



Financial Stability Report

2015

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Abbreviations

AQR	Asset Quality Review	MFT of BH	Ministry of Finance and Treasury of Bosnia and Herzegovina
BARS	Banking Agency of RS	MONEYVAL	Council of Europe Committee assessing the combat against money laundering and terrorist financing
BH	Bosnia and Herzegovina		
BHAS	BH Agency for Statistics		
BLSE	Banja Luka Stock Exchange	NPL	non- performing loans
CBBH	Central Bank of Bosnia and Herzegovina	OPEC	Organization of the Petroleum Exporting Countries
CHF	Swiss franc		
CPI	Consumer Price Index	PPS	Purchasing Power Standard
CPU	Currency Pool Unit	RS	Republika Srpska
CRC	Central Registry of Credits	RTGS	Real Time Gross Settlement
CRD IV	EU Capital Requirements Directive	SASE	Sarajevo Stock Exchange
CRR	Capital Requirements Regulation	SBA	Stand-by Arrangement
EBA	European Banking Agency	SDR	special drawing rights
EBRD	European Bank for Reconstruction and Development	SEE	South - Eastern Europe
ECB	European Central Bank	SNB	Swiss National Bank
EFTA	European Free Trade Association	S&P	Standard and Poor's
EIB	European Investment Bank	TLTRO	targeted longer-term refinancing operations
ESRB	European Systemic Risk Board	USA	United States of America
		USD	American dollar
EU	European Union		
EUR	euro		
FATF	Financial Action Task Force		
FBA	Banking Agency of FBH		
FBH	Federation of BH		
FED	Federal Reserve System		
FSAP	Financial Sector Assessment Program		
FSR	Financial Stability Report		
GBP	Great Britain pound		
GDP	gross domestic product		
GRECO	Group of States against Corruption		
HHI	Herfindahl-Hirschman's Index		
IBRD	International Bank for Reconstruction and Development		
IDA	International Development Association		
ILO	International Labor Organization		
IMF	International Monetary Fund		
JPY	Japanese Yen		
KM/BAM	convertible mark		
KWD	Kuwaiti dinar		
MCO	micro-credit organization		

Countries

AT	Austria	GB	Great Britain	RS	Serbia
BE	Belgium	GR	Greece	SI	Slovenia
BG	Bulgaria	HR	Croatia	SK	Slovakia
CY	Cyprus	IE	Ireland	TR	Turkey
ES	Spain	IT	Italy		
FR	France	PT	Portugal		

Introduction

The Central Bank of Bosnia and Herzegovina (CBBH) considers a financial stability as the condition in which a financial system can absorb shocks without significant disruptions in its current and future operations and whose functioning has no negative effects on the economy.

CBBH's mandate to monitor the financial system stability indirectly arises from the Law on CBBH. CBBH plays an active role in the development and implementation of Bosnia and Herzegovina's (BH) policy on stability and sustainable economic growth, by ensuring stability of the domestic currency and of overall financial and economic stability in the country. One of CBBH's basic tasks is to establish and maintain adequate payment and settlement systems as a part of the financial infrastructure. CBBH contributes to preservation of financial stability through its legally defined competency for coordination of Entity Banking Agencies' activities. Based on a Decision of the Governing Board, the CBBH participates in the work of international organizations that work on strengthening of financial and economic stability through the international monetary cooperation. The CBBH activities in the field of monitoring financial system's stability also include specialized communication with relevant international and domestic institutions that ensures continuity in the process of monitoring system risks. CBBH contributes to the preservation of financial stability through its membership at the BH Standing Committee for Financial Stability.

By publishing the Financial Stability Report (FSR), the CBBH tries to contribute to the financial stability in BH through:

Improvement of understanding and encouraging dialogue on risks for financial intermediaries in the macroeconomic environment;

Warning financial institutions and other market participants about potential collective influence of their individual actions;

Establishing consensus on financial stability and improvement of the financial infrastructure.

Although the FSR focuses on events from 2015, its scope was expanded to the most important developments in the first half of 2016, in line with data available at the time of its development. FSR for 2015 is organized in Chapters, as follows.

The most important risks on the system of financial stability are emphasized in the executive summary. The first Chapter introduces the main trends and risks from the international environment. This Chapter particularly singles out the main risks from the EU and euro zone and describes effects of these risks on the banking sector and real economy of this geographic area and indirectly the effects on BH banking sector and real economy. The second Chapter provides an overview of trends and potential risks from the domestic environment identified as threats for the financial system stability. The third Chapter illustrates effects of the risks identified in the previous Chapters on claims of households. The fourth Chapter focuses on effects of identified risks on the companies sector. The fifth Chapter evaluates risk effects on financial stability system, with focus on the banking sector. Stress tests are consisting part of the fifth Chapter of FSR and serve to establish the banking sector's ability to absorb extreme, but still possible shocks from the macroeconomic environment. The sixth Chapter illustrates the main trends in the financial infrastructure: payment systems and regulatory framework.

FSR for 2015 also includes three text boxes that analyse current topics discussed in the main part of the text in greater details. The fifth Chapter includes Text box 1 in the Banking Sector Chapter, which provides the results of risk concentration analysis in BH banking sector. The same Chapter, in Stress Tests part, in Text box 2, the model of CBBH credit growth, whose results, i.e. projections of credit growth used in CBBH's stress tests, is briefly presented. Text box 3, which is part of Financial Infrastructure Chapter, illustrates the activities in upgrading the regulatory framework in BH in line with the Strategies for introducing of "International Convergence of Capital Measurement and Capital Standards".

Finally, it should be emphasized that FSR exclusively deals with issues of importance for systemic risk, because competent financial sector supervisors are in charge of supervising operations of financial intermediaries, according to the existing laws in BH. Its main goal is to point to risks arising from the financial system and the macroeconomic environment, and to evaluate the system's ability to absorb those shocks.

Executive Summary

Some of the basic characteristics of the global economy in 2015 are: slowdown of the global economic growth under the influence of the slower growth of the developing economies, continued deflationary pressures, along with strengthening of geopolitical risks, and intensive implementation of monetary policy's unconventional measures of the leading central banks including ECB, as well as the central banks of Switzerland, China and Japan. The beginning of 2016 was marked by turmoil on global financial markets due to investors' concerns about economic growth of developing countries, record low interest rates, and the price drop of oil and other commodities. The decision of Great Britain to leave EU, voted on the referendum in June 2016, caused a new wave of strong turbulences on financial markets, and great political uncertainty in Europe.

Some of the most important euro zone risks are: uneven and slow economic recovery of euro zone member states, continued deflationary pressures, decline of the effect of fiscal consolidation measures taken after the debt crisis, limited improvement in implementing structural reforms, and public debt decrease of some countries as well as the strengthening of political risks in EU and euro zone. Measures of expansive monetary policy which ECB has been implementing for the last two years resulted with a slight recovery of approving loans for the real sector in the second half of 2015 and the first half of 2016, but on the other hand had a negative influence on banks' interest rate margins. Low profitability combined with still high level of non-performing receivables in some euro zone member states limits banks' credit potential and their ability to continue strengthening capital positions, i.e. forming protective capital layers. Due to strengthened investors' risk perception, because of the absence of the expected recovery in real and banking sector in the second half of 2015, there was a significant decline of banks' share prices in the euro zone, and the trend of banks' share prices decline continued with somewhat stronger intensity in 2016. Banks from countries with a significant level of systematic risk, in the banking sector of Greece and Italy, suffered the biggest share prices decline.

Despite the positive movements in BH economy in 2015, reflected in real GDP growth, the growth of industrial production, the decline of trade deficit, as well as realized fiscal surplus, risks from the domestic environment were not significantly mitigated in terms of financial stability. The growth of internal and external public debt, weak recovery of domestic

consumption, continued bad indicator of life standard, as well as the absence of a significant investment cycle still represent an important threat to the stability of BH financial sector. Risk for the fiscal sustainability is still present due to expected pressures for public debt repayment in the forthcoming years, especially taking into account the absence of credit arrangements with the international financial institutions. According to rating agencies, due to identified fiscal weaknesses and political situation in the country, BH sovereign rating is still in the area of speculative creditworthiness with high credit risk. Deflationary trends on the global level influenced the decline of import value and are the basic reason for the decline of trade deficit. The decline of trade deficit and the lower amount of due liabilities for servicing foreign debt in 2015, as well as the lower intensity of the banking sector deleverage towards the foreign countries compared to the previous year, had a positive influence of the level of foreign currency reserves.

Weak domestic demand still stands out as a dominant risk in the household sector. Achieved positive trends from the real sector in 2015 were not sufficient for a significant strengthening of the domestic spending. Although there was the increase of household loans with the commercial banks a significant increase of the total household debt was not recorded. Real estate market recorded increased activities compared to the previous years. These activities were characterized by weak demand and lower volume of real estate trade, but that cannot be explained by an improved living standard of the population, considering the indicators from labour market which still show low living standard of the population.

Recovery of the economic activity in the country was also not sufficient to decrease the level of credit risk in the bigger extent which is present in the sector of non-financial companies, and the high share of non-performing loans in the total loans is still one of the basic features of this sector. Due to strengthening foreign demand and the improvement of the export activity of the domestic business entities, as well as the recovery of the industrial production in the country, the signs of positive trends in the credit activities of this sector are present. However, long period of the stagnation of the economic activity in the country, the absence of a significant investment cycle and weak domestic demand prevent stronger credit expansion in the sector of non-financial companies. From the aspect of financing expenses, 2015 was favourable

for corporate sector, since there was a trend of interest rates' decrease on the domestic banking market that continued in this year.

Banking sector of BH kept its stability in 2015 and in the first half of 2016. Realization of idiosyncratic risks with some smaller banks did not have a significant influence on the banking sector stability, so the sector was still adequately capitalized and liquid. Due to accumulated risks, a few banks stated significant losses in business in the fourth quarter of 2015, and as a result total profit of the banking sector was significantly lower compared to the previous year. Recorded losses in these banks with a simultaneous beginning of the implementation of strict regulatory provisions pertaining to the changes for recognition of capital items were reflected in the lower capitalization of banking sector. The liquidity of banking sector is relatively high, but the decline of liquid positions in some banks influenced on somewhat lower values of liquidity indicators compared to the previous year. Credit risk, which represents the dominant risk in BH banking sector is still strong, and its significant decline cannot be expected until the significant recovery of the economic activity in the country. With the credit risk, significant source of risk represents the risk of repayment of BH banks towards their parent bank groups, which was also present in 2015. Low lending activity is still one of the features of the domestic economy. Credit growth is mostly determined by the credit activity in the household sector, while the sector of non-financial

companies records very modest credit growth rates. Due to relatively weak demand of this sector, banks are increasing their exposure towards the government sector. Results of the stress tests conducted by the CBBH showed that the banking sector is able to absorb assumed shocks from the macroeconomic environment despite the existing risks and low level of the economic activity.

In 2015, in line with its legal obligation, the CBBH successfully continued supporting the payments system functions through up-to-date accounting systems and payment systems for performance of interbank payment transactions. By maintaining the Central Registry of Credits with daily updated data, the CBBH enabled financial institutions to better manage credit risks by monitoring credit exposure and credit history of clients. Also, by maintaining the Single Registry of Transaction Accounts and single database of all blocked accounts of business entities in BH, business entities were enabled to review the status of their existing or potential business partners.

In 2015 and the first half of 2016 domestic institutions continued with the activities on changing and upgrading regulatory framework, which regulates BH financial sector aiming to harmonize it with the best European practices as well as to improve the business environment of the financial intermediaries.

1. Trends and Risks from the International Environment

The aim of this Chapter is to point to the most important risks in the international environment. Risks from the macroeconomic environment are observed from the aspect of the effects on the banking sector of euro zone member states (Subsection 1.2.1), as well as from the aspect of the effects of the real sector of euro zone member states (Subsection 1.2.2). Influence of the identified risks from the international environment on the real economy and the banking sector in BH are analysed in the next Chapters.

1.1 Trends in the International Environment

Slowdown of the global economy growth under the influence of the slower growth of the developing economies, continued deflationary pressures, along with the strengthening of geopolitical risks, and the intensive implementation of monetary policy's unconventional measures of the leading central banks are some of the basic characteristics of the global economy in 2015. The beginning of 2016 was marked by turmoil on the world financial markets due to investors' concerns about economic growth of developing countries, record low interest rates, and the price drop of oil and raw materials. The decision of Great Britain to leave EU, voted on the referendum in June 2016, caused a new wave of strong turbulences on the financial markets, and also a great political uncertainty in Europe.

In 2015, there was a slowdown of global economy growth compared to the previous year, and the growth rate was 3.1%. The slow economic activity growth was mainly influenced by the slowdown of the developing countries' growth, especially Chinese economy, further decline of oil and other goods prices on the world market, the decline of the investments and the volume of the international trade and strengthening of geopolitical risks. Economy of China, which was a drive of the global growth in previous years, recorded a growth rate of 6.9% in 2015, which represents the lowest growth in the last 25 years. Slow growth of the Chinese economy reflected on the economic growth of other developing countries through trade channels, so the growth rate of the developing countries decreased by 0.6% compared to 2014 and is 4.0%. The global economic activity was influenced by the recession in Russia. International economic sanctions, combined with the decline of oil prices and depreciation of ruble against dollar, caused the biggest decline of GDP of this country since 2009 (-3.7%). According to IMF's assessments, the recovery of Russian economy is going to be a long process, and the continuation of the recession is expected in 2016, while in 2017 the slight growth of 1.1% is projected.

Apart from the measures of the ECB expansive policy, slow and uneven recovery of the euro zone member states continued in 2015. The euro zone countries' growth rate in 2015 was 1.6% which is in line with the IMF's projections from October 2015, and it is expected that this dynamics is going to continue in 2016. Ireland is still the fastest growing economy of euro zone, and apart from Ireland the significant growth of the economic activity in 2015 was made by Spain (3.2%). On the other hand, economies of France and Italy are making gradual, but still not strong enough, economic growth. In 2015 Italy made the growth of economic activity after three years of recession. However, the fact that the growth at the end of 2015 had a significantly slower dynamics raises concerns, also in the last quarter economy of this country almost stagnated. It is uncertain if the economy of Italy in 2016 would be able to keep the growth rate considering slow global economic growth and the difficulties in the banking sector of Italy. In 2015 Greece went in the recession again due to political instability and continued measures of saving, uncertainty in reaching the agreement about financial help with the international creditors, as well as the consequential crisis in the banking sector due to mass retreatment of household deposits. Because of the crisis of banking sector liquidity Greek government had to introduce strict capital controls and temporary closes the banks which represented an additional impact on the economy of that country. Apart from reaching an agreement to approve the package of financial help in the amount of EUR 85 billion, the economic problems in Greece continued in 2016 due to ineffective reforms implementation which were required by the international creditors. Negotiations for the payment of a new tranche from the third package, which was blocked until the preventive plan of saving measures and reforms is adopted, started. Next tranche of agreed loans, with the purpose of banks recapitalization, which would start the process of abolishing controls over the capital flows, was one of the obstacles in the recovery of Greek economy.

Uncertainty before the June referendum about the Great Britain's membership in the EU significantly influenced the economic activity of this country. Economic growth in 2015 was 2.2%, which is still above the average of the other EU countries, but significantly slower compared to the increase of 2.9% in the previous year. The decision of Great Britain to leave EU, voted on the referendum in June 2016, could have a negative impact on the economic growth of this country and EU in the next period.

Economic recovery of the USA continued in 2015, and the annual growth of real GDP was 2.4%. Still the economic growth is lower than the expected considering that in the last quarter of 2015 there was a slowdown of the US economy growth due to the decline of domestic demands, foreign investments and export. Labour market is still recording positive trends reflected in the continued decline of unemployment rate, which was 5% at the end of 2015, and in May 2016 reached the record low level of 4.7%. Significant strengthening of the global economic activity is not expected in the next period, and according to the IMF's projections the real growth of world GDP in 2016 could be 3.2% and 3.5% in 2017. Observed by the groups of countries, significant increase of the economic activities of developed economies is not expected, nor the developing countries due to the slowdown of Chinese economic growth, and the weak outlook for the growth of counties that export oil. Table 1.1 illustrates the survey of the growth of real GDP annual rates, projections of the real GDP and the changes of the projected growth rates for 2015 and 2016 compared to the projections from October 2015.

Table 1.1: Real GDP, Annual Growth Rate

	Real GDP, Annual Growth Rate				Change Compared to Projection from October 2015	
	2014	2015	2016	2017	2015	2016
World	3.4	3.1	3.2	3.5	0.0	-0.4
Developed Economies	1.8	1.9	1.9	2.0	-0.1	-0.3
EU	1.4	2.0	1.8	1.9	0.1	-0.1
Euro Area	0.9	1.6	1.5	1.6	0.1	-0.1
USA	2.4	2.4	2.4	2.5	-0.2	-0.4
Japan	0.0	0.5	0.5	-0.1	-0.1	-0.5
China	7.3	6.9	6.5	6.2	0.2	0.2
Great Britain	2.9	2.2	1.9	2.2	-0.3	-0.3
Russia	0.7	-3.7	-1.8	0.8	0.1	-1.2
Developing Countries	4.6	4.0	4.1	4.6	0.0	-0.4
Central and Eastern Europe	2.8	3.5	3.5	3.3	0.5	0.5
BH	1.1	2.8	3.0	3.2	0.8	0.0
Main Foreign Trade Partners						
Germany	1.6	1.5	1.5	1.6	0.0	-0.1
Croatia	-0.4	1.6	1.9	2.1	0.8	0.9
Serbia	-1.8	0.7	1.8	2.3	0.2	0.3
Italy	-0.3	0.8	1.0	1.1	0.0	-0.3
Slovenia	3.0	2.9	1.9	2.0	0.6	0.1
Austria	0.4	0.9	1.2	1.4	0.1	-0.4
Montenegro	1.8	4.1	4.7	2.5	0.9	-0.2

Source: World Economic Outlook, IMF, April 16

After ending quantitative easing programme in December 2015, encouraged by continuation of the US economic growth, FED increased reference interest rate for the quarter of

percentage point on the level from 0.25% to 0.50% for the first time after 2006. Decision about raising interest rates was made, among other things, due to the recovery of the US labour market, and because of the expectations that inflation, supported by the further growth of the employment rate and income of households, is going to grow to the target level of 2% in the middle term. Although the markets expected further increase of interest rates in the first half of 2016, in March 2016 FED made the decision that the interest rates remain unchanged. Slow economic growth of the USA in the beginning of 2016, low inflation as well as the danger of new financial crisis before the British referendum voted to leave the EU influenced on the decision of FED to keep its existing monetary policy. FED announced that the further growth of the interest rates is going to depend on the inflation trend in the second half of 2016. However, the results of the referendum in Great Britain are most probably going to influence postponing increase of reference interest rates. Increase of reference interest rates in USA would mostly hit the developing markets because of more stringent global financial conditions, as well as the outflow of the part of capital from the developing countries towards the USA. Other leading central banks including ECB, as well as the Central Banks of Switzerland, China and Japan, in 2015 and in the first half of 2016 conducted the expansive monetary policy. Swiss National Bank (SNB), in 2015, kept negative reference interest rates, so the interest rate on central banks sight deposits was kept on -0.75%, and the target spread for three-month LIBOR from -1.25 to -0.25%. In the first quarter of 2016 Bank of Japan introduced negative interest rates on deposits with the central bank. ECB introduced additional stimulative measures in order to encourage faster economic recovery, increase inflation rate, and reduce unemployment in the euro zone countries. ECB's reference interest rate in March 2016 was reduced to 0% for the first time in history, while the ECB interest rates on loans to commercial banks went down to 0.25%. The interest rate on banks' deposits with ECB was reduced twice, in December 2015 to -0.30%, and in March 2016 to -0.40%. It was also extended the existing programme of repurchase of state and corporate bonds from 60 to the total value of EUR 80 billion a month. New package of ECB stimulating measures includes a second series of target long-term refinancing operations (TLTRO II) which started in June 2016 with maturity of four years. ECB is planning to conduct four quarter auctions within TLTRO II, and conditions for approving loans were weakened in order to encourage banks to participate in the auctions. The lowest interest rates for refinancing of banks are equal to the interest rate on deposits with ECB (-0.40%). One of the main reasons for introducing this new package of stimulating measures by ECB was unfavourable trend of inflation rate in euro zone which has already been under the target level of 2% for four years.

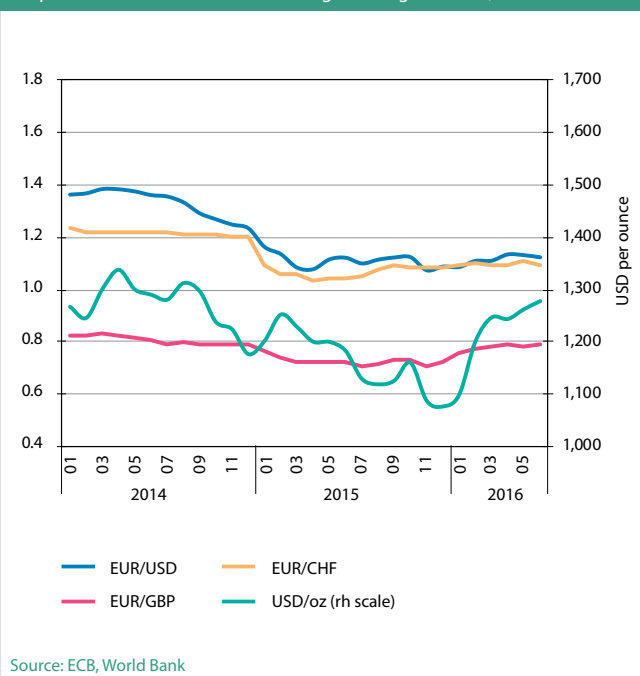
Measures of quantitative easing, introduced in 2015, could not significantly raise the inflation rate which was below or around 0% in 2015. In December 2015 inflation in euro zone was 0.2% while in May 2016 it was -0.1%.

Continuation of gradual normalization of FED's monetary policy with the additional weakening of ECB's monetary policy at the same time determined the trend of exchange rate of euro to dollar in 2015. EUR/USD exchange rate was significantly weakened in 2015 and it reached the level of about 1.07 EUR/USD due to the expectations that FED is going to increase the reference interest rates. Raising interest rates by FED in December 2015 deepened the differences in asset return in Euros and dollars, which made an additional pressure on weakening of euro compared to dollar. FED's decision that reference interest rates remain unchanged influenced on temporary weakening of dollar compared to euro and other world currencies, and the average EUR/USD exchange rate in April 2016 was 1.13 EUR/USD. Exchange rate of Swiss franc to euro was stable in 2015 after strong appreciation in the beginning of the year when SNB left the policy of fixed exchange rate of Swiss franc to euro. EUR/GBP exchange rate became stronger for 9% since the beginning of the year, and in April 2016 it was 0.79 EUR/GBP, which was the result of uncertainty and expectation of the results of referendum about Great Britain leaving the EU. The decision of Great Britain to leave the EU influenced on the additional sudden decline of value of pound and euro compared to dollar and Swiss franc due to increase of the investors for safe currencies. After the results of the referendum were published, the value of British pound compared to dollar declined at the lowest level in the last 30 years¹. Also, compared to the US dollar euro was under strong pressure and it declined under 1.1 EUR/USD.

Recovery of the US economy, strengthening of dollar and the expectations that FED would raise the reference interest rates influenced the decline of gold prices in 2015 (Graph 1.1). Due to reduced investors' demand, gold prices in 2015 ended at the level of USD 1,075 per ounce, which is lower for 10.4% compared to the previous year, and at the same time that was the lowest gold price since 2009. Still, in the first quarter of 2016 there was a sudden growth of demand for gold due to uncertainty on financial markets, the price drop of shares, as well as the speculation about the slower dynamics of raising interest rates by FED in this year, which influenced the growth of gold prices at the beginning of the year. After the results

of the referendum in Great Britain being published, the gold price had the biggest increase since the peak of the financial crisis in 2008. Poor prospects that FED is going to increase the reference interest rate by the end of this year could influence the additional growth of the gold price.

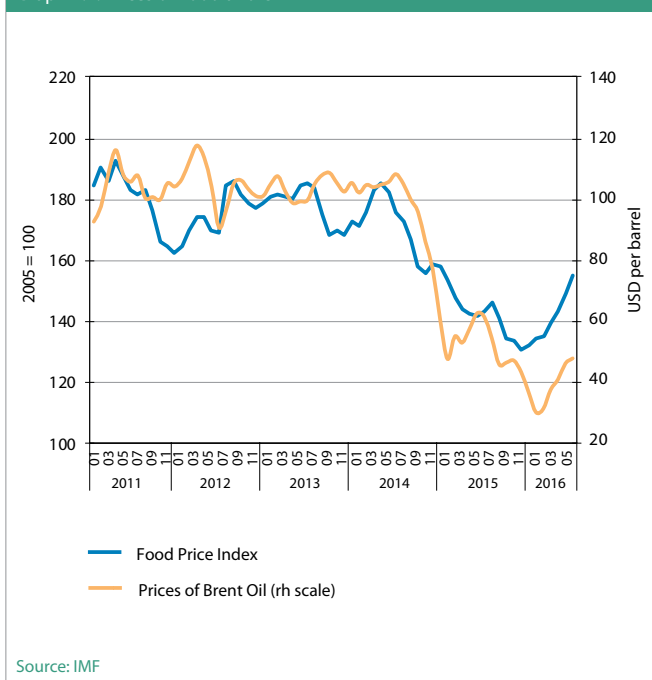
Graph 1.1: Gold Price and EUR Exchange Rate against USD, CHF and GBP



The sharp decline of oil prices, food and the other goods at the world market encouraged deflationary trends in the euro zone. Oil prices drop in the second half of 2015, which continued in the beginning of 2016, significantly influenced on the incomes of oil exporting countries, and the biggest consequences were felt by the economy of Russia. In January 2016 the oil prices declined under USD 30 per barrel for the first time after 12 years. Reasons for such trend of oil prices were reduced demand due to slow global economic recovery, as well as too much offer due to the growing production of crude oil in USA, and the decision of leading OPEC member states, Saudi Arabia and Kuwait, not to reduce the daily production of oil. Even if it is the second quarter of 2016, the oil price increased on about USD 45 per barrel, it is expected that the prices are reduced again in the second half of 2016, due to the abolishing international economic and financial sanctions against Iran, which would enable this country to export oil on the global market. Iran has the capacity that with its production double the OPEC oil export and it can be expected that with the lower prices Iran would try to take the market share which it had before the implementation of sanctions. Publishing the results

of the British referendum influenced the reduction of oil prices on the global market, and the oil price was reduced by 4.93% in a day. In 2015 trend of food price decline was continued due to the bigger food offer on the global markets. Food prices were growing in December 2015 and in the first half of 2016 under the influence of unfavourable climate conditions, i.e. floods and droughts which affected the production of coffee, sugar, cocoa, and rice (Graph 1.2).

Graph 1.2: Prices of Food and Oil



1.2 Overview of Main Risks in the EU and Euro Area

Some of the most important euro zone risks are: still uneven and slow economic recovery of euro zone member states, continuation of deflationary pressures, as well as the strengthening of political risks in the EU and euro zone. Great Britain's voting for leaving the EU brought the great political uncertainty in Europe, which could influence of slowing the economic growth of euro zone member states.

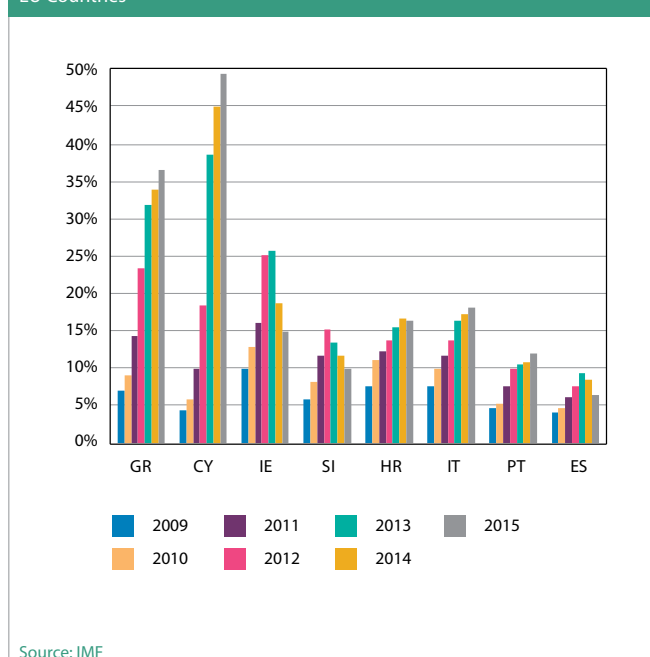
1.2.1 Effects on Banking Sector

Due to uneven and slower euro zone recovery during 2015, the banking sector is still characterized by weak lending activity, low profitability as well as the high level of non-performing claims. Approving loans to real sector shows the signs of slight recovery in the second half of 2015 and in the first part of 2016, which is an indicator

that the measures of expansive monetary policy conducted by ECB in the last two years finally start giving results. Introducing the new programme of long-term refinancing banks at the record low interest rates, as well as the expanded programme of bonds' purchase from March 2016 are indicators that ECB is ready to continue encouraging weak credit activity of euro zone member states' banks with stimulating measures. Low interest rates had the positive effects on loan demands, both the sector of non-financing companies and household sector. Negative rates on ECB banks' deposits encouraged approving credits on the one hand, and on the other hand had a negative influence on interest rates margin of banks in the second half of 2015 and in the first quarter of 2016.

Although the general trend of worsening the assets' quality was stopped in 2014 and the part of non-performing ones in total loans at the end of 2015 was 5.8%, credit risk still represents one of the main risks for the EU banking sector. The level of non-performing loans is significantly different among the EU member countries, and the countries which were mostly hit by crisis is still very high and records further growth in 2015. The biggest level of non-performing loans is marked by the banking sectors of Cyprus (49.3%) and Greece (36.6%), while in the countries like Ireland, Italy, Croatia and Portugal are in the spread from 10% to 20% (Graph 1.3).

Graph 1.3: The Share of Non-performing in the Total Loans in the Selected EU Countries



With the high level of non-performing loans, concern in the banking sector of euro zone causes the policy of low interest rates of central banks. Low profitability combined with high level of non-performing demands in some euro zone countries limits the credit potential of banks and the ability of banks to keep strengthening capital positions i.e. to form protective levels of capital. Besides, the source of risks for the banking sector of euro zone could represent banks' exposure to the developing countries and petroleum exporting countries, if there would be further slowdown of economic growth of these countries.

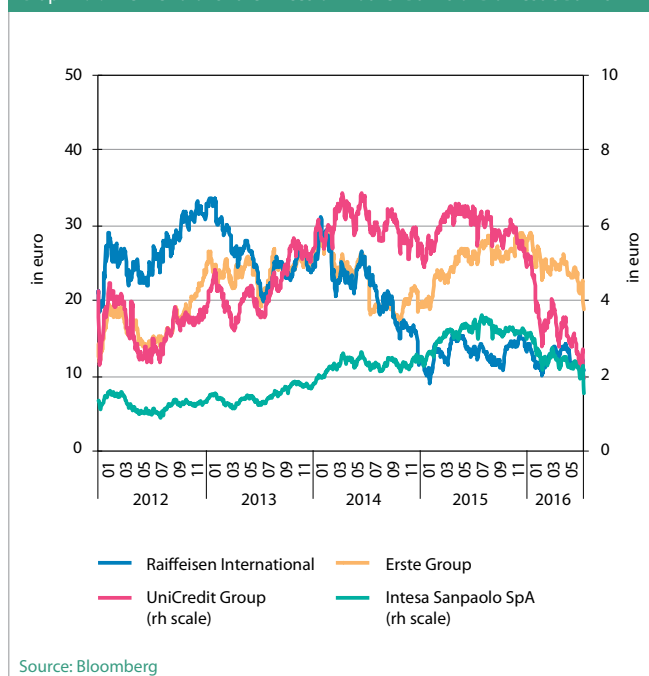
Important source of risk on the stability of euro zone banking sector represents accumulated risks in the banking sector of Italy, which were not successfully solved even after the resolution of problem banks, which were the subject of comprehensive analysis of the banking sector by ECB. Due to the prominent credit risk, which is reflected in the continued growth of non-performing demands, the Government of Italy started the process of systematic recovery of the banking sector in 2016, and the agreement was reached with the EU about establishing guarantee mechanism for non-performing demands. In order to accelerate the process of solving non-performing claims of the banking sector, it was started the initiative for the changes of law about bankruptcy and liquidation. Also the Government established fund in the ownership of private financial institutions with the aim of helping in recapitalization and cleaning of balance sheets of small, weaker banks. The fund took 99.33% of Banca Popolare di Venezia bank's bonds after shareholders and depositors, due to the problems in operating of this bank withdrew EUR 1.5 billion of deposits. Since, according to the estimates, the EUR 300 billion financial injection is needed in order to solve the problem of unrecoverable and non-performing claims in Italian sector, it is not certain whether the established fund is going to be sufficient to prevent collapse of small banks.

Share prices of the euro zone banking sector increased in the first half of 2015, due to the introduction of ECB quantitative easing measures while in the second half of the year there was a significant decline of shares prices due to the concern of the investors because of the slow global economic growth and deflation in the euro zone. Trend of the decline of banks shares continued in 2016 and in the first two months index of shares prices of the euro zone banking sector decreased by 18%, and the biggest decline of the shares prices suffered the banks of Greece and Italy. Two big European banks, Deutsche Bank and Credit Suisse showed the losses in business at the end of 2015, and consequently lost about 40% of its value during the first quarter of 2016. In

banking groups which operate in BH, in the same period market value of UniCredit S.p.A. was reduced by almost 40%, while Intesa Sanpaolo S.p.A. lost the fifth, and Erste bank the sixth of its value since the beginning of 2016 (Graph 1.4).

The decision of Great Britain to leave the EU caused a new wave of strong turbulences, and the decline of shares prices index on the global financial markets. The share prices of the euro zone banking sector and Great Britain were under the biggest pressure, and the investors are concerned that there would be the decrease of the investments, weakening of trade trends and making financial conditions stringent, which could affect weak global economic growth. Expecting the results of referendum, the share prices on the financial markets were increasing for days, because the investors expected the decision that this country is going to stay in the EU which was the reason of sudden decline of shares prices after the results of the referendum were published. The share prices of the banking groups of the euro zone which operate in BH also had a decline, so both Italian banking groups, UniCredit and Intesa Sanpaolo, lost another third of their trade value, Erste group the sixth of its value, and Raiffeisen group shares lost 12% of their value by the end of the first working day after the results of the referendum were published.

Graph 1.4: The Trend of Share Prices of Mother Banks of Domestic Banks



In 2016, the Credit Rating Agency Standard & Poor's (S&P) confirmed the credit rating of the two Italian banking groups, Intesa Sanpaolo S.p.A and UniCredit S.p.A, which have credit rating BBB- with stable outlook due to the expectations about the continuation of the gradual recovery of the Italian economy. Credit rating of Raiffeisen Bank International AG was also confirmed on

BBB+/A-2. Credit rating of Nova Ljubljanska Banka d.d. Ljubljana was confirmed in 2016 on BB-/B while the outlook was changed from the negative into positive due to the improvement of the economic conditions on the market of Slovenia as well as finished process of reconstructing within the bank and the risks for its business declined. Although S&P in 2016 confirmed the credit rating of some bank groups of euro zone which operate in BH, it is uncertain if these groups would be able to keep present credit rating due to unfavourable conditions and strong turbulence on the financial markets of euro zone caused by Great Britain leaving the EU.

European Banking Agency (EBA) and European Board for Systemic Risks (ESRB) in cooperation with ECB and national regulators of the EU member states are going to do stress tests on the biggest European banks in 2016. In November 2015, EBA published the methodology according to which, in the first quarter of 2016, it is going to do the stress tests which are going to include 70% assets of the euro zone banking sector, i.e. 53 bank groups, with 39 under the Single Supervisory Mechanism of ECB. For the banks in euro zone that is going to be the first test after ECB took the role of the single supervisor in November 2014. Extreme scenario of this new stress test includes the biggest four systemic risks to which, according to the regulators' analysis, the EU banking sector is exposed to and it includes: sudden turnover in risk premium trend in EU due to the low liquidity on the secondary market, expected low profitability of the banking sector and the insurance sector, inability of repaying the debt of public and real sector due to the slow economic growth, as well as the potential risks connected to acting of so called banking from the shadow due to the fast expanding of this sector which is not under the regulatory and supervising powers of ECB. The results of the stress test should be published at the beginning of the third quarter of 2016.

1.2.2 Effects on Real Economy

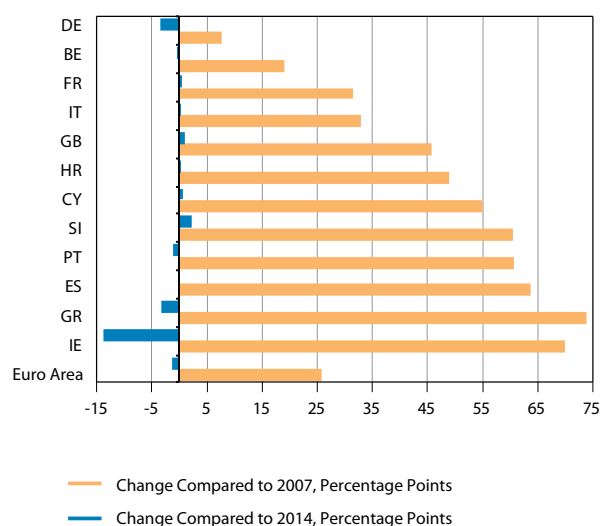
Some of the most important euro zone risks are: uneven and insufficiently dynamic economic recovery of euro zone member states, continuation of deflationary pressures, weak effects of the fiscal consolidation, limited progress in implementing structure reforms and reduction of public debt of some EU member states as well as more prominent political risks in member countries of euro zone and the EU. The decision of Great Britain to leave EU contributed to the additional strengthening of political risks and uncertainty in Europe.

Growth of the domestic demand was one of the basic drives of the economic growth of euro zone member states in 2015. Low

inflation due to the drop of oil prices and other goods, as well as gradual recovery of labour market at the same time is reflected in the decline of the unemployment rate and the growth of real wages influenced on the growth of available income of households, and consequently the growth of private consumption. Additional encouragement on the growth of domestic demand had the growth of Government spending partly for large number of refugees in euro zone member states, especially in Germany.

Although it is still high, public debt of euro zone and the EU member states, in GDP percentages, records gradual decline compared to 2014 for 1.3 percentage points on the euro zone level, and 1.6 percentage points on the EU level. This is the first decline of public debt on the level of euro zone and EU after seven years of constant growth since the beginning of financial crisis in 2007. Still, the debt of the EU and euro zone member states is still very high so that sustainability of public debt is still a challenge, especially for some countries with public debt still at the level above 90% GDP (Greece, Italy, Portugal, Cyprus, Belgium, Ireland, Spain, and France). Among the observed countries, the highest growth of public debt shares measured by GDP percentages had Slovenia, Great Britain, and Cyprus while Ireland, Germany, and Greece recorded a public debt decrease in GDP percentages (Graph 1.5.). In the last year, GDP public debt was increased in eleven EU countries which indicate that measures of fiscal savings are still not sufficient for the decrease of public debt despite the fact that they decrease budget deficit at its strength and dynamics in some countries. Slow economic recovery and low increase of rates do not provide significant support for decrease of public debt of some countries.

Graph 1.5: Changes of Public Debt in Percentages of GDP in 2015



Source: Eurostat

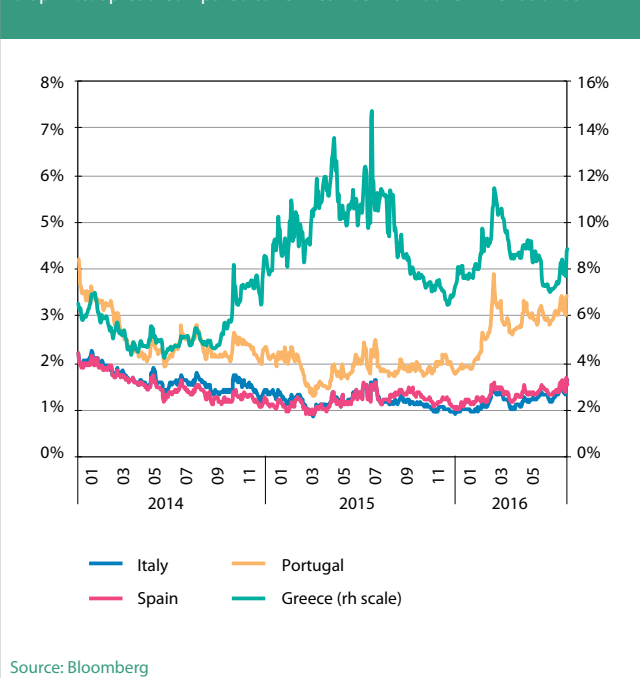
Fiscal consolidation of the countries continued in 2015 even though its dynamics was slower in the last two years. Budget deficit of euro zone in GDP percentages was reduced by 50 basis points, and in the EU by 60 basis points compared to the previous year and at the end of 2015 it was 2.1% and 2.4% respectively. Weakening the effects of fiscal consolidation and limited recovery in the area of structure reforms are the result of more prominent political risks in and among countries of euro zone and EU, i.e. inability of the realization of the agreed reforms.

In the second half of 2015 and the first half of 2016 S&P Agency improved credit rating of Spain, Portugal and Cyprus due to the improvement in the recovery from crisis and expectations for further gradual economic growth, and it confirmed credit rating of Italy and Ireland. Credit rating of Italy was confirmed in 2016 with the expectations about the continuation of gradual economic recovery of this country, further conduct of structure and budget reforms in order to stabilize and gradually start decreasing very high public debt of this country. In the beginning of 2016 S&P Agency improved credit rating of Greece from CCC+ to B- with stable perspective with the explanation that Greece is expected to fulfil conditions from the third package of international assistance in the amount of EUR 86 billion and in that way open its path towards negotiations about official writing off the debt provided by international creditors. As a consequence of Great Britain's decision to leave EU in June 2016 credit agency S&P reduced its long-term credit rating of EU for one level to AA from AA+, due to political uncertainty which is now present in euro zone and the EU. Credit rating of Great Britain also decreased from AAA to AA.

Considering countries from the region, S&P Agency increased credit rating of Albania in 2016 due to successful implementation of fiscal consolidation measures and expectation about further decrease of fiscal deficit as well as the public debt of this country. Credit rating of Serbia was confirmed while prospects for improving credit rating were increased from negative to stable as a result of consistently implemented measures of fiscal consolidation and structure reforms. On the other hand, perspectives for improving credit rating of Croatia and Montenegro were reduced from stable to negative due to expectations that a public debt of these countries is going to grow as well as insufficient structure and fiscal reforms, while credit rating of these countries was also confirmed. Table A1 of Statistical Appendix provides the outlook of changes in credit rating in the period from 2009 to May 2016 for countries which were mostly hit by financial and economic crisis in the previous period.

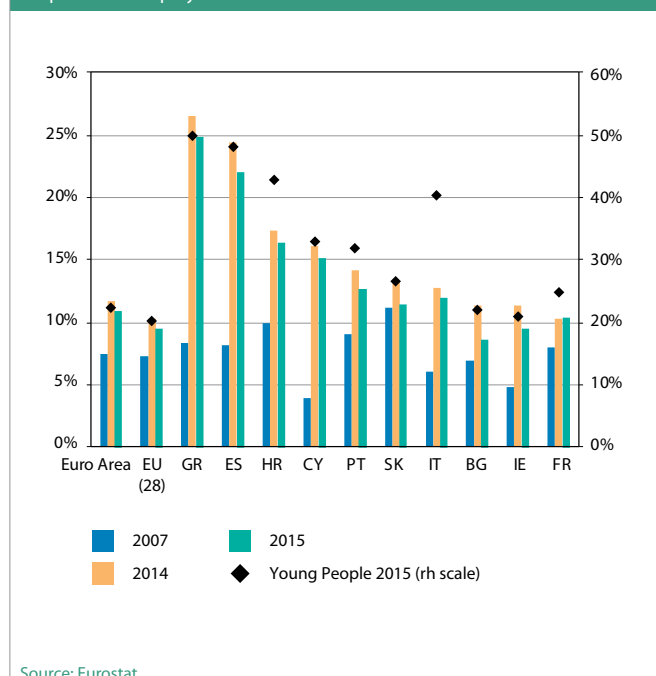
Yields on bonds of euro zone countries in 2015 reached record low levels in the first half of the year due to the beginning of quantitative easing programme by ECB, and then at the end of the year expecting introduction of new measures of expansive monetary policy by ECB. Turbulences on financial markets, share prices decline as well as the decline of oil prices on global market caused further decline of yields on bonds of euro zone countries in the first half of 2016. Yields on German ten-year bonds in April 2016 declined under 0.1% for the first time since April 2015. Yields on Greek bonds moved in the same direction and in May 2016 reached the lowest level since the beginning of the year (7.1%) due to the beginning of negotiation between Greece and international creditors about mitigating public debt of this country after the Greek Parliament adopted part of necessary reforms. In the conditions of raising liquidity, and potential additional decrease of interest rates on overnight deposits by ECB, it is expected that this trend of yields on state bonds of euro zone is going to continue. Yields on bonds of Portugal moved in the opposite direction (Graph 1.6). Publishing the results of referendum in Great Britain, yield on bonds of developed countries of euro zone recorded an additional decrease and yield on ten-year German bonds on closing the market (24 June, 2016) recorded low level of - 0.047%. At the same time, due to increased reluctance of investors towards the risks yields on bonds of periphery countries of the EU recorded growth, so the spread between yield on bonds of Italy, Spain, Portugal, and Greece compared to ten-year German state bonds increased.

Graph 1.6: Spread Compared to Ten Year German Government Bonds



Conditions on the labour market of euro zone show signs of gradual recovery, and unemployment rate at the end of 2015 in euro zone was the lowest in the last four years and it is 10.9%. Still unemployment rate in many countries of euro zone is still on very high level especially considering youth unemployment. Large number of refugees in Europe is going to represent an additional challenge for absorption of labour market capacity, especially of the developed economies in euro zone. Conditions on labour market significantly differ among euro zone member states so the lowest unemployment rate was recorded in Germany (4.6%), while the highest unemployment rate was in Greece (24.9%). The biggest decline of unemployment rate in euro zone in 2015 was in Spain (2.4%), and the unemployment rate in this country is still very high.

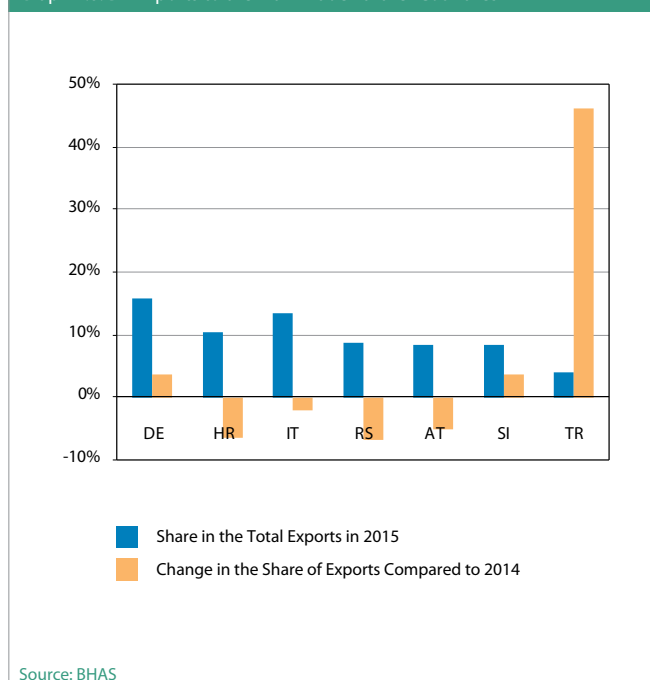
Graph 1.7: Unemployment Rate in the EU



In 2015 almost all main foreign trade partners of BH recorded the growth of economic activity. Germany, as the most important trade partner of BH, in 2015 despite negative external influences, recorded further growth of economic activity primarily due to strengthening of domestic demand encouraged by high employment rate, increase of wages as well as low inflation and interest rates. Economy of Italy, after three-year recession, in 2015 was growing due to the growing domestic demand. Croatia also recorded growth of economic activity from 1.6% in 2015 after six years of recession due to the recovery of domestic demand, as well as the capital investments and industrial production, while Serbia recorded poor growth of economic activity namely 0.7%.

According to IMF's projections in the next two years more dynamic growth of economic activity in countries, which are main foreign trade partners of BH, is expected. This could have positive influence on the growth of BH export to these countries. Graph 1.8 illustrates export shares in countries, which are the most important foreign trade partners of BH in 2015 in total export, as well as change of shares in total export compared to 2014.

Graph 1.8: BH Exports to the Main Trade Partner Countries



The highest export growth in 2015 was made to Turkey, and this country now has 3.9% share in total export of BH. On the other hand, the decline of export to Croatia and Serbia is recorded. Gradual recovery of economic situation in the region, with the continuation of deflationary trends, could influence strengthening of foreign demand which could mean the continuation of positive economic trends for BH.

Decision of Great Britain to leave the EU could have negative effects on BH export in the extent in which it could have consequences on slowing business growth in euro zone countries. On the other hand, considering the fact that on the foreign currency market depreciation of euro was recorded, first of all in comparison to dollar, and having in mind fixed domestic exchange rate to euro in currency board arrangement, these exchange rates can affect the depreciation of nominal and real effective foreign exchange rate of KM, which makes BH more competitive on global market and can positively effect on the growth of this country's export. Considering the fact that Great Britain cannot be in the category of important foreign trade partners, nor the investors in BH, direct negative influences are not expected.

2. Trends and Potential Risks in BH

Economy of BH in 2015 recorded positive trends, which are reflected in the growth of real GDP, industrial production, decline of trade deficit and realized fiscal surplus. However, despite the positive trends risks from the domestic environment on the financial stability did not significantly mitigated due to the growth of internal and external public debt, weak recovery of domestic spending, continuously bad indicators of living standard, and the absence of significant investment cycle in the country. Risk on fiscal sustainability is still present due to the expected pressures of repaying public debt in the next years, especially considering the absence of credit arrangements with international financial institutions. Due to the fiscal weakness, political situation in the country and rating agencies' assessment sovereign BH rating is still in the area of speculative credit ability, with high credit risk. On the global level deflationary trends influenced decline of import and are the basic reason of trade deficit's decline. Trade deficit's decline and the smaller amount of due liabilities for servicing foreign debt in 2015 had a positive effect on the level of foreign currency reserves.

2.1 Country's Fiscal Position

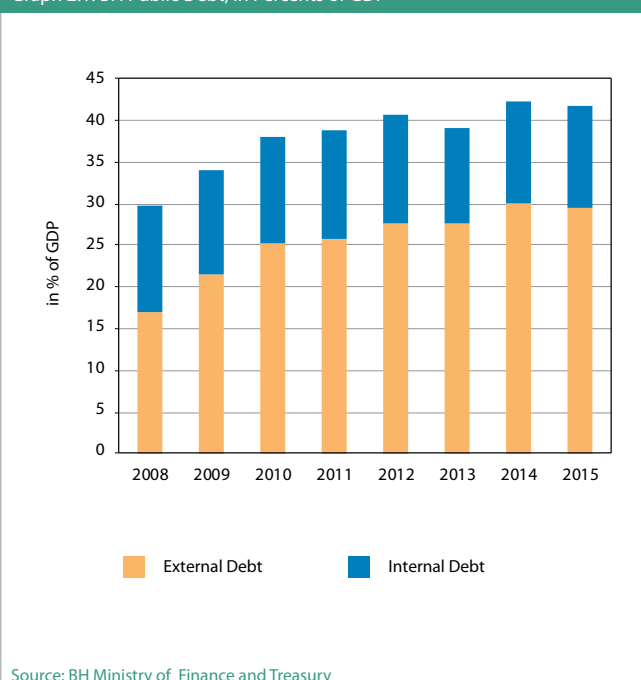
Positive tax collection trends of direct and indirect taxes, measures of limiting budget spending, and significant reduction of net purchase of basic assets resulted with budget surplus at the end of 2015. Budget surplus in 2015 was KM 188.9 million (0.66% GDP), and it was mostly the consequence of decreased intensity of investment in infrastructure projects in BH in 2015.

In 2015 there were no difficulties in servicing the external debt, and both international rating agencies that were selected to develop and monitor BH sovereign credit rating confirmed its credit rating. Factors that are considered while evaluating the credit rating were not significantly improved, which is why sovereign credit rating remained at the same level. S&P International Agency conducted two assessments of BH sovereign credit rating in 2015 and confirmed "B" credit rating with positive outlook both times. Also, Moody's Agency kept "B3" rating with stable outlook for BH. According to both Agencies, BH rating is still limited by weak frame of fiscal

management, sensitive foreign position which comes from constant deficit of the current account, and institutions with competencies which overlap.

According to data from the Ministry of Finance and Treasury of BH (MFT), BH² public debt amounted to KM 11,936.9 million at the end of 2015. Thanks to the recovery of BH economic activity and slower dynamics of foreign debt, indicators of debt, i.e. risks of fiscal sustainability remained almost unchanged compared to the previous year. At the end of 2015 the share of public debt in GDP percentages was 41.8% and it recorded the reduction of 35 bp compared to the previous year (Graph 2.1). Slower dynamics of foreign debt partly contributed to the absence of IMF arrangement in 2015. Although BH Government in May 2016 reached overall agreement with IMF about Extended Fund Facility in the amount of SDR 443.04 million, i.e. KM 1,089.8 million, credit arrangement by the end of the first half of the year was not realized. Funds from the Extended Fund Facility are aimed for the improvement of business environment by strengthening trade market, reduction of public debt through gradual fiscal consolidation, preservation of financial stability and revival of credit growth.

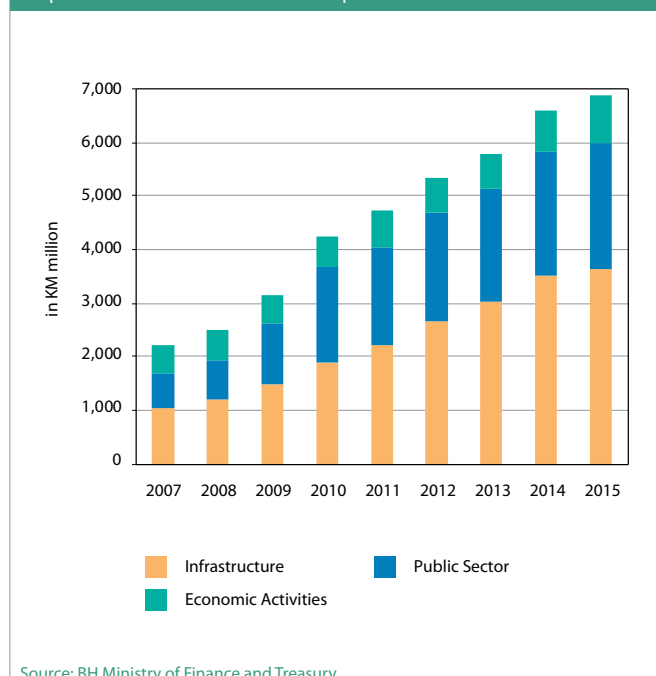
Graph 2.1: BH Public Debt, in Percents of GDP



² BH public debt comprises overall external and internal debts of all Government levels (debt of BH Institutions, Entity and Brčko District debts, debts of cantons, municipalities and cities).

Compared to 2014 public debt was increased by KM 420.6 million or 3.7%. Of the total public debt amount, KM 8,401.5 million or 70.4% accounts for the foreign debt. Compared to the end of the previous year foreign debt of the country (government sector) is by KM 183.2 million higher (2.2%). Of the total external debt, 17.91% accounts for the “old” debt³, with the tendency of decrease compared to the previous years. The largest percentage of the “new” debt accounts for debt to international financial institutions⁴. Increase of the public debt in 2015 was mostly the consequence of engaging previously approved loans of international financial institutions. As in the previous periods, these funds were mostly used for the realization of infrastructure projects, which in the structure of new debt have been continuously increasing since 2009 (Graph 2.2). In 2015 loans for infrastructure projects recorded the growth of total 2.9% as compared to 2014 when the growth of these loans was 16.6%. Slower dynamics of deleverage for the needs of infrastructure works in 2015 mostly contributed to the recorded surplus at the end of the year. The highest amount of the previously arranged loans, where the first withdrawals started in 2015, was for business activities (85.1%). Loans for public sector are used for macro financial assistance and different development projects, assistance for health and social sector, and for servicing debt based on Stand-By Arrangement (SBA), as well as for budget support.

Graph 2.2: Sector Structure of Loan Purposes on the Basis of “New” Debt



Despite rather favourable conditions⁵ under which the foreign debt was agreed, the market risk is not negligible, because 49.8% of the total foreign debt at the end of 2015 was related to loans with floating interest rates. Yet, as long as the leading central banks conduct the low interest rate policy, the interest risk has no significant effect on the public debt level. However, if the average maturity of the foreign debt is observed, the refinancing risk is increased compared to the previous year. The average time of the foreign debt maturity in the end of 2015 amounted to 7.2 years and the share of the debt which is due in a period shorter than one year is 7.2% of the total foreign debt and it increased by 1.5 percentage points compared to the previous year. Observing the currency structure, the share of the foreign debt in euro slightly decreased compared to the previous year. In the end of 2015, 51.3% of the foreign debt was denominated in EUR, 34.1% in SDR, 7.5% in USD, 2.3% in CPU⁶, and 4.5% in other currencies. The market risk mainly arises from the exposure to foreign exchange risk, particularly due to the fact that the debt to the IMF as one of the largest creditors is expressed in SDR⁷.

During 2015, the total of KM 581.3 million of foreign debt was repaid, by which all the undertaken liabilities related to the servicing of debt were met. Out of this amount, KM 478 million was related to principal and KM 103.3 million was related to interest, service and other costs and bank fees. By creditors, the largest part of the total serviced amount was paid to the European Bank for Reconstruction and Development (KM 121 million or 20.8%), the World Bank (KM 119.2 million or 20.5%), and the IMF (KM 106.7 million or 18.4%). During 2016, KM 746.6 million⁸ of foreign debt is due, out of it, KM 140.3 million of the debt based on the SBA with the IMF. A detailed survey of the liabilities towards the IMF, as of 30 May 2016, is provided in Table 2.1.

3 The “old” debt consists of inherited commercial debts, originating from the period before 2 April 1992 that, according to MFT data as of 31 December 2015, account for a debt to Paris Creditor Club (KM 771,1 million), the World Bank – EBRD (KM 442,2 million) and London Creditor Club (KM 291,6 million).

4 The World Bank – IDA and EBRD, European Investment Bank – EIB, IMF, EBRD i European Commission.

5 According to the data of MFT BH, the total foreign debt of BH, as of 31 December 2015 was agreed at the average interest rate of 1.49%.

6 The basket of currencies used by the World Bank and other regional development banks for the calculation of liabilities based on loans which are usually paid in dollars.

7 SDR structure: USD 41.9%, EUR 37.4%, GBP 11.3% and JPY 9.4%.

8 The amount of the projections of liabilities does not include the loans in process of being agreed.

Table 2.1: Repayment Plan of the Stand-by Arrangement with the IMF

(as of 30 May 2016)		in SDR	in BAM
Year	Description	Repayment Amount	Repayment Amount
2016	SBA Principal	54,957,500	135,191,383
	Charges / Interest	2,095,172	5,153,968
	TOTAL	57,052,672	140,345,351
2017	SBA Principal	136,336,875	335,378,624
	Charges / Interest	3,371,522	8,293,695
	TOTAL	139,708,397	343,672,318
2018	SBA Principal	143,735,000	353,577,464
	Charges / Interest	1,660,201	4,083,972
	TOTAL	145,395,201	357,661,435
2019	SBA Principal	68,696,875	168,989,229
	Charges / Interest	377,397	928,369
	TOTAL	69,074,272	169,917,598

Source: IMF

Note: Amounts in BAM are calculated according to the CBBH exchange rate as of 31 May 2016 1 SDR = 2,459926 BAM

For 2016, only the amount remaining for repayment is shown

BH internal debt⁹ at 2015 end, according to the data of MFT BH, amounted to KM 3,535.4 million¹⁰. The internal debt amount in the end of 2015 increased by KM 237.4 million. The increase compared to the previous year was mainly caused by the increase of banks' claims on the government sector, due to the absence of the agreement on the arrangement with the IMF during 2015. According to the CBBH data, the total debt of the government sector with commercial banks increased by 19.7% compared to the previous year, by which the exposure of the

banking sector to the government sector continued to increase (see Chapter 5.1: Banking Sector). The debt of the government sector on the basis of issuing securities the buyers of which were commercial banks in BH, increased by 39.5%, while the debt of the government sector on the basis of loans of commercial banks increased by 6.3% compared to the previous year. The exposure of commercial banks to the government sector in the first three months of 2016 additionally increased (Table 2.2).

Table 2.2: Banks' Claims on the Government Sector

in KM million

Claims	2008	2009	2010	2011	2012	2013	2014	2015	March 2016
Central Government	1.7	4,6	0,2	0,0	0,3	0,3	0,2	0,2	0,3
Loans	1.7	4,6	0,2	0,0	0,0	0,0	0,0	0,0	0,1
Securities	0.0	0,0	0,0	0,0	0,3	0,3	0,2	0,2	0,2
Government at the Entity Level	116.1	155,8	193,1	582,5	845,3	952,4	1.273,1	1.589,6	1.606,8
Loans	115.8	151,7	179,6	310,5	445,7	484,9	565,6	600,9	550,2
Securities	0.3	4,2	13,5	272,1	399,6	467,5	707,5	988,7	1.056,6
Cantonal Government	3.2	4,3	33,8	33,3	52,6	66,2	142,0	209,7	208,6
Loans	3.2	4,3	33,8	33,3	52,6	66,2	142,0	209,7	208,6
Securities	0.0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Municipal Government	142.3	188,2	225,6	273,9	314,0	341,8	342,4	304,5	295,6
Loans	141.5	186,0	222,5	269,8	309,4	337,7	339,2	301,9	293,1
Securities	0.9	2,2	3,1	4,1	4,6	4,1	3,2	2,6	2,5
TOTAL	263.4	352,9	452,6	889,8	1.212,2	1.360,6	1.757,6	2.104,0	2.111,2
Loans	262.2	346,6	436,0	613,6	807,7	888,8	1.046,7	1.112,5	1.051,9
Securities	1.2	6,4	16,6	276,1	404,5	471,9	710,9	991,5	1.059,3

Source: CBBH

⁹ BH internal debt includes the debt of the Entities and Brčko District, and includes the liabilities based on old foreign exchange savings, war claims, general liabilities, liabilities based on issued securities, liabilities based on loans in the country and liabilities based on reimbursement of taxes and activated guarantees.

¹⁰ BH internal debt does not include the liabilities based on restitution as this issue still has not been legally regulated.

In 2015, the Governments of FBH and RS issued securities in the total value of KM 1,017.04 million. The FBH Government organized 14 auctions of treasury bills in the total nominal value of KM 299 million, and the accepted weighted average interest rate was from 0.26% to 0.75%. During 2015, the RS Government carried out eleven auctions of treasury bills, in the total value of KM 166.75 million, and the average yield rates at which treasury bills were issued were between 0.81% and 3.2%. The position of the liabilities on the basis of the issued treasury bills, in the end of 2015, amounted to KM 186.75 million. In addition to borrowing on short-term basis, for the purpose of financing the imbalance between the budget revenues and expenses, the Entities Governments issued also long-term securities in the amount of KM 551.26 million. The FBH Government issued the bonds with maturity periods from three to seven years in the nominal amount of KM 310 million, and the debt balance at 2015 end in FBH on this basis amounted to KM 520 million. The Government of BH Federation, in the third quarter of 2015, issued for the first time the bonds indexed to euro in the total amount of KM 20 million, after that, in the fourth quarter, it issued two additional issues of bonds indexed to euro¹¹. In the end of 2015, the total value of the issued bonds indexed to euro in FBH amounted to KM 120 million. The RS Government during 2015 issued long-term bonds with repayment periods up to four and five years with purpose of financing the budget expenses in the amount of KM 241.26 million, and the total position of the liabilities on the basis of the issued long-term bonds in RS at 2015 end amounted to KM 534.51 million. RS Government started issuing bonds indexed to a foreign currency in September 2014, so all the five issues of bonds from 2015, which were issued by the RS Government, were indexed to euro.

During 2015, the debt based on the issues of the Entity bonds on the basis of old foreign exchange savings and war claims decreased. Until the end of 2015, the Entities and Brčko District issued bonds on the basis of old foreign exchange savings accounts in the amount of KM 1,380.54 million, and KM 1,083.70 million of liabilities on the basis of the principal was repaid as well as KM 88.92 million of liabilities based on interest.

On the basis of the war claims, FBH issued four issues of bonds in the amount of KM 195.42 million, with the maturity periods of 14 years, grace periods of 9 years at the interest rate of 2.5%. On the same basis, RS issued ten issues of bonds in the amount of KM 374.82 million, with maturity periods from 13 to 15 years, grace periods from 3 to 5 years and with the interest rate of 1.5%.

Although fiscal sustainability indicators did not deteriorate significantly, the general condition of the economy on the whole, still indicates the necessity of systemic control of further borrowing, and more active debt management policy. In the end of April 2016, the Council of Ministers of BH, for the first time, adopted a Medium-term Debt Management Strategy of BH at the state level.

In 2016, a larger amount of the foreign debt will be due than in 2015, and taking into account a restricted fiscal area of BH, impossibility to access international capital markets and the postponement of the planned arrangement with the IMF, there is still a concern regarding the public debt sustainability in long term. The public debt repayment programme, which is intensified in the next several years, will be an additional challenge for BH authorities in respect of keeping the fiscal stability. In addition, the postponement of the credit arrangement with the IMF could make more difficult the implementation of the necessary structural reforms and the fiscal consolidation planned by the Reform Agenda (see Chapter 6 Regulatory Framework) and it will create stronger pressure on the growth of internal debt, which could additionally jeopardize the fiscal stability of the country.

2.2 Current Account Deficit Financing

The balance of payments position of the country in 2015, compared to the previous year, was improved, which was largely a result of favourable trends within the current account. The current account deficit was lower by KM 446.9 million compared to the previous year and in 2015 it amounted to KM 1.59 billion. Measured by the share in GDP, the current account deficit, compared to the previous year, decreased by 1.89 percentage points and amounted to 5.57% of GDP in the end of 2015. The largest effect on the decrease of the current account deficit came from the trends in the account of goods where the increase of exports and decrease of imports resulted in a deficit decrease. The dynamics of the movements in the account of goods resulted from a higher foreign demand, and also the trend of the prices on the global market, primarily those of oil and food, which resulted in a lower value of imports. In addition, the increase of the balance in the account of services resulted in a decrease of the foreign trade deficit, and a significant increase of net inflow in this account, among other, was registered also with the groups of services where a higher surplus was traditionally recorded.

11

The eleventh issue of bonds of the FBH Government dated 21 October 2015 in the nominal amount of KM 30 million and the twelfth issue of bonds of the FBH Government dated 27 November 2015 in the nominal amount of KM 70 million.

The largest increase of the net inflow in the nominal amount of KM 83.5 million (9.9%) was recorded in the sub-account of the services of travel where the highest surplus was recorded in the previous three years, resulting from more arrivals of tourists and the increase of net income from tourism. A higher surplus compared to the previous year was also registered in the sub-account of services of processing goods in foreign ownership, in the amount of KM 35.5 million (4.5%), and in the sub-account of telecommunication and information services, in the amount of KM 34.0 million (43.9%).

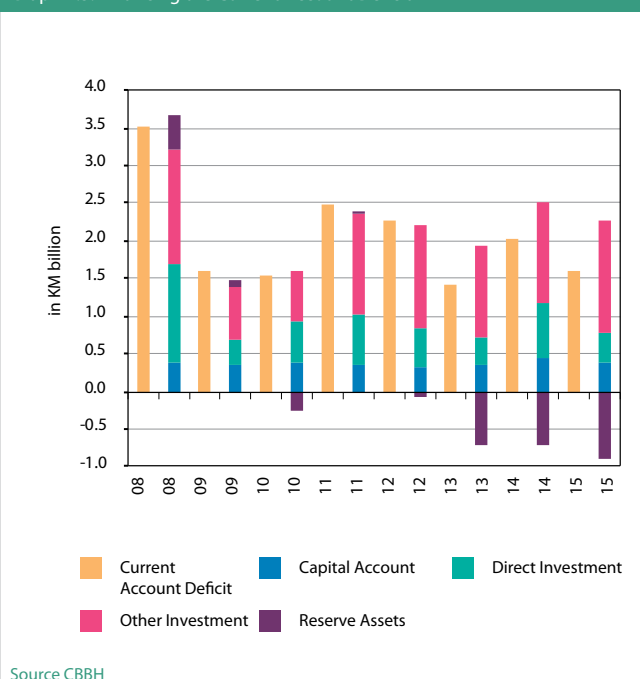
The imbalance in the exchange of goods was traditionally mitigated by the surplus in the primary income account which, compared to the previous year, was higher by 50.1% amounting to KM 271.5 million. Although compensations to employees were slightly lower compared to the previous year, they remained the most significant item on the basis of which a positive balance in primary income account is formed. The increase of the surplus in primary income account in 2015 was largely a consequence of a decrease of debt items in the sub-account of investment income resulting from a lower amount of payments based on dividends to companies in foreign ownership.

The pressure on the current account deficit in 2015, as in the previous years, was significantly mitigated by the recorded surplus on the basis of secondary income. However, unlike the previous five years, when a constant growth of the surplus in the secondary income account was recorded, in 2015, there was a significant decline of the recorded surplus compared to the previous year. The recorded surplus in the secondary income account was lower by KM 413 million, i.e. 10.4% compared to 2014. The inflows on the basis of personal transfers remained the most significant item affecting the creation of the surplus in the secondary income account, and compared to the previous year, they increased by 2.4%. The main reason of a lower surplus in the secondary income account and lower inflows is a decrease of inflows on the basis of other current transfers, i.e. inflows on the basis of pensions from foreign countries. These inflows were lower by KM 372.9 million, i.e. by one fourth compared to 2014.

Within the financial account, which mainly covers the current account deficit, there was a decrease of net inflow compared to the previous year in the amount of KM 325.9 million (24.1%), so the balance in the financial account at 2015 end amounted to KM 1,026.1 million. The main reason of lower inflows in the financial account is a decrease of the inflows based on foreign direct investments, which, compared to the previous year, were lower by 43.8%, so in 2015 they amounted to KM 402.8 million. The lower intensity of foreign direct investment was partly a result

of the take-over of holdings in companies with majority foreign ownership by domestic business entities and the repayment of the loans from direct foreign investors. Compared to the previous year, investments of residents in foreign countries increased, which, with a lower amount of reinvested earnings, additionally decreased the inflows based on foreign direct investment. Net inflows on the basis of other investment were higher by 10.5%, as a result of the increase of net financial liabilities and a decrease of net financial assets compared to the previous year. The government sector did not significantly increase its debt compared to the previous year. In other sectors, the increase of debt in the amount of KM 398.3 million was recorded, and deleverage trend was continued in the sector of financial intermediaries. In the capital account, less inflows was registered compared to the previous year.

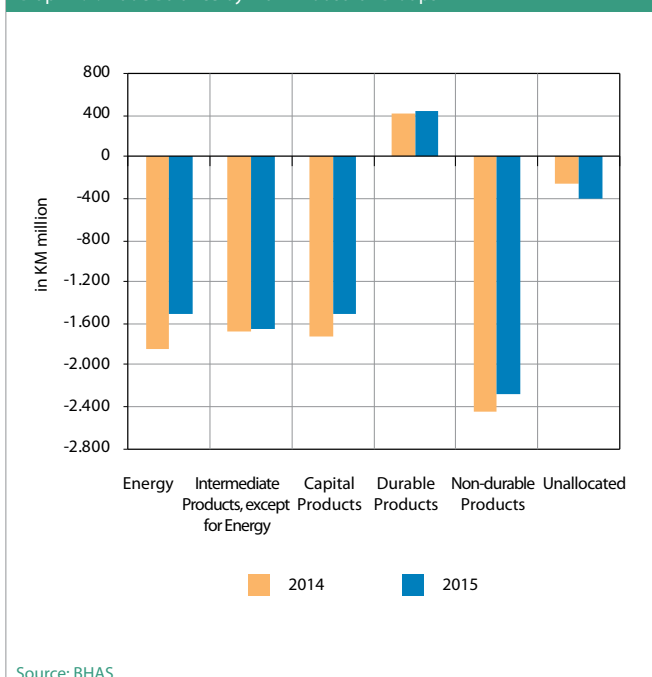
Graph 2.3: Financing the Current Account Deficit



Observing the structure of the trade deficit by economic purpose, in 2015, in most of the main industrial groups, a decrease of trade deficit was recorded. The largest decrease took place in industrial group Energy, where the trade deficit is lower by almost KM 350 million, which is the consequence of a lower realized value of imports in this group. In industrial group Non-durable Consumer Goods, the largest trade deficit was recorded (KM 2,266.8 million), although, compared to the previous year, it decreased by KM 175.9 million. Also, a significant decrease of the trade deficit was recorded in the group of capital products (KM 216.5 million), while in the group Intermediary Products except for Energy, the trade deficit did not significantly change. The deficit decrease was a consequence of lower import prices (in case of Energy and Non-durable Consumer Goods) and the

high base from the previous year in case of capital products due to the growth of the imports of goods for the repair of the damages after the floods.

Graph 2.4: Trade Balance by Main Industrial Groups

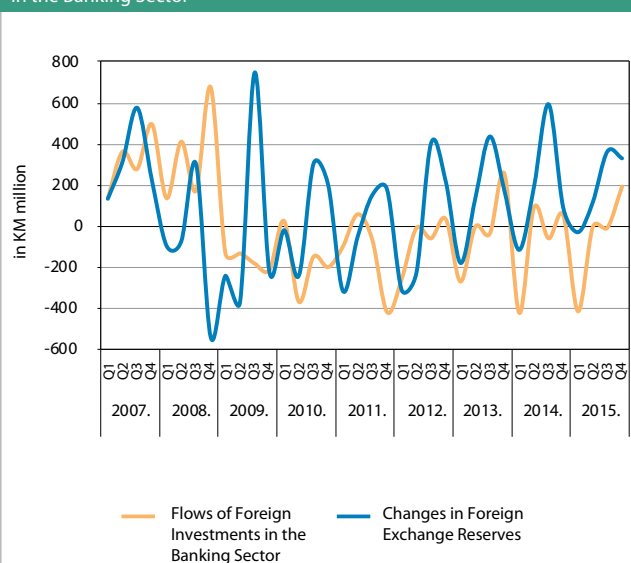


The expected strengthening of economic activities in 2016 will create pressure on the deepening of the current account deficit through the growth of domestic demand. In addition, a possible growth of prices of oil and other energy sources and also the growth of food prices will affect a higher value of imports, which will bring about additional pressure on the increase of the current account deficit. On the other hand, the growth of foreign demand, and also the increase of the competitiveness of the local exporters on foreign markets would have a positive effect on the deficit. The expected beginning of operations of new facilities and increase of the production of electric energy, as one of the main export products, will decrease pressure on the current account. The trends in the prices of base metals which have been the main export product over the previous several years have a negative trend, which, with a lower global demand for these products will have a negative effect on the value of exports and deficit of goods and decrease foreign exchange inflows.

The decrease of the current account deficit had a positive impact on the foreign exchange reserve balance of the country at year end. Gross foreign exchange reserves at 2015 year end amounted to KM 8.61 billion, which was the highest recorded amount of the foreign exchange reserves since the establishment of the CBBH. One of the most significant factors influencing the trend of the foreign exchange reserves is the pace of

the trend of the government sector external debt. In 2015, there was no withdrawal of new tranches from the loan arrangement with the IMF due to the expiry of IV SBA, so the increase of foreign exchange reserves could not take place on such basis. The absence of the loan arrangement with the IMF did not have a considerable negative impact on the positions of the foreign exchange reserves in 2015, as it was expected. The absence of the inflow on this basis was obviously compensated by other kinds of foreign exchange inflows. On the other hand, during 2015, the total of KM 106.7 million was serviced on the basis of the liabilities which were due on the basis of III and IV SBA, which had a negative impact on the balance of the foreign exchange reserves. Yet, the amount of the serviced debt towards the IMF during 2015 is significantly lower compared to the previous year, so, in this respect, the pressure on the foreign exchange reserves was lower. Also, the total amount of the serviced foreign debt during 2015 was lower compared to 2014, which had a positive impact on the positions of the foreign exchange reserves. As the repayment based on IV SBA started as early as in the end of 2015, the pressure on the balance of the foreign exchange reserves will be stronger in the period ahead (see Table 2.1). The activities of BH banking sector have influenced the foreign exchange reserves of BH for a number of years (Graph 2.5¹²). In 2015, the external debt of commercial banks continued to decrease, so foreign liabilities at 2015 year end were lower by KM 346.7 million compared to the end of the previous period. The deleverage intensity in 2015 was slightly weaker than in the previous year, which resulted in a weaker pressure on the country's foreign exchange reserves.

Graph 2.5: Foreign Exchange Reserves and Flows of Foreign Investment in the Banking Sector



12 Foreign investments in the banking sector include investments in equity, liabilities towards foreign direct investors, liabilities towards sister legal persons from foreign countries and liabilities towards other non-residents.

2.3 Slow Recovery of the Real Sector

Although the trends in the real sector in 2015 indicated a slow recovery of BH economy, progress is still insufficient in order to considerably mitigate the risks for financial stability. The low level of wages and their stagnation, and also high unemployment rate influenced the low level of purchasing power and a weak domestic demand in the previous years. Due to a slow economic recovery, domestic demand could not significantly strengthen in 2015 and it still represents one of the risks from the domestic macroeconomic circumstances. The welfare indicators, actual individual consumption per capita and GDP per capita in 2015 remained at a very low level¹³. Although, according to the Annual Report of the World Bank on projected conditions for operations for 2016, BH improved its position on the country list, the business environment still represents an obstacle for the appearance of foreign investors¹⁴. Due to a decline of the prices of food and energy sources at the world market, deflationary trends in BH continued in 2015.

The growth of real GDP in 2015 amounted to 3.03%¹⁵ and it was mainly stimulated by the growth of wholesale and retail trade and the growth of the production output in manufacturing industry. The growth trend of industrial production was continued in 2015 as well, and compared to the previous year, the industrial output was higher by 3.1%¹⁶. The most significant contribution to the growth of industrial output index came from the growth of the production in manufacturing industry, while for the second successive year, the decline of industrial output was recorded in category Production and Supply of Electric Energy and Gas. Unlike industrial production, a positive trend from the previous year was not continued in the construction sector. The production output in this economic activity was lower by 3.2% compared to the previous year, primarily due to the slow-down of works on infrastructure projects and decrease of construction works volume in civil engineering.

Welfare indicators, actual individual consumption per capita and GDP per capita did not record any considerable

changes compared to the previous two years, and they remained at a low level in 2015. The preliminary results of the European price and GDP comparison programme show that in 2015, GDP per capita expressed in the Purchasing Power Standard (PPS), amounted to 29% of the average of the EU countries, and despite its growth of 1 percentage point, BH remained at the last position of 37 countries included in the research¹⁷. Also, according to this research, actual individual consumption per capita expressed in the Purchasing Power Standard increased by 1 percentage point and amounted to 38% of the average in the EU countries, and BH, according to this indicator, takes the second last place in the mentioned group of countries. It should be added that the largest part of individual consumption, in the structure of the Purchasing Power Standard, is used for the basic needs of living, primarily food and non-alcohol beverages and costs of housing and utility costs, which indicates the continuing low living standard in BH.

The downward trend of the prices of food and energy sources on the global markets determined the trend of the general level of the prices in BH, so deflationary trends continued in 2015. The recorded deflation measured by the consumer price index amounted to 1% and compared to 2014, it recorded an increase of 10 basis points. Deflationary pressures were particularly prominent in the end of the year, due to a significant decline of oil prices on the global markets. Having in mind a high trade deficit in section „Food and Food Products“, the decline of food prices on the global markets in 2015 had a strong impact on the decline of the prices in the category Food and Non-alcohol Beverages (-0.9%), while the oil prices on the global market determined the decline of the prices in category Transport (-6.9%). Despite a strong impact of the prices of goods and services from the mentioned two sections, with high shares in the household consumption, the creation of the general price level was significantly influenced by the decline of the prices in section Clothes and Footwear (-7.3%), while in most of other sections, a low growth of prices was recorded (Graph 2.6).

¹³ Eurostat, News release 117/2016, 15.06.2016.

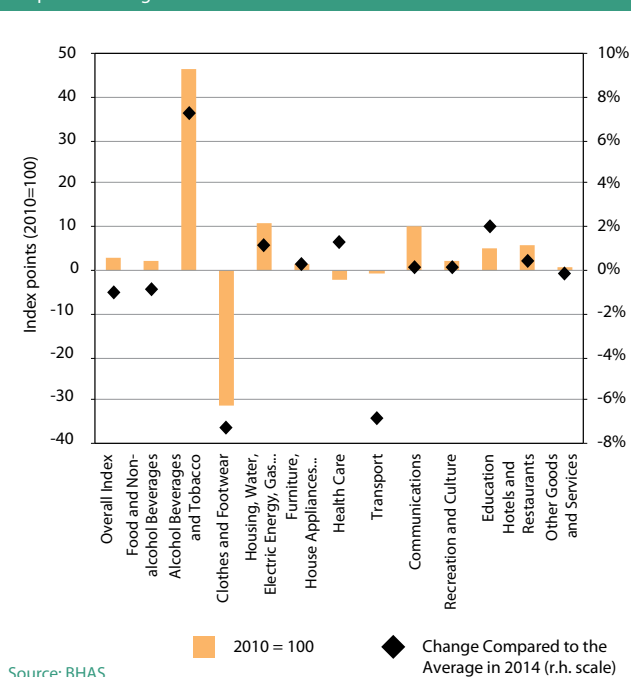
¹⁴ According to the Annual Report of the World Bank on projected conditions of operations for 2016 (Doing Business 2016) BH takes the 79. position out of the total of 189 ranked countries of the world. It is particularly important to stress that BH according to the mentioned list is ranked on 175. position according to the starting of a new business criterion.

¹⁵ Source: BH Agency for Statistics, the first results for 2015

¹⁶ Annual rate of change, calculated from calendar adjusted indices of industrial output, shows the growth of 2.6%, whereas the growth in December 2015 compared to the same month of the previous year amounted to 1.8%.

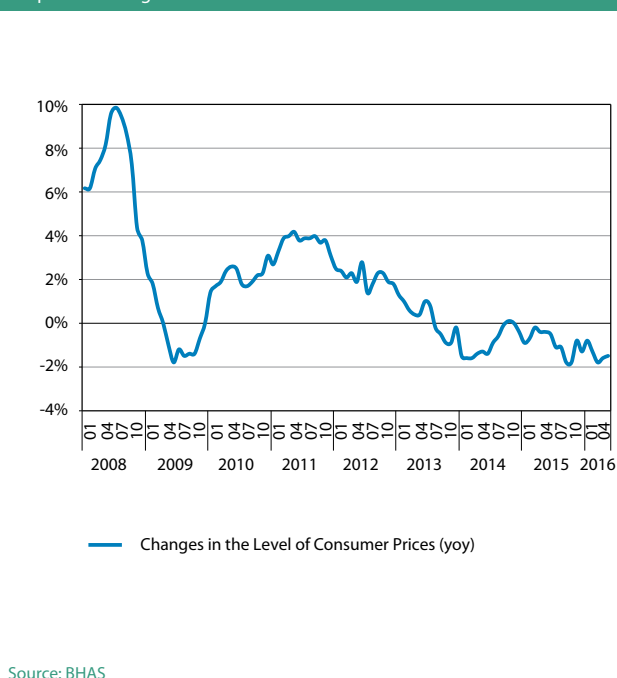
¹⁷ EU 28 countries, EFTA member countries (Norway, Switzerland, Iceland), the EU candidate countries (Turkey, Serbia, Montenegro, the Former Yugoslav Republic of Macedonia and Albania) and BH, as a potential candidate country for EU membership.

Graph 2.6: Changes in Consumer Price Index



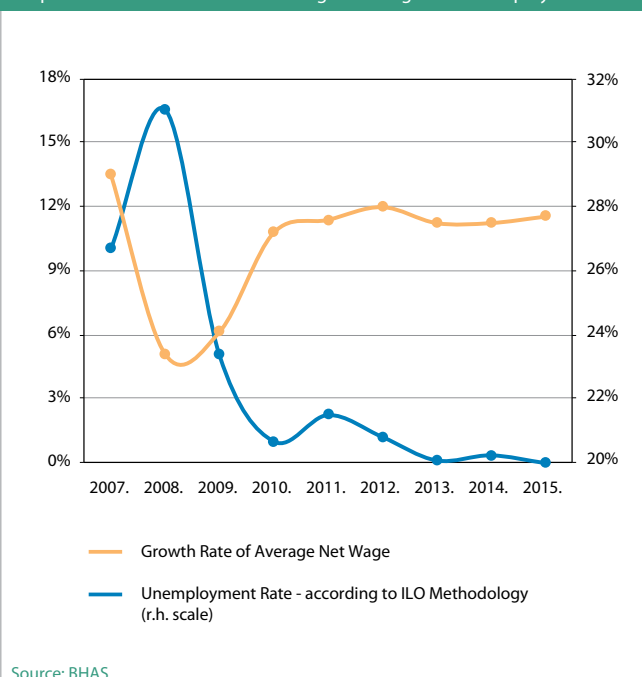
Due to the continued downward trend of the prices of food and oil on the global markets, the decrease of deflationary pressures in BH is not expected in 2016 either. Deflationary trends continued in the first five months of 2016, and the prices measures by CPI compared to the same period of the previous year were lower by 1.4% (Graph 2.7).

Graph 2.7: Changes in the Consumer Price Level



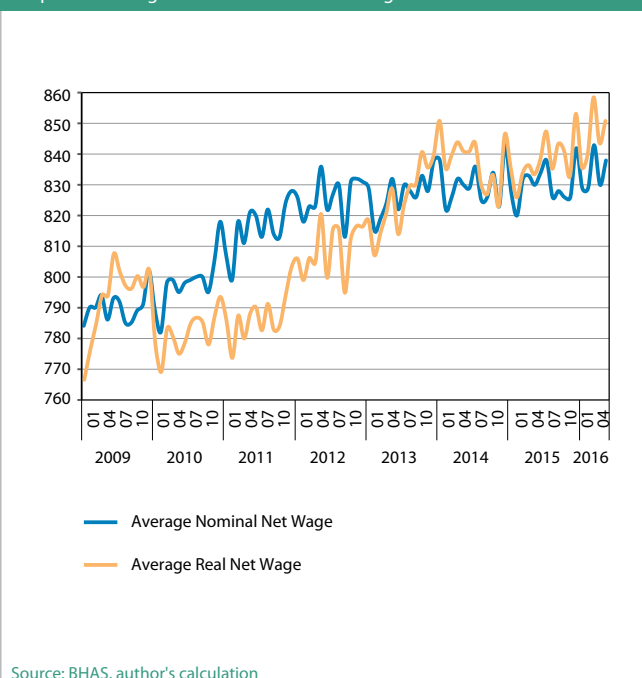
The low level of wages and their stagnation over the previous several years, and also a high unemployment rate are the basic features of the labour market (Graph 2.8).

Graph 2.8: Growth Rates of the Average Net Wage and Unemployment



In 2015, the average nominal net wage in BH remained at the same level as in the previous year (KM 830), while the average nominal net wage in December 2015 was lower by 0.1% compared to the same period of the previous year. Unlike the average nominal net wage, due to deflationary trends which were continued in 2015, the average real net wage remained at a slightly higher level (Graph 2.9).

Graph 2.9: Average Nominal and Real Net Wages



According to the Survey on Labour, conducted according to the methodology of International Labour Organisation (ILO), in April 2015, the unemployment rate in BH amounted to 27.7%

and it was higher by 20 basis points compared to 2014. The number of employed persons according to the data from the survey increased by 1.2%, while at the same time, the growth of the unemployed persons was 2.3%. Unlike the data from the Survey on Labour, according to administrative data of the employment bureau, in 2015, the growth of the number of employees was recorded in 2015 (1.1%) and the decline of the number of unemployed persons (-1.7%), and the administrative unemployment rate is lower compared to 2014. The differences between the trends of the administrative rate of unemployment and that from the survey arise from the differences in the applied methodologies of calculation and determining the status of the unemployed persons, but in both cases it is evident that changes are small, and that the entire situation at the labour market can be estimated as stagnating. Also, quite concerning data are related to the unemployment rate of young people amounting to 62.3%¹⁸.

Observing the data on employment according to individual activities, the increase of employees was recorded in twelve activities, and the largest real increase was in the activity Real Estate Business, which is a consequence of the strengthened activity on the real estate market. The largest contribution to the growth of the total number of employees came from the growth of the number of employees in activities Wholesale and Retail Trade and Manufacturing Industry, and a significant increase of employees in nominal amount was recorded in Activity of Accommodation and Food Services (Graph 2.10).

The trends on the labour market in the first four months of 2016 do not indicate a considerable recovery on the labour market. The average net wage in the period January – April 2016 was higher than the average in 2015 by 0.4%, while the number of employees increased by 0.9% compared to the end of 2015. Taking into account the mentioned indicators, it is evident that, it is necessary to implement reforms on the market of labour as soon as possible, and this problem has been recognized by BH authorities, which have committed to solve problems on the market of labour in the Reform Agenda.

Graph 2.10: Changes in the Number of Employees by Activities



Source: BHAS

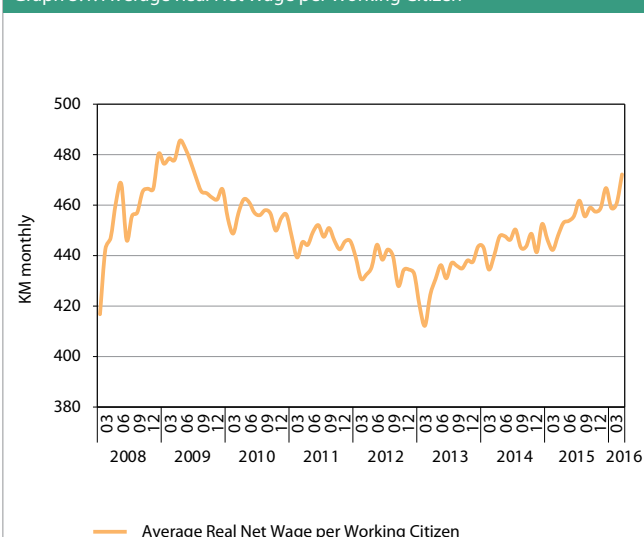
A - Agriculture, Forestry, Fishing,
 B - Mining and Quarrying,
 C - Manufacturing Industry,
 D - Electricity, Gas, Steam Production and Supply and Air Conditioning,
 E - Water Supply; Sewerage, Waste Management and Remediation Activities,
 F - Construction,
 G - Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles,
 H - Transportation and Storage,
 I - Accommodation and Food Service Activities (Hotels and Catering),
 J - Information and Communication,
 K - Financial and Insurance Activities,
 L - Real Estate Activities,
 M - Professional, Scientific and Technical Activities,
 N - Administrative and Support Service Activities,
 O - Public Administration and Defence; Compulsory Social Security,
 P - Education,
 Q - Human Health and Social Work Activities,
 R - Arts, Entertainment and Recreation,
 S - Other Service Activities

3. Households

In the previous Chapter, a slow and insufficient recovery of economic activities in BH was identified as one of the risks from domestic macroeconomic environment. Although some indicators from real sector indicated a slow recovery in 2015, the recorded positive trends were not sufficient for a considerable strengthening of domestic consumption. Despite the growth of loans to households with commercial banks, a larger increase of the total debt of households was not recorded. On the real estate market, intensified activities were recorded compared to the previous years with low demand and low volume of turnover in real estate, but these cannot be explained by the improved living standard of households.

Indicators from the labour market still point out a low living standard of households. The average net wage in 2015 remained at the same level as in the previous year, and the unemployment rate remained very high (see Section 2.3). The average real net wage per working citizen¹⁹ in December 2015 recorded a growth of 3.2% compared to the same period of the previous year, which was affected by the deflation and also the trend of the number of employed and unemployed persons. Although a slow increasing trend of the average real net wage was evident since 2013, its level in 2015 remained below the level from 2009 (Graph 3.1).

Graph 3.1: Average Real Net Wage per Working Citizen



Source: BHAS, author's calculation

Despite the absence of a stronger recovery in the household sector, in 2015, the strengthening of the activities on the real estate market in BH was recorded. The volume of transactions in real estate measured by the number of the sold square metres of housing space compared to the previous year increased by 18.8%. A higher turnover in real estate compared to the previous year was recorded in all the cities in BH included in the calculation of real estate price, and the highest growth was recorded in the cities of Tuzla and Mostar, and Centre Municipality Sarajevo. It is characteristic of Tuzla and Mostar that the real estate trade volume came close to the values from the beginning of the economic crisis. In Centre Municipality, the largest volume of purchase and sale of real estate for housing purposes has been recorded since 2004. The intensity of the activities on the market of real estate in the other two Sarajevo municipalities, and in City of Zenica, is still quite lower compared to the years before the economic crisis.

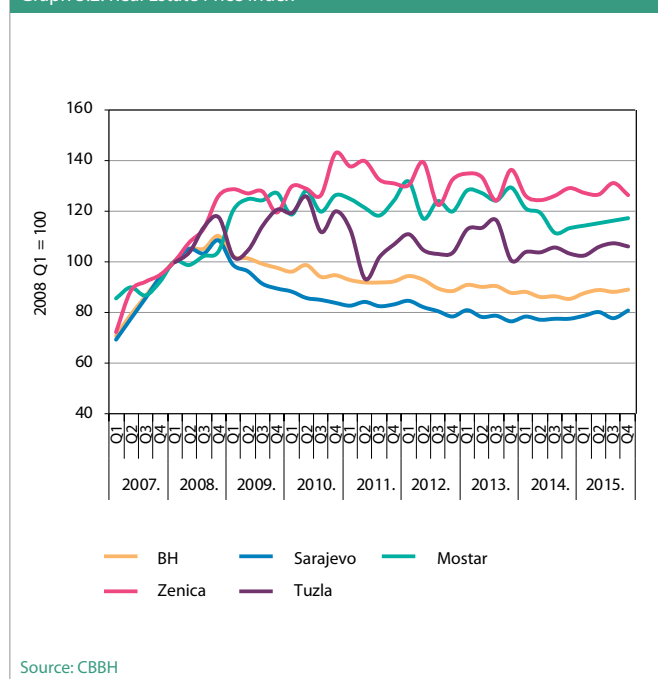
The growth of demand on the real estate market brought about a slow growth of the prices of real estate for housing purposes. The prices of real estate property for housing purposes in 2015 recorded a growth for the first time after six years. According to the real estate price index for BH²⁰, a slow growth of real estate prices for housing purposes²¹ was recorded in Sarajevo where the real estate prices stagnated in the previous years and also in other regional centres in BH, where larger oscillations of real estate prices were already present earlier (Graph 3.2). The intensified activities on the real estate market were accompanied by the increase of the number of employees in the activity Real Estate Business, so the largest relative increase of employees was recorded in this activity (9.2%).

¹⁹ For the calculation of the average real net wage per working citizen, the monthly data were used: consumer price index (2010=100) and administrative data on the number of employed and unemployed persons.

²⁰ The methodology for index calculation has been explained in FSR for 2007. Real estate price index for City of Sarajevo does not include Old Town Municipality, which has not replied to the request for the submission of data since 2008. Municipality of Tuzla has been included since 2010 which has submitted data back from 2008. RS Tax Authority could not submit data for Grad Banja Luka in the required form.

²¹ When creating the real estate price index, the data on prices of real estate which are newly constructed buildings are not used.

Graph 3.2: Real Estate Price Index



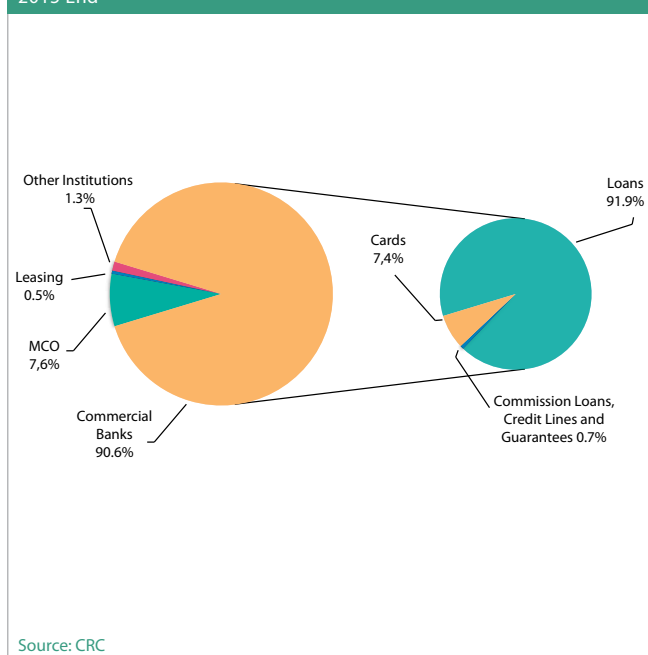
Positive trends in the real estate market still cannot be explained by better living standard of citizens, and there is a possibility that this is a short-term effect which is partly a result of investing in real estate by citizens with higher monthly income and citizens who financed the purchase of real estate property by funds acquired by working abroad. This is supported with the data that in 2015 the loans for housing purposes continued to decline for the third successive year. The data on housing construction in BH do not indicate a stronger recovery of real estate market. In 2015, the number of finished, newly constructed housing units significantly decreased compared to the previous four years²², while the number of housing units in the stage of construction is below the average recorded in the previous 4 years. The further developments on the real estate market will depend on the intensity of economic recovery and the trends on the labour market which the standard of living of households and finally the demand for real estate for housing purposes depend upon.

According to the data from the Central Registry of Credits (CRC), claims on households in the end of 2015 amounted to KM 8.42 billion and compared to the end of 2014, they increased by 3%. Expressed in the percentages of GDP, the exposure of financial institutions to households, due to a slightly faster growth of GDP, was lower by 0.9 percentage points compared to the previous year and at 2015 end it amounted to 29.5% of GDP. The growth of the total claims on households was mainly the result of the growth of the household debt based

on the standard loans from banks (5.4%). On the other hand, the downward trend of the household debt based on other types of claims of banks, except for debit cards, continued as well as the downward trend of the debt of households with microcredit organizations and leasing companies. In the sector structure of loans from banks, for the third successive year, the share of loans to households compared to the share of loans to companies increased and at 2015 end, 49.6% of the total banks loans was related to the loans to households.

Observing the sector structure of the claims on households through periods, it is evident that the growth of claims of commercial banks continued in comparison to the claims of other financial institutions. So, the claims of commercial banks at 2015 end accounted for 90.6% of the total claims on households, out of it, 91.9% of all the bank claims was related to loans (Graph 3.3). Also, for the second successive year, a slow growth of the share of bank loans was recorded, compared to the other types of the banking sector claims, and also their share in the total claims on households, which in the end of 2015 amounted to 83.2%.

Graph 3.3: Claims on Households according to the Type of Debt at 2015 End



According to the data from CRC, the household debt based on payment cards continued to decrease for the second successive year. In the segment of deferred payment cards, the decrease of the household debt was recorded by 16.2%, while the debt based on standard credit cards was lower by 4.7% compared to the previous year.

Table 3.1: Claims on Households, Cards

in KM

	Number of Issued Cards		Approved Amount		Used Amount		Debt per Card	
	2014	2015	2014	2015	2014	2015	2014	2015
Debit Cards	674,916	682,211	736,157,101	764,431,968	343,393,060	347,201,372	509	509
Credit Cards	202,577	207,449	347,853,188	343,638,459	191,457,617	182,369,372	945	879
Deferred Payment Cards	118,721	125,609	146,421,326	149,150,621	41,268,380	34,580,382	348	275
TOTAL	996,214	1,015,269	1,230,431,615	1,257,221,048	576,119,057	564,151,126	578	556

Source: CRC

The decrease of the amount of the used part of overdraft, both with deferred payment cards and also credit cards, could be an indicator of a lower level of borrowing of households on the basis of cards due to higher costs related to this kind of borrowing²³. The increase of the used part of overdraft was only recorded in case of debit cards (1.1%). The growth of borrowing based on debit cards was in proportion to the increase of the number of debit cards, so, compared to the previous year, there was no change of the average debt of households based on debit cards. Unlike debit cards, the average debt per credit cards and deferred payment cards decreased by 7% and 20.8% respectively.

As the overdraft amount of debit card is mainly determined by the level of the average monthly income, the used part of the card overdraft amount can be used as an indicator of the household consumption compared to the amount of their income. The average debt based on debit cards at 2015 end amounted to KM 509, which is 61.3% of the average net wage in 2015 and was not changed compared to 2014.

Observing the debit cards according to the spread of the approved overdraft amount (Table 3.2), it can be noticed that the used part of the overdraft amount based on debit cards decreased compared to the previous year in all the categories, except in case of the category of households with the highest monthly income (the approved overdraft amount over KM 1,600). Although the growth trend in the borrowing of households with the lowest income, which had been present in the previous years, was stopped, the households from this category still considerably used the approved overdraft amount on debit cards, which is probably the consequence of excessive level of debt of this category of households and the impossibility to provide needed funds in any other way. As the households with the lowest income in the previous period was most affected by deteriorated economic circumstances in the country, and to a high extent they issued overdraft amounts

on debit cards, customers from this category continued to record a higher ratio of non-performing to the total claims compared to the category of customers with higher monthly income. Even 86.9% of the total number of debit cards classified in non-performing claims is in the group of debit cards with the approved overdraft amount up to KM 400.

Table 3.2: The Used Debit Card Overdraft

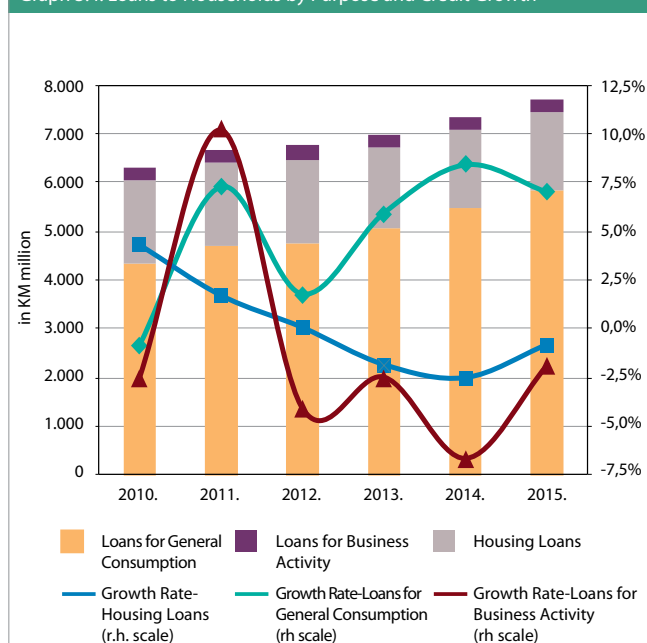
in KM

		The Approved Overdraft Spread				
		up to 400	401-800	801-1200	1201-1600	over 1600
The Used Part of the Card Overdraft	XII 2014	173	307	507	713	1,091
	XII 2015	165	299	490	698	1,105
	Change, %	-4.7	-2.7	-3.2	-2.1	1.3

Source: CRC

In the structure of the claims on households by purpose, general consumption loans are dominating, which include the claims based on all the types of cards (Graph 3.4).

Graph 3.4: Loans to Households by Purpose and Credit Growth



Source: FBA and BARS

23 Average interest rate on household debt per cards in December 2015 was higher than the average interest rate on loans approved in the same period by 4.8 percentage points.

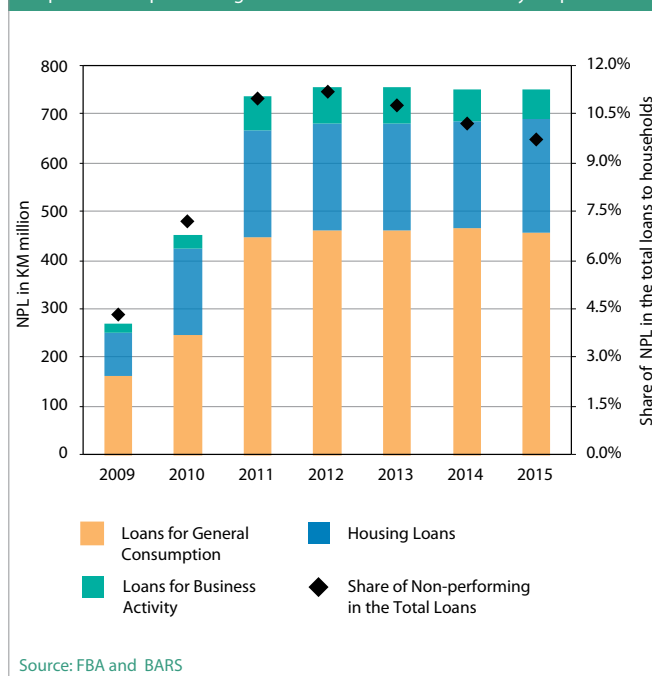
The loans intended for general consumption have been growing for the fifth successive year and at 2015 end they recorded an increase of 7% compared to the end of the previous year. Their share in the total loans to households increased by 1.4 percentage points and at 2015 end, 75.7% of loans to households was related to general consumption loans. Unlike the loans for general consumption, housing loans and business activity loans in 2015 recorded a decline of 0.8% and 1.9% respectively. The share of housing loans in the total loans amounted to 21% and it was lower by 1.2 percentage points compared to the end of 2014.

Housing loans for the third successive year recorded negative growth rates, which is a result of a slower pace of placing housing loans in the previous four years. The continuous decline of housing loans, despite the declining trend of interest rates on housing loans, with the growth of loans for general consumption, could be one of the indicators of a continued low living standard of households, and the households, in the previous years, postponed the solving of the housing issue, due to the uncertainty related to the ability to service debt, but also expecting a further decrease of real estate prices. However, as the data on purchase and sale of real estate properties for housing purposes indicate a slow recovery of the real estate market in respect of the volume of purchase and sale, and also a slow increase of real estate prices, it can be concluded that purchase and sale of real estate is not financed entirely by loans of this purpose. As the banks over the previous several years tightened the conditions for granting housing loans, the cases when housing needs are solved by several members of the household borrowing lower amounts through general consumption loans are not rare. Accordingly, there is a possibility that the growth of loans for general consumption, which in the previous years was caused mainly by low available income, and the needs of the households to borrow with purpose of meeting the basic needs of life, was partly brought about by the use of these loans for the purchase of real estate.

After a significant growth of the level of non-performing loans in the period between 2009 and 2011, caused by a sudden deterioration of the quality of the loan portfolio due to the economic crisis, and the including of E category into the balance sheet records of banks, no considerable changes in the level of non-performing loans in the household

sector were recorded. The termination of the growth trend of non-performing loans to households was partly impacted by the write-off of non-performing loans in several banks in the sector, and also the activities which the banks undertake for decreasing credit risk and more efficient collection. After a slight decrease of non-performing loans in the absolute amount in the previous year, in 2015, non-performing loans recorded a very low growth (0.05%). Yet, due to the growth of placements to households, for the third successive year, the downward trend of the share of non-performing in the total loans of households continued (Graph 3.5). The share of non-performing in the total loans to households at 2015 end amounted to 9.7% and compared to the same period of the previous year it was lower by 47 basis points.

Graph 3.5: Non-performing Loans in the Household Sector by Purpose



The quality of the loan portfolio in the household sector was also affected by the undertaken activities by banks on the decrease of credit risk and more efficient collection. The Banking Agencies adopted several legal enactments²⁴ in the previous years with purpose of facilitating the settlement of liabilities to customers which due to economic crisis or natural disasters in 2014 encountered problems in debt repayment. The measures of the Banking Agencies included the possibility of rescheduling, restructuring and moratorium of loan obligations of customers where difficulties in debt repayment appeared, and legal enactments which regulated them ceased to be effective during 2015. By the mentioned

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Decision on provisional measures for the treatment of credit liabilities of bank customers affected by natural disasters, dated 30.06.2014. ("Official Gazette of FBH", Ref: 55/14) and Decision of provisional measures for credit liabilities of customers endangered by natural disasters dated 26.06.2014. („Official Gazette of RS", Ref: 57/14); Decision on provisional measures for rescheduling credit liabilities of natural and legal persons ("Official Gazette of FBH", Ref: 2/10, 1/12, 111/12 i 1/14 and „Official Gazette of RS", Ref: 9/10, 126/10, 127/11, 123/12, 01/14, 01/15); Decision on provisional measures for treating liabilities based on leasing contracts for the customers of leasing companies affected by natural disasters, dated 29.10.2014. ("Official Gazette of the Federation of BH", Ref: 88/14).

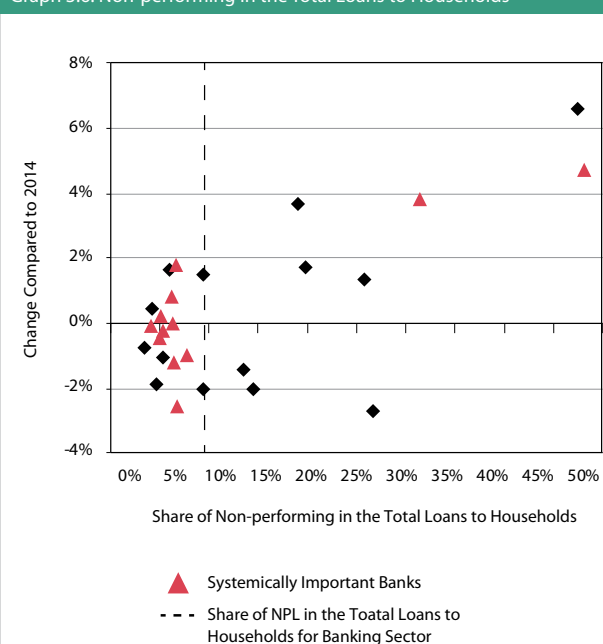
measures, the banks provided a possibility for customers which still did not enter the category of non-performing to finance the existing obligations in an easier way, and decreased the growth of provisions due to deterioration of the quality of loan portfolio. Also, these measures had an impact on the reduction of activation of instruments for loan collection, primarily guarantors. According to the data of the Banking Agencies, the number of guarantors which repaid the loans decreased compared to the previous year by 25.6%. During 2015, 2,308 guarantors /co-debtors repaid credit liabilities on the basis of 1,879 credit lines. Although, according to the data of the Banking Agencies, for the fifth successive year, the number of guarantors and credit lines for which the liabilities are settled by guarantors instead of main debtors decreases, and these are not systemically important indicators, the problem of credit repayment by guarantors still represents a burden for households which often have their own debts with banks or other financial institutions.

Observing by individual banks, most of the banks in the system at 2015 end had the share of non-performing loans in the total loans of households below the average value of the banking sector. Among the banks with lower indicators of the loan portfolio quality in the banking sector, six banks particularly stand out, where the quality of the portfolio continued to deteriorate in 2015, and whose share in the total loans to households amounted to 12.2%. In this group of banks, there are also two systemically important banks, with large impact on the quality of the loan portfolio of the entire banking sector, and Banka Srpske whose operating licence was revoked in the second quarter of 2016 (Graph 3.6).

Observing the quality of the loan portfolio by loan purposes, in case of housing loans, the loan portfolio quality continued to deteriorate for the fifth successive year. The amount of the non-performing loans in 2015 in this category of loans increased by 3.3%, while the share of non-performing in the total housing loans at year end amounted to 14.2%, and it was higher by 56 basis points compared to the end of the previous year. In addition to the growth of non-performing loans in the absolute amount, the growing trend of this indicator was also affected by the decrease of portfolio of housing loans, which lasted for the previous three years. At the same time, non-performing loans and the share of non-performing loans in the total loans for general consumption decreased, which was also the case with loans for business activity, where, beside the non-performing loans, the entire loan portfolio decreased. The share of non-performing loans in the total loans for general consumption at 2015 year end amounted to 7.8% and decreased by 65 basis points compared to the same period of 2014. Although the share of loans to households intended for business activity in the total loans to households was only 3.3%, it needs to be stressed that, despite the decrease of non-performing loans, in this category, the quality of loan portfolio remained the lowest and the share of non-performing in the total loans for this purpose at 2015 year end amounted to even 24.6%. The low quality of loan portfolio, taking into account a low share of these loans in the total loans to households, is not concerning in respect of systemic risk, but it is stressed in case of several banks, particularly two small banks. With these banks, loans for business activity accounted for 64.7%, i.e. 41.9% of the total loans to households, and the share of non-performing loans amounted to 32.9%, i.e. 23.5% of the loans for this purpose.

Another important indicator of the loan portfolio quality is the default rate. According to the data from CRC, the default rate in 2015 amounted to 1.47%²⁵ and it was lower compared to the previous year by 20 basis points, while the number of credit lines reclassified into non-performing loans was lower by 6.6% and in 2015 it amounted to 7501 credit lines. Default at the annual and quarterly level cannot be compared due to changes in classification which take place within one year. Thus, a number of credit lines which during 2015 encountered collection problems regained the good quality loan status by the end of the year. Since the beginning of 2015, the highest default rate was recorded in the fourth quarter of 2015, and it can be concluded that banks in the end of the year revised the classification of the loan portfolio (Graph 3.7).

Graph 3.6: Non-performing in the Total Loans to Households



Source: FBA and BARS

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The default rate is calculated as a ratio of the residual debt based on loans to households which during a period (year or quarter) were reclassified into non-performing loans (categories C, D and E) and the value of the total portfolio of good quality loans (categories A and B) from the previous period.

The chart displays two metrics over time:

- Number of Credit Lines Reclassified into NPLs (Orange Bars):**
 - Q1 2015: ~2,500
 - Q2 2015: ~3,000
 - Q3 2015: ~3,000
 - Q4 2015: ~3,800
 - Q1 2016: ~2,500
- Default Rate (Black Diamonds):**
 - Q1 2015: ~0.50%
 - Q2 2015: ~0.53%
 - Q3 2015: ~0.50%
 - Q4 2015: ~0.58%
 - Q1 2016: ~0.52%

Quarter	Year	Number of Credit Lines Reclassified into NPLs	Default Rate
Q1	2015	~2,500	~0.50%
Q2	2015	~3,000	~0.53%
Q3	2015	~3,000	~0.50%
Q4	2015	~3,800	~0.58%
Q1	2016	~2,500	~0.52%

In 2015, the default rate of most banks was approximately at the same level as in the previous year, and the largest number of banks had the default rates below 2% (Graph 3.8²⁶). Banks with higher default rates mainly belong to the group of banks which have recorded a very high share of non-performing loans in the total loans for a certain period, which shows that the quality of the loan portfolio in these banks continued to deteriorate in 2015. Four banks from this group in 2015 recorded a higher default rate than in the previous year.

The scatter plot displays the relationship between the change in default rate compared to the previous year (x-axis) and the current default rate (y-axis). The x-axis ranges from -8 to 8 percentage points, and the y-axis ranges from 0% to 10%. A dashed horizontal line at approximately 1.2% represents the default rate for the banking sector. Systemically important banks are marked with red triangles, while other banks are marked with black diamonds.

Bank Type	Change Compared to the Previous Year, in Percentage Points (X)	Default Rate (Y)
Systemically Important Bank	-2.2	5.0%
Systemically Important Bank	-0.5	1.5%
Systemically Important Bank	-0.2	1.0%
Systemically Important Bank	0.0	1.8%
Systemically Important Bank	0.2	2.5%
Systemically Important Bank	0.5	2.3%
Other Bank	-7.2	2.5%
Other Bank	-2.8	2.3%
Other Bank	-1.2	0.9%
Other Bank	-0.5	1.5%
Other Bank	-0.2	1.2%
Other Bank	0.0	0.2%
Other Bank	0.0	0.5%
Other Bank	0.2	0.7%
Other Bank	0.5	2.3%
Other Bank	2.8	4.2%
Other Bank	5.8	9.5%

As a result of the decline of interest rates at the international financial markets and attempts to achieve a larger market share, banks in the previous years gradually decreased the interest rates (Graph 3.9). The downward trend of receivable interest rates from previous years was continued in 2015, and more favourable conditions of borrowing for households contributed to the growth of demand for loans.

The chart displays two data series over time from January 2012 to January 2015. The orange area represents the number of newly approved loans in million, with the right Y-axis ranging from 0 to 300. The blue line represents the average annual interest rate at the monthly basis in %, with the left Y-axis ranging from 6.0% to 9.0%.

Newly Approved Loans (in million)

Month	Newly Approved Loans (in million)
2012-01	100
2012-03	120
2012-05	140
2012-07	130
2012-09	120
2012-11	120
2013-01	100
2013-03	140
2013-05	160
2013-07	150
2013-09	170
2013-11	140
2014-01	160
2014-03	180
2014-05	160
2014-07	180
2014-09	160
2014-11	140
2015-01	160

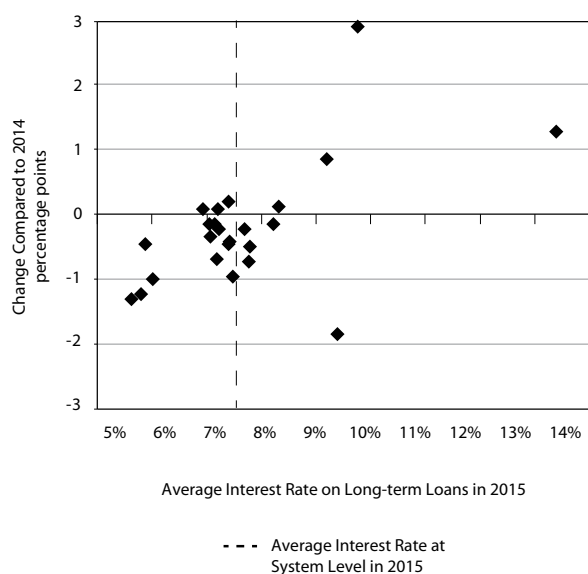
Average Annual Interest Rate at the Monthly Basis (%)

Month	Average Annual Interest Rate (%)
2012-01	8.2%
2012-03	8.9%
2012-05	8.5%
2012-07	8.7%
2012-09	8.5%
2012-11	8.6%
2013-01	8.5%
2013-03	8.6%
2013-05	8.6%
2013-07	8.6%
2013-09	8.4%
2013-11	8.2%
2014-01	7.9%
2014-03	8.0%
2014-05	7.5%
2014-07	7.5%
2014-09	7.8%
2014-11	7.9%
2015-01	7.3%

Graph 3.10 shows the level of the average weighted interest rates on newly approved long-term loans to households by banks during 2015 and the change compared to the average interest rate in 2014. The average interest rate on long-term loans to households in 2015 by banks was in the range from 5.61% to 13.39%, while at the banking sector level, the average interest rate amounted to 7.46% and was lower by 30 basis points compared to the average interest rate in 2014.

Average interest rates on long-term loans in most banks in the system were decreased compared to the previous year, which was mainly the result of the strong competition at banking market and weak demand of households for loans in the previous periods, those being the reasons why a large number of banks decided to conduct the policy of lower interest rates. A considerable growth of the average interest rate in 2015 was recorded with three small banks in domestic ownership, for which it was probably difficult to access the sources of financing from foreign countries, and they were forced to rely more on domestic sources which are mainly more expensive.

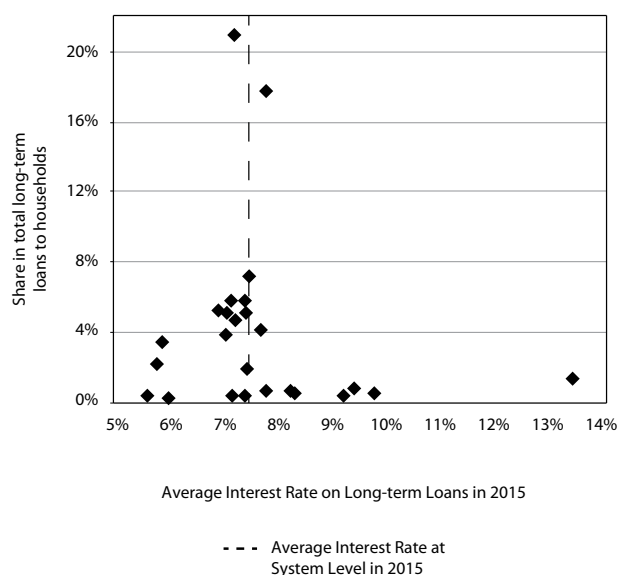
Graph 3.10: Average Interest Rates on Long-term Loans to Households Granted in 2015



Source: CBBH, author's calculation

Average interest rates on long-term loans by banks are mainly within the range +/- one percentage point compared to the average interest rate at the banking sector level, and larger deviations from the mentioned spread were recorded in case of eight smaller banks, whose long-term loans to households at the end of 2015 amounted to 9.5% of the total long-term loans to households in the banking sector (Graph 3.11).

Graph 3.11: Interest Rates on Newly Approved Long-term Loans according to the Level of Lending to Households



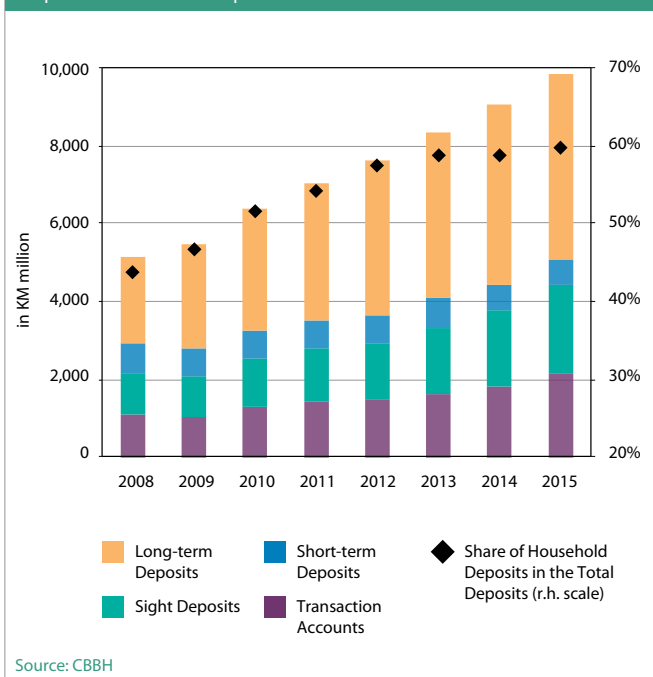
Source: CBBH

Banks which have lower level of interest rates than the average interest rate of the banking sector in 2015 granted long-term loans at lower interest rates compared to the previous year, probably in attempts to improve their competitive positions at the market. In case of one small bank which is focused on operations with companies, within the changes in the business strategy, a considerable decline of interest rate was recorded on long-term loans to households.

Despite high unemployment rate and lack of the average salary growth in Bosnia and Herzegovina, as well as the trend of decrease in deposit interest rates in BH, in 2015, the growth of household deposits continued (Graph 3.12). According to the CBBH data, household deposits, at the end of 2015, reached the amount of KM 9.86 billion, recording a growth of 9.1% compared to the previous year. The growth of household deposits of KM 822.7 million gave the largest contribution to the growth of total deposits in the banking sector (even 71.2% of the total increase of deposits in the nominal amount in related to the growth of household deposits), thus, it was continued the trend of growth of household deposits in total deposits in the banking sector.

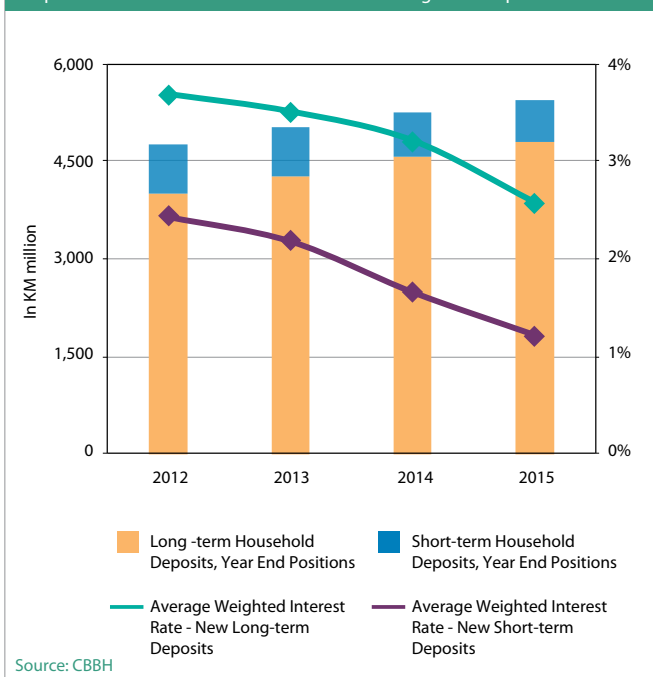
Growth in household deposits cannot be interpreted as an indication of better living standards, instead, it is mainly the result of uncertainty regarding the future economic situation in the country, with the category of higher incomes citizens who preferred the saving than the consumption. In 2015, the household deposits partly grew also thanks to the payment out of old foreign savings bonds in both BH Entities, during the year. At the same time, the growth of household deposits is an indicator of confidence in the banking sector and the commitment of the population to traditional and more secure form of savings, compared to investments in securities and other forms of savings still being perceived as more risky. It is important to note that the structure of household deposits is dominated by long-term deposits, which, in 2015, grew at 4.8% rate, while the biggest increase was recorded in the segment of demand deposits (18.6%).

Graph 3.12: Household Deposits



Under the influence of low interest rates on international financial markets, the banks in 2015 continued to reduce their deposit rates. The average weighted interest rate on household deposits with contracted maturity decreased by 59 basis points compared to 2014, while the average weighted interest rate on long-term and short-term household deposits decreased by 63 and 44 basis points, respectively (Graph 3.13).

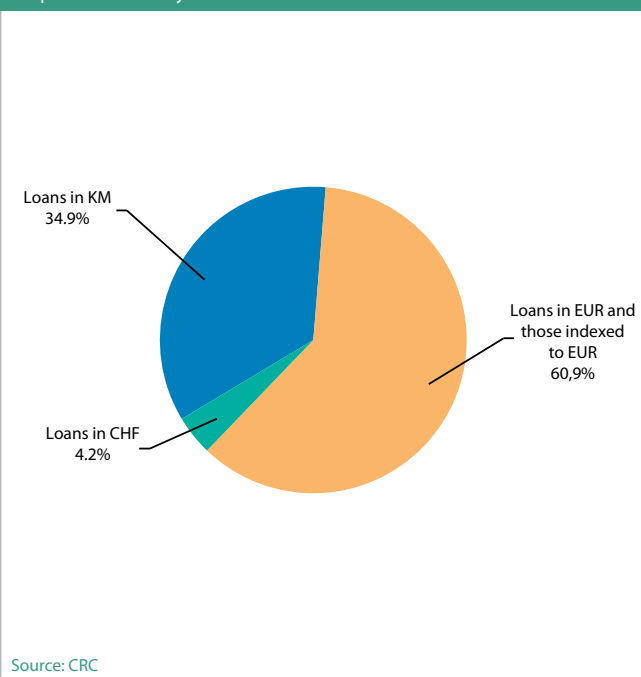
Graph 3.13: Interest Rates on Short-term and Long-term Deposits



Household loans in foreign currencies and with foreign currency clause accounted for 65.1% of total household loans, out

of which the largest part relates to loans indexed in euro or approved in euro. Household debt on loans indexed in CHF, at the end of 2015, was 4.2% of the total debt on loans to households, which is by 40 basis points less than in the previous year (Graph 3.14).

Graph 3.14: Currency Structure of Loans to Households at 2015 End



The decreasing trend of the household debt based on CHF indexed loans is the result of repayment, rescheduling or conversion of loans into another currency, as well as the termination of new CHF loans allocations since 2013. The entire amount of existing claims in CHF refers to loans approved by the two banks. Although the number of household loans in CHF, at the end of 2015, was lower by 15.2% compared to the previous year, the CHF outstanding household debt, denominated in KM, has not substantially decreased due to the appreciation of the Swiss franc in 2015, following a SNB decision to abandon its policy of fixed CHF exchange rate, and it was lower by only 3.8% compared to the end of 2014.

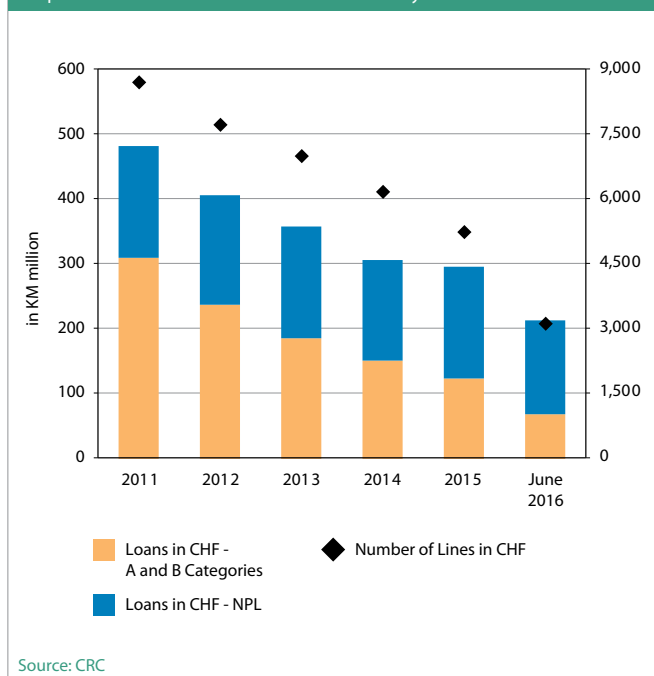
Although, according to the CRC data at the end of 2015, the number of approved lines of household loans in CHF accounted only to 0.7% of total loans approved to households, the repayment of CHF loans was a great burden for households indebted in this currency, and the loan portfolio quality was constantly deteriorating²⁷. The problem of CHF loans repayment was again actualized and enhanced by mid-January of 2015, after the appreciation of the Swiss franc against the euro, which has contributed to further deterioration in the quality of loan portfolio in CHF. During 2015, the share of non-performing

27 In the last five years, a share of non-performing loans in total CHF loans increased by 22.1 percentage points.

loans in total Swiss francs loans increased by 7.5 percentage points and it amounted to 57.9 at the end of the year.

In March 2016, customers of Swiss francs loans were given the option of restructuring credit debt through conversion of Swiss francs indexed loans into EUR indexed loans under certain more favourable conditions of the repayment than the repayment at the current exchange rate.²⁸ A large number of borrowers has accepted the offered opportunity, thus, as of the end of the first half of 2016, the number of loan accounts with Swiss franc clause decreased by 40.7%, while the outstanding balance on these loans was reduced by 28% (Graph 3.15). The process of conversion of the loans with CHF foreign currency clause continued in the second half of 2016.

Graph 3.15: Debt of Households in CHF Currency



Compared to December 2014, household debt based on KM loans grew by 10.2%, while the debt from loans in EUR and indexed to EUR recorded a slightly modest growth (3.5%). Considering the maturity structure, the credit growth was recorded in all categories of long-term loans to households, while the remaining value of the debt from loans with up to one year maturity recorded a slight decrease. The largest share of claims from household loans was relating to loans of over 10 years contracted maturity, and then to loans with maturities between 5 and 10 years. In recent years, these categories of households loans have recorded the highest credit growth, while in 2015, the largest credit growth, compared to the previous year, was recorded in the category of long-term loans with the contracted maturity of 3 to 5 years (7.7%). In this maturity category, the growth was recorded with the loans approved in KM, while the outstanding balance of loans approved or indexed in EUR is less than in the previous year. Slightly weaker growth of loans with maturities of over 10 years, compared to the previous year, could be associated with a decrease in housing loans, but also with the trend of reduction of foreign, mostly long-term sources of financing.

Table 3.3: Loans to Households, Maturity and Currency Structure

Maturity	Debt Balance and Due Uncollected Principal in thousands of KM							
	Loans in Foreign Currency and Loans Indexed to a Foreign Currency							
	KM		EUR		CHF		TOTAL	
	2014	2015	2014	2015	2014	2015	2014	2015
Up to 1 Year	73,024	71,969	4,717	5,751	0	0	77,740	77,720
1 - 3 Years	160,304	176,856	163,681	163,029	9,710	12,775	333,695	352,660
3 - 5 Years	271,325	304,199	456,920	449,884	16,534	48,298	744,779	802,381
5 - 10 Years	827,478	911,569	1,643,190	1,707,410	39,112	72,150	2,509,780	2,691,128
Over 10 Years	889,023	982,676	1,854,882	1,943,134	241,229	161,626	2,985,134	3,087,436
TOTAL	2,221,154	2,447,268	4,123,389	4,269,209	306,586	294,849	6,651,128	7,011,326

Source: CRC

²⁸ The offer was related to the conversion of the loans at the exchange rate on the day of conclusion of the Annex to the Contract, while the outstanding debt would be restructured at the fixed nominal interest rate of 5.99% and the reduction by 30%.

4. Companies

The recovery of economic activity in the country was not sufficient to largely reduce the level of credit risk, being present in the sector of non-financial companies, and one of the basic characteristics of this sector is still high proportion of non-performing loans in total loans. Due to the strengthening of foreign demand and improving of export activities of local companies, as well as the recovery of industrial production in the country, there are signs of positive developments in the credit activity of the sector. However, a lengthy period of the stagnation in the country's economic activity, the absence of a significant investment cycle and weak domestic demand prevent a stronger credit expansion in the sector of non-financial companies. From the aspect of financing costs, 2015 was favourable for the corporate sector, since the downward trend of the interest rates in the domestic banking market continued in this year, too.

Base metals and base metals products continue to represent the most significant group of export products in BH. The maximum nominal value of exports was recorded in this group of products and their exports account for almost a fifth of total exports in 2015. Compared to 2014, there was a decrease of 5.6% in nominal value of exports, which is caused by lower exports in the group of Iron and Steel. The decline of exports in the a.m. products group is the result of fewer quantities exported, as well as unfavourable price trends of this products group. Globally, iron and steel production has slowed because of decreasing demand for this products group, which had a negative impact on the production and the exports from BH. In addition, the prices of these metals were under pressure of reduction throughout 2015, and the negative price effect accelerated the decline in value of these products group exports. In the case of aluminium and aluminium products, it was also recorded a decline in the nominal value of exports due to the decrease of demand on this product category. The a.m. developments in the category of base metals have caused the base metals to lose the status of category with the highest surplus in trading goods in Bosnia and Herzegovina. For the second consecutive year, the largest decrease of exports, in nominal value, in the group of main export products, was recorded with mineral fuels. The decline of the exports value is the result of fewer exported quantities and negative price movements, where the effect of volume having bigger influence.

The trends in exports of these products category is under significant influence of the electricity market trends, whose

production in 2015 declined by 2.4%, while the realized exports decreased by 7.94% , compared to the previous year. Although in previous years, the electricity was one of the key determinants of export growth, in the last two years, its participation in the foreign trade of the country is weakening. In recent years, BH wood industry has recorded the constant growth in production and exports and it is one of the sectors of the economy which generates a significant surplus in foreign trade. In the category: *Wood and Wood products*, in 2015, too, it was recorded an increase in the nominal value of exports, which is primarily the result of favourable price effects. Also positive trends in export growth continued in the group: *Miscellaneous Products (furniture, mattress constructions, bedding and the like; lamps and lighting fittings, which are not mentioned or included elsewhere; illuminated signs, illuminated name-plates, prefabricated buildings)* where, despite the negative impact of prices, the exports grew at the rate of 6%, thus the increase in exports is solely the consequence of an increase in the exported quantities. In the case of products from the category: *Machinery, Apparatus and Mechanical Appliances, Boilers and their Parts*, the export increase is solely the consequence of the increased quantities of exported goods, while the price effect had a negative contribution to the growth of exports value. With products from category: *Electrical Machinery and Equipment and Parts thereof; Apparatus for Sound Recording or Reproducing, TV and Apparatus for Video recording or Reproducing Pictures and Sounds, and the Parts and Accessories thereof*, the export increase is primarily a result of increasing quantities, although the price movements partly contributed to the increase in value of exports of this category. Exports of both products groups are largely relying on the recovery of the car industry on the global level, and the movement of exports and production in recent years suggests the increasing competitiveness of domestic producers in these two areas. The most significant increase in the nominal value of exports in 2015 was recorded in the category of chemical and related industries, where the strong expansion of exports resulted from favourable price trends and the increase in export volume (see Table A7 in the Statistical Appendix).

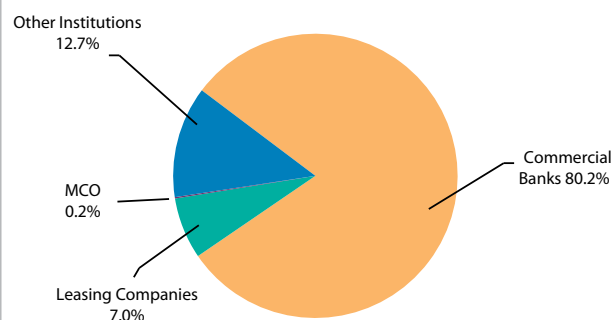
The value of imports in 2015, amounted to KM 15.8 billion and it decreased by KM 347.5 million compared to the previous year, which is the annual decline in the value of imports by 2.1%. Movements in imports are determined largely by price movements on the world market or deflationary pressures that have marked 2015.

A continuing decline in oil prices in the world market, during 2015, was significantly reflected in the overall realized value of imports in BH, since in the group of mineral products, it was recorded a decrease of the imports nominal value by 22.1%. This is entirely the consequence of the price effect and lower oil price, since the imported quantity of these products is almost at the same level as in the previous year. In the group of major import products, the negative growth rate was registered with the imports of *Machinery, Apparatus and Mechanical Appliances, Boilers and their Parts*, where the reduction of imports resulted from lower import demand, i.e. high base from the previous period. The value of imports of food products did not change significantly, compared to the previous year, with the deflationary pressures in the food market having a negative contribution to import trends in this group.

On the other hand, the growth of imported quantities had a positive contribution to the trends of imports in this product group. Imports of base metals and articles of base metals increased due to higher demand and imported quantities, and lower prices for these products limited higher growth of the nominal value of imports (Table A7 in the Statistical Appendix).

Total claims of all groups of financial intermediaries²⁹ from the sector of non-financial companies, according to the data from CRC, at the end of 2015, were KM 11.07 billion. Banking sector still has the biggest share in total claims on non-financial companies. The total debt of this sector to BH banks is KM 9.45 billion, i.e. 80.2% of debts to all groups of financial intermediaries in BH. In the group of non-banking financial intermediaries, the biggest share is the one of leasing companies and other non-banking financial institutions. Share of micro-credit institutions (MCO) in the total debt of non-financial companies to financial intermediaries in BH is almost insignificant (Graph 4.1). Funding through debt securities or equity instruments is still insignificant (to see Section on non – banking financial institutions), and we can conclude that the crediting through banks represents the main source of financing the non-financial sector in BH. Slight recovery of the economic activity and the GDP growth in 2015, resulted in moderate recovery of credit activity in the sector of non-financial companies, thus the overall claims of the banking sector at the end of 2015 are higher by 2.6%, according to the data from CRC.

Graph 4.1: Claims on Companies according to Type of Debt at 2015 End



Source: CRC

Traditional and revolving credits still represent the most significant type of funding the non-financial companies and in the structure of total banking claims they are prevailing.

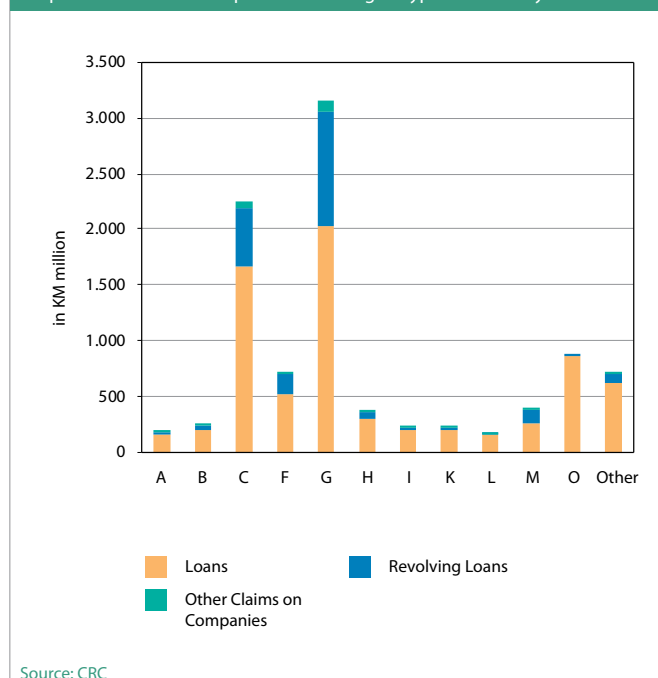
Claims based on guarantees, letter of credits and factoring are decreasing from year to year, which indicates the weakening of need for such kind of financing, and they insignificant share of total claims and have no systemic importance (Graph 4.2). Total indebtedness of non-financial companies to all groups of financial intermediaries measured by the share of GDP is 39.2% and, compared to the previous year, it was not changed significantly.

Given the total claims of the banking sector in terms of sector indebtedness, the biggest contribution to the growth of total claims is the one of companies registered in C activities (Manufacturing Industry), B (Extraction of Ore and Stone), G (Whole Sale and Retail Trade), O (Public Administration and Defence; Mandatory Social Insurance), D (Production and Supply of Electricity, Gas, Steam and Air-conditioning) and I (Accommodation and Food Services)

In most of those activities, it was recorded also the growth of gross added value in 2015. On the other hand, the biggest negative contribution to the growth of total claims comes from the sectors which in most cases depend on domestic demand, thus, we can conclude that weak domestic demand still represents the limiting factor for stronger recovery of credit activity in corporative sector.

The exposure of the banking sector is still the biggest towards the companies from the manufacturing industry and trade, the activities with the biggest share in generating gross added values. Compared to the previous year, the share of those two activities in the total claims of banks additionally increased and at the end of 2015 it made slightly over 57% in all claims of BH banking sector. Such large exposure of the banking sector towards those two activities makes it vulnerable in case of macro-economic instability, and increases the risk of the potential losses and decreases the capacity of banks to absorb adequately the potential loss.

Graph 4.2: Claims on Companies according to Type and Activity



A - Agriculture, Forestry, Fishing
 B - Mining and Quarrying
 C - Manufacturing Industry
 F - Construction
 G - Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles
 H - Transportation and Storage
 I - Accommodation and Food Service Activities (Hotels and Catering)
 K - Financial and Insurance Activities
 L - Real Estate Activities
 M - Professional, Scientific and Technical Activities
 O - Public Administration and Defence; Compulsory Social Security
 Other:
 D - Electricity, Gas, Steam Production and Supply and Air Conditioning
 E - Water Supply; Sewerage, Waste Management and Remediation Activities
 J - Information and Communication
 N - Administrative and Support Service Activities
 P - Education
 Q - Human Health and Social Work Activities
 R - Arts, Entertainment and Recreation
 S - Other Service Activities

Standard loans make the biggest share of total claims in all activities, and trends in standard loans indebtedness of companies mostly reflect the balance of total claims in the sector

of non-financial companies (Table A4 in Statistical Appendix). Only in two activities (activity G and the activity M), the share of standard loans is lower than 70%, thus, it can be concluded that those activities in their operations are more relying, in relative terms, to other types of funding, such as revolving loans.

The biggest share to the growth of indebtedness from the standard loans was the one of loans approved to the following activities: C (Manufacturing Industry), O (Public Administration and Defence; Mandatory Social Insurance), B (Extraction of Ore and Stone), G (Wholesale and Retail) I (Accommodation and Food Services). Growth of industrial output in mining sector (activity B) is followed by the increase in volume of funding by the banking sector in BH, through standard and revolving loans.

Increase of standard loans indebtedness, being long term loans, as a rule, in the activity B, shows the bigger investment activity in the mining sector. Since the manufacturing industry is one of generators of the growth, during the past year, it is logical that the banking sector has recognized the credit worthiness of those clients and thus, within this activity, it was recorded the biggest increase of borrowings based on standard loans. Decline of standard loans indebtedness is recorded in the following activities: K (Financial Activities and the Insurance Activities), L (Real Estate Business), M (Professional, Scientific and Technical Activities), A (Agriculture, Forestry and Fishing), i.e. in the activities which mostly depend on domestic demand.

Along with this, the decline of indebtedness in the activity A, based on standard and revolving loans, too, is most probably also the consequence of delayed realization of the credit risk caused by negative effects of floods in 2014. In activity L (Real Estate Business), decline of standard loans indebtedness is partly substituted by higher indebtedness based on revolving loans.

Used amount from the revolving loans in 2015, was not significantly changed compared to the previous year, which implies that the sector of non-financial companies did not have additional needs for using of those resources while maintaining the liquidity. (Table A4 in Statistical Appendix). The biggest used amount, i.e. the highest share of debt from the revolving loans is with the activity G (Wholesale and Retail), which is understandable, having in mind the needs of this sector to finance the turn over funds, and its share in generating the gross added value.

Similar as in the previous year, the decline in industrial output in activity D (Production and Supply of Electricity, Gas, Steam and Air-conditioning) did not influence the lower volume of financial support, and in 2015, it was recorded the growth of remaining debt from standard and revolving loans in this activity.

The reason for this should be looked for in the fact that in this activity, with the low level of non-performing loans, there are mostly big companies, which, in principle, have satisfactory indicators of operations and can offer adequate collaterals, influencing the confidence of banking sector and the readiness to provide to them the credit support, regardless the occasional oscillations in the level of economic activity.

Along with the increase of funding through the standard loans, banks in 2015, continued to increase the exposure towards the companies from the mining sector through the revolving loans, too.

Although the activity A (Agriculture, Forestry and Fishing), records the gross growth of added value, the approved and used amount of debt is less than in the previous year, which is a possibly the effect of the credit risk accumulation in this activity. More significant volume of financing through the revolving loans is also present in the activities C (Manufacturing), F (Civil Engineering) and M (Professional, Expert and Technical Activities). Increase of debt from the revolving loans (as well as standard ones) in the activity C, is almost identical to the realized growth rate of the industrial output in this activity. Decline of the production index in civil engineering, being 25% in BH, is followed by the decline of the approved and used up amount from revolving loans in this activity and almost unchanged amount of the debt from the standard loans. The positive fact is that such like trends in civil engineering did not negatively affect the level of non-performing loans.

In addition to borrowing from the banks on domestic market, a number of the economic entities has a possibility to borrow from abroad. According to the CBBH data, indebtedness of the business companies in BH, including also the activity of financial intermediation, towards abroad was KM 7.85 billion at the end of 2015.

Excluding the financial intermediation activity (which includes specialized firms for claims management - special purpose vehicles) and real estate business, the indebtedness of the economic entities amounts to KM 4.2 billion and compared to the previous year it was not significantly changed. Detailed survey of non-government external debt according to NACE2 classification of the debtors activities is presented in Table A6 in Statistical Appendix.³⁰

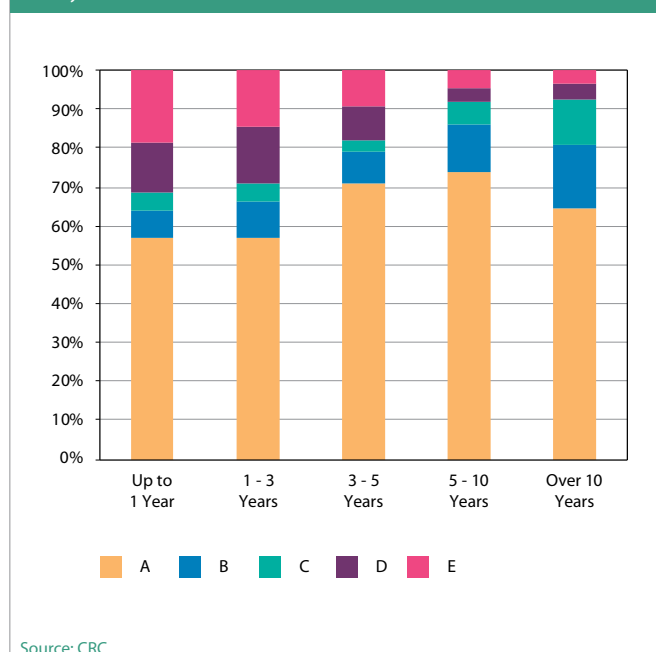
The amount of approved standard loans in 2015 is less by KM 18.1 million (0.5%), where, during the year, it was approved KM 1.88 billion of long term and KM 1.46 billion of short term loans. The amount of approved long term loans in 2015 is higher by 4.2%, while the approved short term loans are less by 6%. Lower level of approved standard loans can partially be explained by the fact that in 2015, 26 banks had the banking licence, i.e. one less compared to 2014, and that during the year, another bank was under the temporary administration. Since the decline of approved loans was caused by decrease in the level of short term loans, it seems probable that the support of other banks in the system was lacking for the clients of those two banks. In addition, both banks had a high proportion of non-performing loans in the corporate segment, which means that the credit worthiness of their clients was questionable, and it is very likely that other banks in the system were not ready to provide credit support to this group of legal entities. In addition, the interest rates at which two banks approved the loans were among higher in the system, which further confirms the previously presented thesis that the clients of these banks have not been able to provide credit support from other banks in the system.

According to the CRC data, in 2015, there was a reduction of outstanding standard loans with contracted maturity over ten years, while in all other categories of maturity, compared to the previous year, it was recorded an increase of the outstanding debt. The largest increase was observed in the group of loans with agreed maturity of three to five years, and then in a group of loans with the contracted maturity up to one year. As for the maturity structure of loans, it is still dominated by loans with contracted maturity of five to ten years. Their share in standard loans amounted to 39.85% and has not changed compared to the previous year. The share of loans with the contracted maturity of over ten years in total standard loans is less by 9.3% compared to the previous year.

30 The data are the results of polling on foreign investments, which the CBBH runs regularly on quarter and annual basis. Those data include only those business entities for which the CBBH has the information on having the amount of the direct foreign investment higher than KM 100,000, as well as the microcredit organizations in BH.

A small amount of the outstanding debt from these loans indicates that the approval of the over ten years maturity loans to enterprises takes slower pace than in the previous periods, which may be a result of deleveraging process of banks in the past few years and the reduction of foreign funding, which, by their maturities, generally have long-term character, or a stronger reliance of banks on local resources, which, in principle, in terms of maturity, have a shorter maturity period. Besides the uncertainty that is present in the local market limits the businesses and banks to enter such long period investments.

Graph 4.3: Structure of Loans to Companies according to Maturity and Quality in 2015



Currency risk in the corporate sector under the circumstances of the Currency Board arrangement is not pronounced, since over 99% loans, according to the CRC data, are approved in the domestic currency and the euro zone currency, against which we have established a fixed exchange rate. Also the most important partners in external trade of corporate sector in BH are the EU countries and the euro area countries and the eventual correction of the exchange rate would have limited effects on financial stability. In the category of up to one year maturity, the largest share has the loans approved in the domestic currency, while in all other categories of contracted maturities, the loans denominated or indexed to euro are prevailing. In 2015, the outstanding amount of borrowings approved in or indexed to the CHF currency had an insignificant portion (less than 0.5%) of the total debt standard loans of companies, which is why, as in some other countries, the appreciation of CHF was neither a serious problem for the stability of the financial sector, i.e. the banking system, nor a significant source of risk in the corporate sector.

Table 4.1 : Loans to Companies, Maturity and Currency Structure of Debt Balance

in thousands of KM

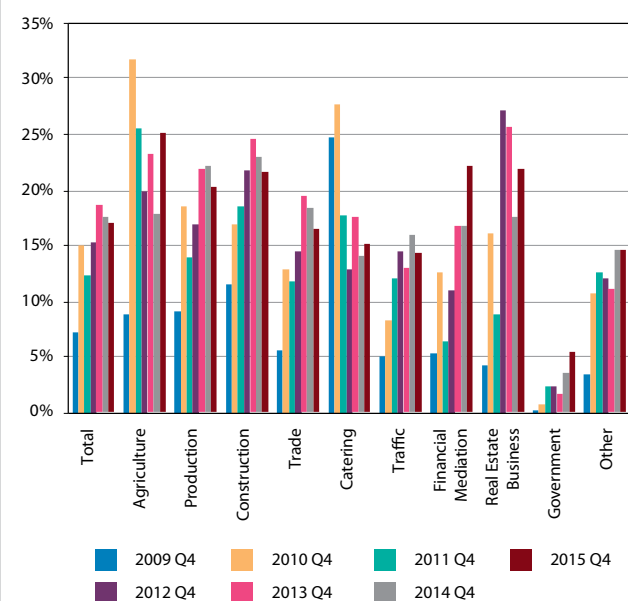
Maturity	Debt Balance and Due Uncollected Principal					
	Loans in a Foreign Currency and Loans Indexed to a Foreign Currency					TOTAL
	KM	EUR	CHF	USD	KWD	
Up to 1 Year	505,877	265,372	0	12,693	0	783,942
1 - 3 Years	455,597	456,003	0	10,715	4,819	927,134
3 - 5 Years	413,496	852,492	778	0	580	1,267,346
5 - 10 Years	566,879	2,260,169	355	340	3,363	2,831,107
Over 10 Years	373,261	898,428	28,985	1,347	160	1,302,181
TOTAL	2,315,110	4,732,464	30,117	25,095	8,923	7,111,710

Source: CRC

The sector of non-financial companies remained burdened by high levels of non-performing loans. Although in 2015, it was recorded a decline in non-performing loans in the nominal amount, as well as the reduction of their share in total loans to non-financial companies, the credit risk in this sector is not insignificant. According to the Entities' Banking Agencies, the share of non-performing loans to total loans of this sector is 17.2% at the end of 2015, which when compared to the previous year, it is a decrease of 43 basis points (Graph 4.4). However, the net outflow of non-performing loans in the corporate sector in 2015 is insignificant, being KM 4.1 million, and the reduction of percentage share of non-performing loans in total loans is largely the result of dynamic growth of total loans in this sector, rather than improving of the macroeconomic indicators affecting their trends. Positive developments in the macroeconomic environment and a slight recovery in economic activity are not sufficient to solve the accumulated problems in the sector of non-financial companies in terms of regular repayment of debt and to reduce the credit risk in the corporate sector to an acceptable level. Observing the quality of the loan portfolio by activities, it is encouraging the fact that the reduction of non-performing loans, in both absolute and percentage terms, was recorded in those activities which make the largest share in the generation of gross added value, such as the activities C (Manufacturing) and D (Production and Supply of Electricity, Gas, Steam and Air Conditioning), and in the activities which largely depend on domestic demand, such as the civil engineering industry. The activity of *Manufacturing* recorded a decrease in non-performing loans in the amount of KM 14.3 million, which may indicate that the companies in this activity are successfully recovering from the negative effects caused by the floods of 2014. In particular, a significant reduction of non-performing loans in 2015, of KM 41 million was

recorded in *Trading activities*. On the other hand, in the activity *Agriculture*, there has been a deterioration in the quality of the loan portfolio in the absolute amount of KM 13.8 million, which is most likely the consequence of delayed materialization of credit risk as a result of damages caused by the floods of 2014, and about which we already warned in the previous Financial Stability Report. The significant increase in non-performing loans was recorded in the activity *Financial Intermediation*.

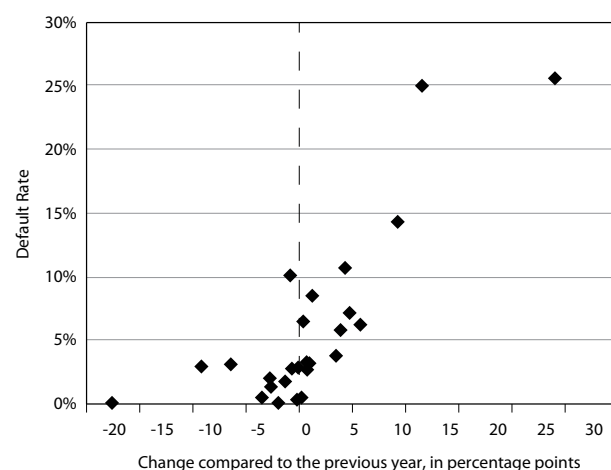
Graph 4.4: The Share of Non-performing in the Total Loans to Companies, by Activities



Source: FBA and BARS

Still high level of credit risk in the sector of non-financial companies is indicated by the *default rate* in 2015 amounting to 4.53%, being 45 basis points higher than in 2014. Although the problem of non-performing loans in the sector of non-financial companies has the systemic nature, the materialisation of credit risk is especially strongly manifested in several banks. In most cases, in question are the banks which, in periods of credit expansion, had a bad policy for the credit risks management, and some of them, after the crisis maintained inadequate assessment of credit worthiness of their clients. As for the systemically important banks, most have the *default rate* below a recorded annual rate at the system level, while in the case of three systemically important banks, the *default rate* is at a higher level than the average one. In one case, in question is the bank with a very conservative approach to the categorization of the loan portfolio, and in the other two, in question are banks being previously mentioned in terms of the inadequate credit risk management.

Graph 4.5: Default Rate by Banks in 2015

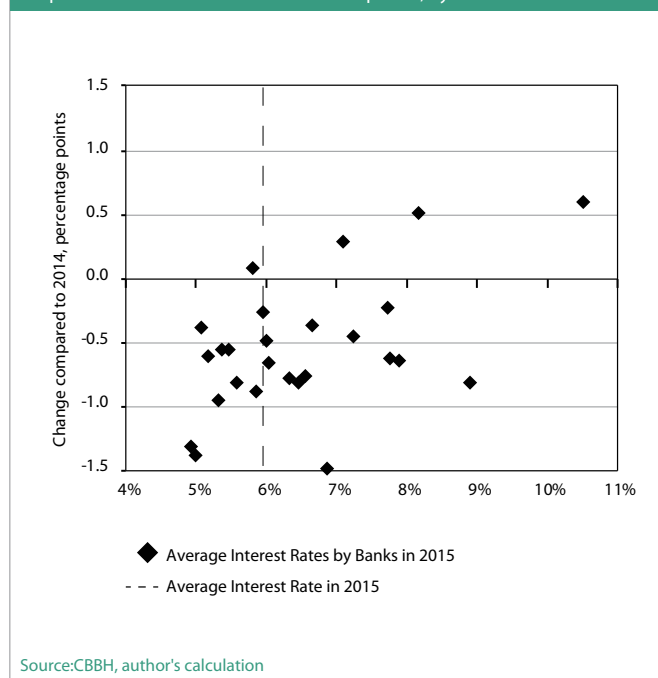


Source: CRC

From the aspect of financing costs in the domestic banking market, 2015 was favourable for the corporate sector in BH, since the interest rates at which banks lend to this sector had on average the lowest levels until now. According to the CBBH data, the average weighted interest rate on new loans to non-financial companies, in 2015, amounted to 5.97% and it is by 68 basis points lower compared to 2014 (Graph 4.6). The growth of interest rates was recorded in four banks, and average interest rate ranged from 4.9% to 10.5%. With the banks which recorded a rise in interest rates, in two cases in question are the banks which most probably do not have possibility to access international funding sources. In the other two cases, in question are the banks which previously had very expansionary lending activity and, therefore, lower interest rates than the rest of the banks in the system, and now they probably adjust their interest rate policy to ensure the business profitability. The majority of systemically important banks recorded a interest rates decrease of over 50 basis points compared to the interest rates in 2014. The interest rates decrease, among other things, was also caused by the favourable trends in the international markets and the declining cost of banks funding, mostly due to the expansionary monetary policy, which is continuously carried out by the ECB. The decline of interest rates may also be caused by the growing competition of the banks in the effort to provide better market position under the conditions of stagnant crediting activity and weak demand on loans. Since the credit risk is still expressed in the corporate sector, the banks could not be guided by this factor when deciding on the price of credits. One of the factors which will likely limit, in the future,

the further decline of interest rates is the sovereign credit rating and the perception of risk associated with investing in BH by foreign investors, i.e. the international creditors. Historically low interest rates in BH represent a significant boost to the recovery of credit activity, and thus the economic activity, too, but one should not ignore the risk that they carry with themselves. Due to the fact that, in most cases, the economic entities in BH contract the variable interest rates on loans, the potential rise in interest rates on new loans means the growth of financing costs, which makes higher the probability of materialization of the interest rate risk.

Graph 4.6: Interest Rates on Loans to Companies, by Banks



Exposure of non-financial companies to interest rate risk in 2015, has slightly decreased in comparison to the previous year, because the structure of new loans in 2015 reduced the share of loans with variable interest rate within one year. The share of loans with an initial fixation period of the interest rate up to 1 year in total loans was 74%, during 2015, while in 2014 it amounted to 82%. At the same time, it was increased the share of loans with variable interest rate for a period of one to five years from 9% in 2014 to 15% in 2015, and the share of loans with variable interest rate over five years from 11% to 14%. Regardless of this change in the structure of new loans in 2015, it should be noted that the risk of changes in interest rates in the sector of non-financial companies is not insignificant, since the majority of loans extended to this sector, was approved with the clause on interest rate changing within a year. Since the prices of credit in 2015 were at historically low levels, the companies that had long-term borrowings at these rates have been exposed to a significant risk of the interest rates increase. In the case of materialization of interest rate shock, these companies will be exposed to higher costs of financing, which would subsequently affect the banking sector itself in the form of lower capacities to serve the liabilities by these companies and could cause negative effects on financial stability.

5. Financial Intermediaries

The financial system of Bosnia and Herzegovina preserved stability, despite the risks identified in previous Chapters. Total assets of financial intermediaries in 2015 recorded a growth of 4.28%, with a dominant influence on the assets increase by the banking sector, which is also the largest and the most developed sector in the financial system of BH. Banking sector of BH recorded a balance sum increase of 4.43%, and the share of bank assets in the total assets of financial intermediaries, reached the level of 87.5% at the end of 2015 (Table 5.1). On the other hand, micro-credit organizations and leasing company, as a result of earlier accumulated risk for the third consecutive year, recorded a contraction of the balance sum and the reduction of the share in value of total assets of financial intermediaries. Assets of investment funds recorded a slight increase during 2015, but the share of investment funds in the total value of assets of financial intermediaries did not significantly increase. The lack of large domestic institutional investors, reluctance to invest in the securities of the households and the corporate sector, are still limiting factor for the growth of domestic investment funds.

The most developed segments of non-banking financial sector are insurance and reinsurance companies, which have the second largest assets, and their share in total assets of financial intermediaries increased (by 5.4%) compared to the previous year. Domestic capital markets, because of their fragmentation, are not sufficiently attractive to foreign investors. The most active segment of the capital market continues to be a trade with the domestic debt securities in the primary market. Table 5.1 shows the trends and the assets structure of BH financial intermediaries for the last three years.

Table 5.1: The Financial Intermediaries Asset Value

	2013		2014		2015	
	Value, KM Million	Share, %	Value, KM Million	Share, %	Value, KM Million	Share, %
Banks ¹⁾	22,026	87.1	22,766	87.4	23,775	87.5
Leasing Companies ¹⁾	597	2.4	514	1.97	475	1.75
Microcredit Organizations ¹⁾	670	2.6	647	2.48	640	2.36
Investment Funds ²⁾	761	3.0	758	2.91	801	2.95
Insurance and Reinsurance Companies ³⁾	1,231	4.9	1,364	5.24	1,473	5.42
TOTAL	25,285		26,049		27,163	

Source:

1 - FBA and BARS

2 - Commission for Securities of FBH and Investment Funds

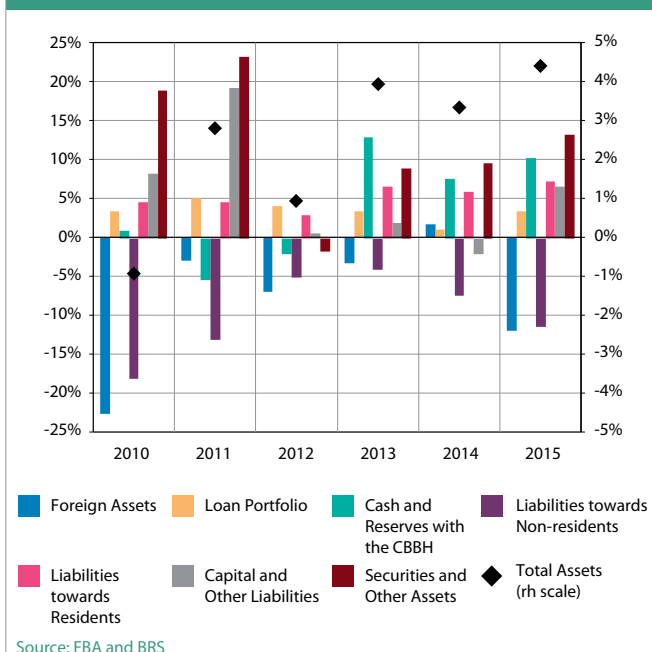
3 - Entity Agencies for Supervision of Insurance Companies

5.1 Banking Sector

The stability of the banking sector in BH was maintained during 2015 and in the first half of 2016. The materialization of idiosyncratic risk in a number of smaller banks, did not significantly affect the stability of the banking sector, thus the sector remains adequately capitalized and liquid. Due to accumulated risks, several banks reported significant losses in business in the fourth quarter of 2015, which makes the profit of the entire banking sector significantly lower than in the previous year. Realized losses in these banks, with immediate start of implementation of stricter regulatory provisions relating to changes in the recognition of capital items, were reflected in a lower capitalization of the banking sector. The liquidity of the banking sector is relatively high, but the weakening of liquidity positions in individual banks affected slightly lower value of the liquidity indicator compared to the previous year. Credit risk, which is the dominant risk in BH banking sector, continues to be enhanced, and we cannot expect its significant weakening before reaching the significant recovery of economic activity in the country. In addition to credit risk, a significant source of risk for the banking system of BH is the risk of BH Banks deleveraging towards parent banking groups, this risk was also present in 2015. Low lending activity is still one of the characteristics of the local economy. Credit growth is largely determined by the lending activity in the household sector, while non-financial corporate sector has recorded a very modest rate of credit growth. Due to relatively weak demand in this sector, the banks increased exposure to the government sector. Despite the existing risks and the low level of economic activity, the results of stress tests, conducted by the CBBH, showed that the banking sector is able to absorb projected shocks of the macroeconomic environment.

Although in 2015, there was a growth of economic activity in Bosnia and Herzegovina, we can estimate that the real sector business is still run with difficulties, which hampers a stronger economic recovery. In such circumstances, there was a modest increase in balance sum of banks by 4.4%. The biggest influence on the growth of the balance sum was made by the increase in deposits of domestic resident sectors, with the sometime increase of lending, investments in securities and other liquid items on the asset side (Graph 5.1).

Graph 5.1: Changes of the Most Important Items of the Banking Sector Balance Sheet



Deposits of local resident sectors recorded an increase of KM 1.23 billion or 8.1% compared to the previous year, with the largest increase in deposits recorded by the household sector (KM 864.5 million or 9.4%). The increase in retail deposits was partially influenced by payments based on old foreign savings bonds during 2015, and a part of the increase was generated by the inflow and remittances from abroad. On the other hand, the process of deleveraging banks towards EU parent groups, which is reflected in the decrease in deposits and loans from non-residents in the structure of commercial banks liabilities (Table 5.2).

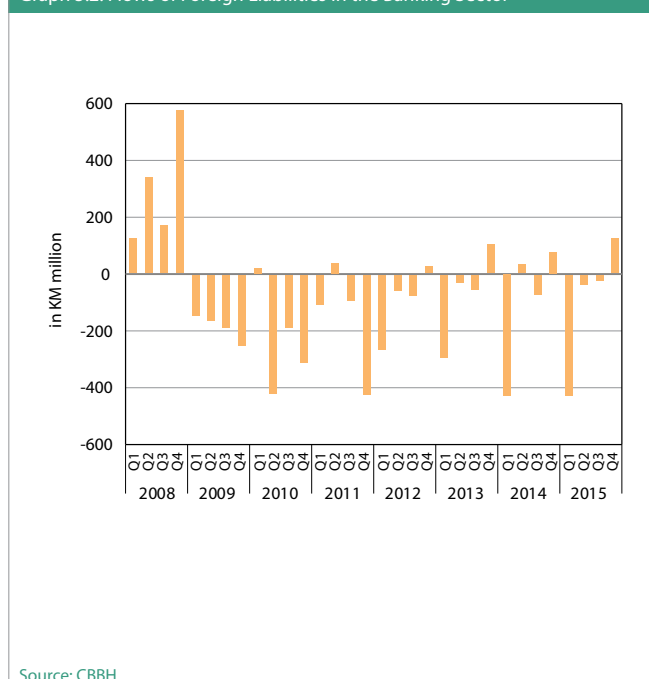
Table 5.2: Simplified Balance Sheet of Commercial Banks in KM million

	Assets			Liabilities	
	2014	2015		2014	2015
Funds and Deposits with Banks	6,041	6,255	Residents' Deposits	15,212	16,448
of which:			Non-residents' Deposits	1,682	1,608
Reserve Accounts with the CBBH	3,716	4,085	Liabilities Based on Loans	1,824	1,530
Securities	1,191	1,494	of which:		
Loans, Claims Based on Leasing and Due Claims	15,903	16,458	Loans from Non-residents	1,234	1,017
Other Assets	1,328	1,379	Other Liabilities	775	805
Impairments	-1,697	-1,811	Capital	3,273	3,385
TOTAL	22,766	23,775	TOTAL	22,766	23,775

Source: FBA and BARS

Due to still weak credit demand in BH, the repeated increase of risk premium, but also under pressure of the stringent EU regulations, the parent banks reduce their exposure to BH banks (Graph 5.2). Liabilities towards non-residents decreased by KM 384.5 million or 11.6% compared to the end of 2014. Observing the period since the beginning of 2010, when the process of deleveraging to abroad started, the sources of funds, originating from local resident sectors, rose to KM 4.39 billion³¹, while liabilities to non-residents in the same period decreased by KM 2.64 billion.

Graph 5.2: Flows of Foreign Liabilities in the Banking Sector



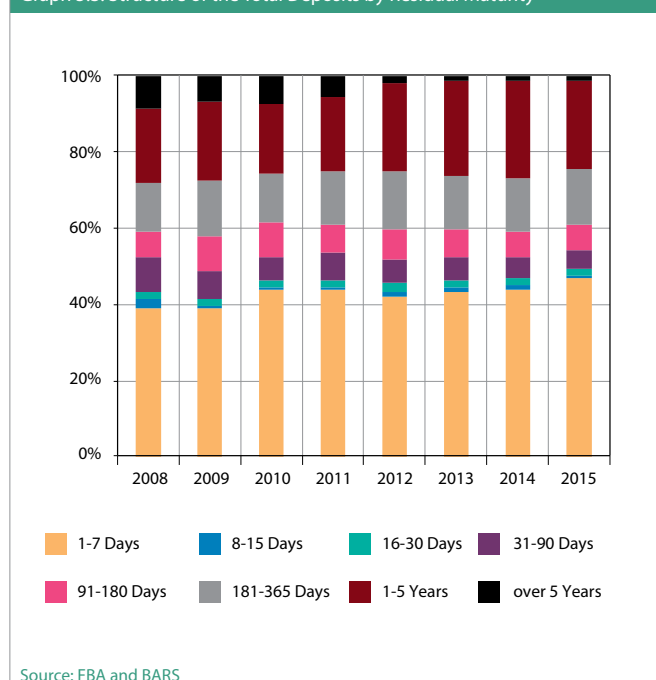
The intensity of deleveraging BH banks towards abroad was the weakest in 2012 and in 2013 (Graph 5.1 and 5.2), which is somehow linked with the risk premium trends of European banks³². More specifically, at the end of 2011, when it started the debt crisis initiated by restructuring of the public debt and the decline in the credit rating of certain countries, there was an increase in risk premium of banks in Europe, after which, the risk premium have had continued decline. This trend lasted until 2015, when the risk premium again began to rise, due to increased levels of uncertainty in global financial markets (Greek and Ukrainian crisis). In the conditions of increased risk premium that raises the cost of capital to the banks owners, as well as under the pressure of more stringent EU regulations and weak credit growth, the re-intensification of the deleveraging process of BH banks to parent groups is not unexpected.

³¹ This amount does not include the loans on the liabilities side from Investment-Development Bank of RS, which were KM 512.3 million at the end of 2015.

³² Premium risk is the difference between the cost of principal, i.e. expected yield on the invested capital and the non-risk return rate (which in the European market can be estimated with the yield until maturity of ten years German bond and implicit risk premium of the risky assets market).

Although the growth in domestic deposits compensate the reduction of foreign sources of funding, it should be noted that these deposits have relatively unfavourable maturity structure. According to the CBBH data, in the structure of total household deposits, deposits in transaction accounts were constantly growing and, at the end of 2015, they account for over one-fifth of total household deposits, which, to some extent, makes it difficult to manage liquidity risk. Observing the period from the end of 2008, we can notice the upward trends of the deposits share, with a maturity deadline of 1-7 days, in the structure of total deposits (Graph 5.3)³³. As an illustration, the share of deposits with maturity up to 30 days of total deposits, at the end of 2008, was 43%, while, at the end of 2015, the share of these deposits reached the level of 49.4%. On the other hand, it is negligibly small share of deposits with a maturity of over five years in the structure of total deposits (only 1.2%). According to data from the end of 2015, only in the case of one bank, term deposits with a maturity of over five years exceeded 5% in the structure of funds sources. In the case of 18 banks, the share of deposits with a maturity of over 5 years in total deposits is lower than 1%. Based on data from the end of 2015, deposits with remaining maturity of less than one year make up even 75.6% of total deposits. This unfavourable maturity structure of sources could be, in the future periods, the limiting factor for long-term lending in Bosnia and Herzegovina.

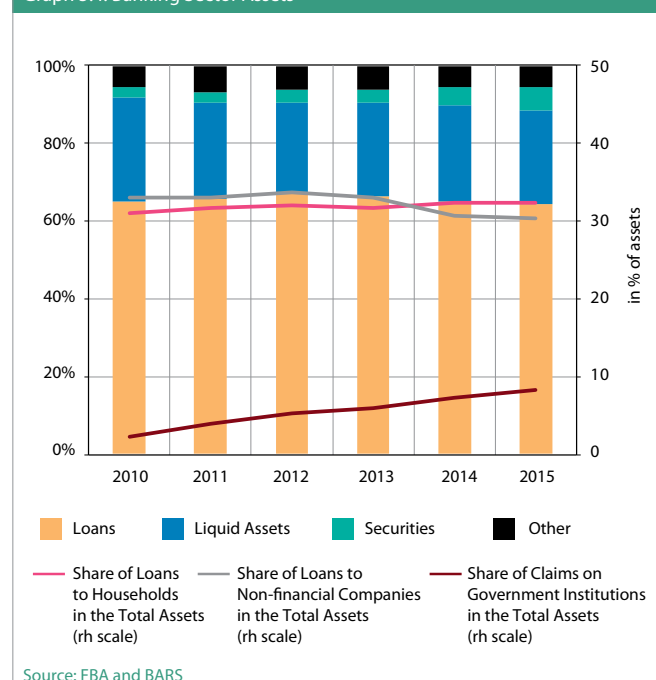
Graph 5.3: Structure of the Total Deposits by Residual Maturity



At the end of 2015, the item: capital and reserves in the balance sheet recorded an increase in the amount of KM 111.3 million or 3.4%, where the largest positive impact on the capital had the realized profit from the current period, and the recapitalization in ten banks (Table 5.2). Although during 2015, 10 banks in the system had the recapitalization, the total capital recorded a modest increase, due to the significant impact of losses realized by 6 banks, at the end of 2015. During the last years, it is noticeable an upward trend of dividend payments in the case of certain banks from foreign groups, which also represents a channel of deleveraging, i.e. reducing of exposure of foreign banking groups to BH, and it influences on the reduction of total capital.

In the structure of assets, the largest share is the one of loans, with an annual growth rate of 3.5%, with recorded significantly higher growth rates in the household sector in relation to the growth rates in the sector of private non-financial companies. The growth rates of loans to non-financial companies³⁴, since the beginning of the year to October 2015, were below 2%, but, at the end of December, the annual growth rate of loans to this sector amounted to 2.72%. As a result of weak credit demand in the sector of non-financial companies, the share of loans to this sector in total assets slightly decreased and at the end of 2015 amounted to 30.3% (Graph 5.4).

Graph 5.4: Banking Sector Assets



33 The analyses was prepared based on the Entities' Banking Agencies data on the maturity adjustment of the assets and liabilities. The Graph presents the total deposits, including also the deposits from non-residents and those per the remaining maturity.

34 For the analyses sake we have used year to day growth rates of loans.

Based on data from the first quarter of 2016, it can be concluded that the slight recovery of the real sector led to the gradual intensification of credit activity in this segment (annual growth rate at the end of March amounted to 3.14%). On the other hand, stronger credit activity in the household sector resulted in the increase of loans share in total assets to this sector (Graph 5.4). In the first half of 2015, the annual growth rates of loans to households were ranging from 5.5 to 5.8%, while in the second half of the year, they started to decline slightly (the annual growth rate, stood at 5.26 % at the end of December 2015), and in the first three months of 2016, it was continued the rate's declining trend of 4.23%.

In the period of relatively weak credit demand of non-financial companies sector, banks continued to increase exposure to the government sector during 2015. According to the CBBH data, the indebtedness of the government sector based on securities issuance, whose buyers are commercial banks in BH, increased by 39.5%, at the end of 2015, while the debt of the government sector based on commercial banks loans increased by 3.6% compared to the previous year (see Table 2.2). Continued lending to the government sector, as well as the increase of exposure through the purchase of this sector securities, have led to an increase in the share of loans allocation to the government, which, at the end of 2015, reached the level of 8.2% of total assets (Graph 5.4). Although according to the local regulations, Entity Governments' securities are grouped in the risk-free category, and the banks do not allocate capital requirements for credit and market risks, although the increase of the banks' exposure to the government sector does not reduce the risks for banks. The credit rating of the country is still in the zone of speculative creditworthiness, i.e. a high credit risk, which increases the risk premium of these securities, and the limited volume of trading in the secondary securities market additionally increases the risks for banks.

The increase in total deposits, in 2015, is partly reflected in the increase of liquid items in the banks' assets. Increasing of the primary liquid funds in the banking sector was reflected in the increase of cash in banks' vaults and surplus funds in the reserves accounts with the CBBH. However, due to reduced lending activity and pressure of European regulations, some banks further reduce the surplus in the reserves

accounts with the CBBH³⁵. The trend of reducing the surplus in the reserves accounts with the CBBH will continue in the coming periods, too, due to the policy changes in the CBBH required reserves' rates and fees³⁶, among other things. Most banks kept the excess liquidity in the domestic banking channels while increasing the reserves accounts' funds with the Central Bank, thus the banking sector deposits with foreign banks recorded a decrease in the amount of KM 202.9 million or 11.9% (Graph 5.1).

At the end of 2015, the banking sector was adequately capitalized and, although it decreased compared to the previous year, the capital adequacy ratio is still quite above the required regulatory minimum (Table 5.3). However, the materialization of credit risk and the risk of high concentration in the case of several banks resulted in significant business operating losses of these banks and contributed to a decline of capitalization indicators' value compared to the last year. Realized losses in the mentioned banks, together with the beginning of the regulatory provisions implementation, which are related to the changes in the acknowledgment of capital items, resulted in a lower capitalization at the system level.

Table 5.3: Basic Features of the Banking Sector

		2014	2015
Lower Capitalization	Regulatory Capital, KM Million	2,768	2,646
	Total Weighted Risk, KM Million	17,021	17,587
	Capital Adequacy Rate	16.3%	15.0%
Better Quality of the Loan Portfolio	Total Loans, KM Million	15,903	16,458
	Non-Performing Loans, KM Million	2,253	2,249
	The Ratio of Non-Performing to the Total Loans	14.2%	13.7%
Considerably Lower Financial Performance	Net Profit/Loss, KM Million	144	70
	Return on Equity	5.2%	2.4%
Satisfactory Liquidity	Liquid to Total Assets	26.8%	26.4%
	Liquid Assets to Short-term Financial Liabilities	46.1%	44.0%

Source: CBBH

In fact, since the end of 2015, in accordance with Decisions on capital and capital protection of banks³⁷, the amount of subordinated debt, which is included in the Tier 2 of the bank, in the last five years before the expiry of the contracted maturity, is reduced by 20% of cumulative annual deduction from its value, at the date of calculation of the Tier 2, but,

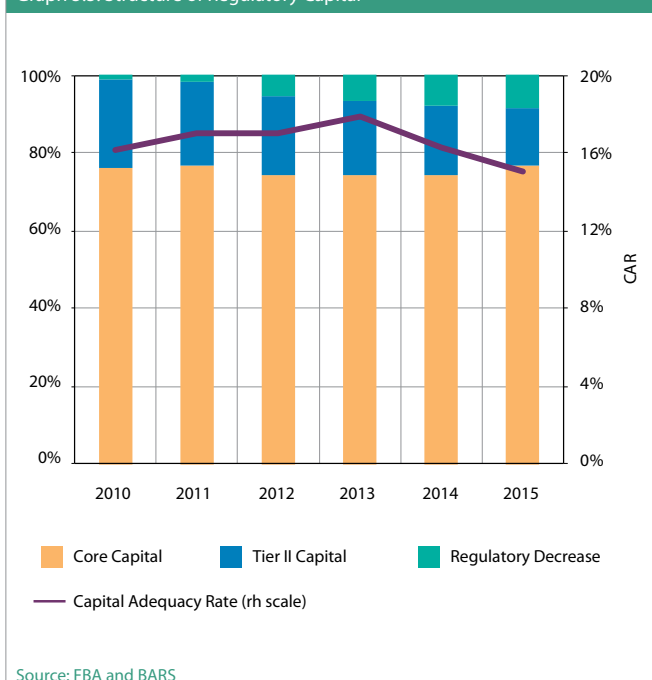
35 In line with the European Directive 2013/36/EU (Capital Requirements Directive IV – CRD IV) and the Regulation 575/2013 (Capital Requirement Regulations – CRR) each exposure towards the central governments and central banks is treated as risky and as such it is assigned the risk weight of 100%, which means that banks at the group level must allocate capital reserves for the funds that their subsidiaries are holding at the reserves accounts with the CBBH.

36 By the mid of April, the CBBH delivered the Decision on expanding the required reserves calculation base, on the change of required reserves rate, as well as on the fee that the CBBH will charge at the required reserves funds and at the excess reserves funds. This Decision enters in force by the beginning of July 2016.

37 Official Gazette of FBH, No. 48/14 and Official Gazette of RS, No.57/14

in the last year prior to the expiration of the contracted deadline of the subordinated debt, it is not included in the Tier 2. Also, since the end of 2015, it was reduced the amount of general reserves to cover credit losses for assets estimated as category A, which may be included in the amount of Tier 2 (from 2% of assets total risk to a maximal level of 1.625% of assets total risk). In order to strengthen the capital base of banks, which should provide full capability of banks to absorb the existing risks and potential losses, since the end of 2015, the amount of Tier 2, which can be included in the calculation of regulatory capital is reduced, and it can amount up to a maximum of one half of the basic capital.

Graph 5.5: Structure of Regulatory Capital



As a result of implementation of the a.m. regulatory provisions, Tier 2 at the system level recorded a reduction in the amount of KM 64 million or 12.2% at the end of 2015. Banks which met the capitalization related regulations, to a larger extent, with the Tier 2 items will face the need to provide more quality capital items in order to meet regulatory requirements.

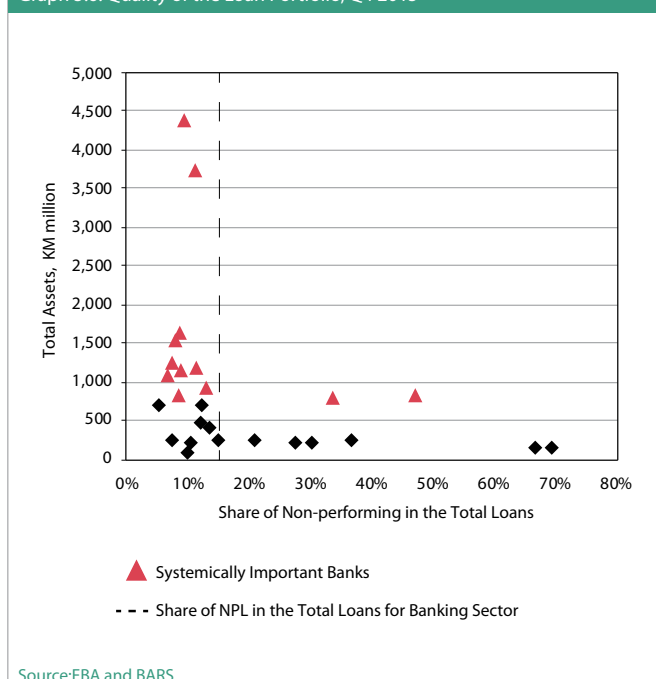
Systemically important banks are adequately capitalized, but some systemically important banks maintain the capitalization closely to the regulatory minimum. On the other hand, the materialisation of risks has led to problems in meeting prudential capital requirements in several smaller banks. Due to accumulated risks arising from the non-performing loan portfolio and inadequate credit risk management, at the end of 2015, three banks did not meet the capital adequacy ratio. For a long time,

Srpska Banka ad Banja Luka faced serious problems in business operations, which is why it was put under special oversight by the regulator, and it was forbidden to collect the deposits. In November 2015, BARS has introduced a temporary administration in the a.m. bank. The Government of Republika Srpska, being the majority shareholder of the bank, has not decided on the recapitalization and the bank became insolvent, which caused the revocation of its licence and the liquidation proceedings in April 2016. Two other banks initiated the process of consolidation and merger with other banks, which is supposed to ensure resolving of the existing weaknesses in the operations and to strengthen the capital base of the resulting banks. Completion of this procedure in both cases is expected in the second half of 2016. Although the smaller banks are in question, without the systemic importance, large operational losses and reduction of capital affected the value of the indicators of financial system soundness in 2015. This situation best illustrates that the simultaneous materialization of risk in several small banks can have a systemic impact in banking systems such as BH banking system.

In order to strengthen the capital position of banks in terms of the risk level, in 2016, it was continued a thorough review of asset quality (AQR) in banks. The started structural changes and consolidation of mainly domestically owned banks should lead to the necessary strengthening of the capital base in this part of the banking sector.

Key indicators of asset quality continued the trend of gradual improvement at the level of the entire banking system, which is largely a reflection of sales and permanent write-off of non performing claims (Table 5.3). In question are mostly several systemically important banks, which, in the last two years, have had very good business results and had the ability to recover their balance sheets, in order to strengthen the capacity for more significant credit activity in the future, when the recovery of the country's economic activity happens. Such business policy of systemically important banks, to a large extent, contributed to the declining value of the indicators of non-performing loans in total loans. Nevertheless, the greatest risk to the stability of the banking sector continues to be a high proportion of non-performing loans in total loans, which, at the end of 2015, amounted 13.67%. Most systemically important banks has a share of non-performing loans in total loans below the banking sector's average (Graph 5.6).

Graph 5.6: Quality of the Loan Portfolio, Q4 2015



Back since 2011 until nowadays, two systemically important banks of the same group, with a high proportion of nonperforming claims in total ones, have encountered problems in business operations. The share of non-performing loans in total loans in these two banks, in 2015, too, recorded growth, due to deterioration in the quality of the current loan portfolio, as well as due to the lack of large scale lending activities. Among other things, problems in the repayment of the CHF indexed loans have contributed to the growth of

non-performing loans in this bank. The issue of resolving the Swiss francs indexed loans was in focus of the public in 2015, too. Although the governments made a number of proposals for this issue to be legally regulated, none of the proposals has yet been adopted. At the same time, banks have tried to find a systemic solution in the form of different offers to customers, in order to facilitate the repayment of the CHF indexed loans (see Section 3: Households). Although it is expected that this solution will prove to be effective, in the coming periods, too, these claims will represent the issue for the operations of this group banks. In mid-2015, the process of these banks reprivatisation was completed, and change in business policy, through a focus on a particular segment of the banking market, should lead to renewed growth of the allocations and their repositioning in the market. In the first quarter of 2016, the banks recorded a decrease in non-performing assets in the total amount of KM 42.6 million, which combined with the loans allocation growth, should have a positive impact on the asset quality indicators, and would ultimately alleviate the risks to financial stability, having in mind that the system important banks are in question.

In several smaller banks, the high level of non-performing loans in total loans is a result of inadequate credit policies and the poor management of credit risk. These banks have also higher degree of risk concentration. The below text box presents an analysis on the sensitivity of risk concentration in BH banking sector.

Text box 1: The Risk Concentration in the Banking Sector

The measurement of risk concentration is extremely important for banks, since its materialization may be one of the causes of major losses in banks business operations. In recent years, the very materialization of the risk concentration has endangered the operations of several smaller banks in BH banking sector.

A sensitivity analysis was performed on the basis of supervisory data on the largest exposures of the banks at the end of 2015. The analysis assumed two scenarios: failure to fulfil contractual obligation or default of the largest debtor³⁸, and failure to fulfil contractual obligations, i.e. default of five largest debtors. In both scenarios, it was analysed the effect of the loss on the amount of regulatory capital with three assumptions (assumed recovery rates: 0%, 35% and 70%)³⁹.

Table T1 Results of Credit Concentration Risk Sensitivity Analysis

	Default of the Largest Debtor	Defaults of 5 Largest Debtors
Actual CAR (Q4 2015)	15,0	15,0
Assumed Collection Rate - 0%		
CAR after Shock, %	11.8	4.2
Lack of Capital ¹⁾ (in thousands of KM)	251,492	1,387,287
Number of Banks with CAR Lower than 12%	13	24
Number of Banks with CAR below 0%	2	7
Assumed Collection Rate 35%²⁾		
CAR after Shock, %	13.1	8.2
Lack of Capital ¹⁾ (in thousands of KM)	157,621	753,986
Number of Banks with CAR Lower than 12%	9	18
Number of Banks with CAR below 0%	2	3
Assumed Collection Rate 70%		
CAR after Shock, %	14.0	11.5
Lack of Capital ¹⁾ (in thousands of KM)	118,283	292,841
Number of Banks with CAR Lower than 12%	6	12
Number of Banks with CAR below 0%	2	2

1) The needed recapitalization amount at the system level so that each bank could have CAR at 12%

2) The estimated collectible amount of claims in case of default.

Although the level of BH banking sector has relatively moderate concentration risk, and the potential losses could still be adequately managed at the system level, the business of several banks might be significantly endangered if the clients, causing large exposures, fail to fulfil their obligations. In an extreme scenario assuming the failure to meet contractual obligations of 5 largest debtors and assuming that banks will not be able to recover any part of the claims (assumed recovery rate of 0%), in the case of seven banks, the combined amount of five largest exposures exceeds the total amount of regulatory capital. If, however, we assume that the banks would be able to recover a portion of claims after the default of the largest debtor (assumed recovery rate of 35%), with the exception of two banks which, at the end of the fourth quarter 2015, had a negative value of capital adequacy ratio, another seven banks would record the value of capital adequacy ratio below the regulatory minimum.

Banks that have a high concentration of exposure to a single client or a group of connected entities should be aware of potential risks, since the failure to meet the contractual obligations by one of the largest debtors would result in a significant increase of non-performing loans. The smaller banks are particularly vulnerable, having the limited access to financing resources, and in the case of default of any largest debtor, the business operations of these smaller banks could be significantly endangered. In this regard, it is extremely important to adequately manage the risk of credit concentration, especially for smaller banks, which should also strengthen the capital position in order to increase absorption capacity of capital in case of materialization of any risk to which these banks are exposed.

38 The largest debtor is considered to be an individual legal entity or a group of connected physical or legal entities.

39 Since the CBBH did not have data on available collaterals for the corresponding highest exposures, the results of the analyses understanding the recovery rates of 35% and 70% (the assumed amount of claims that can be recovered in case of failure to meet the contractual obligations) are indicative. For the projections with the recovery rates of 35% and 70%, we assumed that the value of collateral for each of five highest exposures corresponds to the height of the corresponding exposures.

40 The final unrevised data.

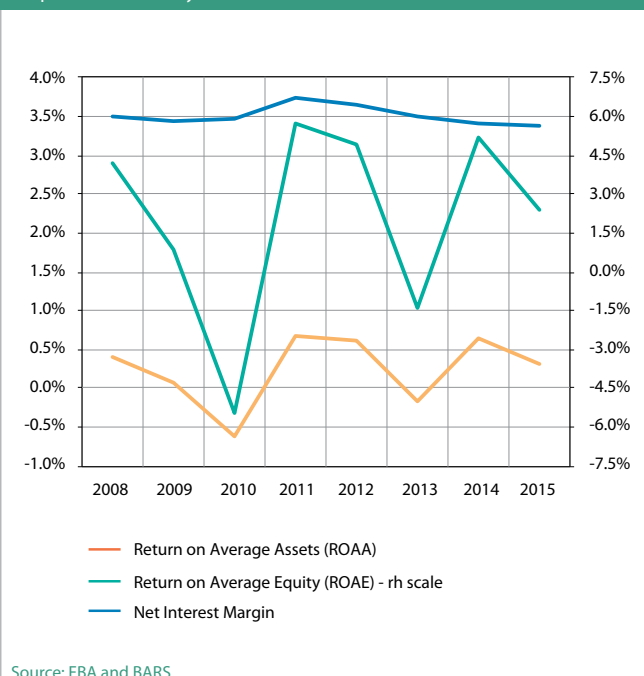
The level of credit risk in the banking sector of BH will probably keep the slow downward trend in the period ahead, as the increasing number of banks finds individual solutions in order to mitigate the credit risk and as a consequence of the expected stable economic growth. Non-performing loans are particularly present in the sector of non-financial private companies, and the recovery of economic activities should contribute to the decrease of the share of the non-performing in the total loans. The domestic institutions undertake the activities on the establishing of the legal framework which should contribute to more efficient solving of non-performing loans as the key problem of BH banking sector. These activities include the creation of the entire set of regulations and are related to the establishment of the special purpose vehicles, the establishment of a special tax treatment for the purchase of non-performing claims, creation of banks' plans for acting in crises, regulations related to forced collection of debt, revision of the law on bankruptcy and liquidation and regulations related to the process of restructuring and procedures related to out of court settlements. Upon the establishment of the framework for solving non-performing loans, the decrease of the level of systemic risk can be expected.

BH banking sector at the end of 2015 recorded a modest business result in the amount of KM 69.9 million⁴⁰. After the record high profit achieved by the banking sector in the first three quarters of 2015, the presented profit at year end was lower several times, due to high losses presented by three banks (KM 197.4 million). Consequently, the other profitability indicators recorded decreased values compared to the previous year (Table 5.3) Banks which recorded positive business performance recorded a profit in the total amount of KM 279.2 million. The banking sector profit remained concentrated in several systemically important banks, and the profit in the two largest banks accounted for 52.5% of the total recorded profit of the banking sector.

In the total income structure, the largest share was that of interest income (69.7%). Weak lending activities and a decrease of the interest rates on newly approved loans during 2015 resulted in a decline of the interest income at the banking sector level. By decreasing payable interest rates, banks mitigated the decline of the interest income, and at 2015 end, the net interest income was improved compared to the previous year. Yet, due to the increase of the value of the average assets, net interest margin⁴¹ remained almost unchanged, i.e. it recorded a decrease of 2 basis

points compared to the previous year (Graph 5.7). Except for the several banks which in 2015 recorded a considerable growth of loans, most of the banks recorded a growth of the net interest income due to the effects of a faster decline of payable interest rates compared to receivable interest rates.

Graph 5.7: Profitability Indicators



Non-interest expenses at the banking sector level significantly increased compared to 2014 (10.1%), due to a dramatic deterioration of the asset quality of the three mentioned banks. At the same time, a considerable increase of profitability which is evident with two banks with largest shares in assets, was partly generated by a decrease of costs of the value adjustment due to the continued trend of decrease of non-performing assets in these banks.

The banking sector liquidity in BH is at the satisfactory level (Graph 5.8). The basic liquidity indicators, liquid assets to the total assets and liquid assets to short-term financial liabilities recorded a small decrease of the value compared to 2014. At 2015 end, liquid assets accounted for 26.4% of the banking sector assets, whereas 44% of short-term liabilities was covered by liquid assets (Table 5.3). Yet, some banks recorded significantly lower liquidity coefficients, which can indicate a stronger liquidity risk in these banks. The deposits to loans indicator⁴² represents a liquidity measure which shows to what extent the banks' lending activities are financed from

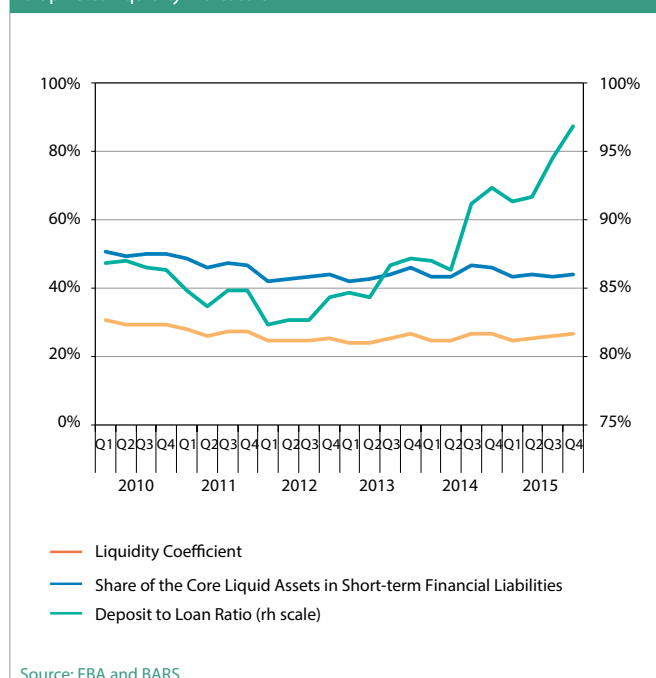
41 Net interest margin was calculated as a relation of the net interest income and the average assets. The value of the average assets represents the average value of the monthly positions of assets for 12 months.

42 The indicator was calculated according to the IMF methodology (Financial Soundness Indicators Compilation Guide, IMF 2006).

43 The current rate applied by the ECB on commercial banks' deposits is -0.4%.

stable sources. The value of the indicator at 2015 end amounted to 96.9% and recorded a significant increase over the last two years. The continuous growth of the indicator value is a result of the long-term trend of the deposit growth with a rather slow credit growth.

Graph 5.8: Liquidity Indicators



Following the recommendations of the FSAP mission related to the improvement of management of the system liquidity and mechanisms of the financial sector protection, the CBBH made a decision on expanding the base for the reserve requirement calculation, by which all the funds which were excluded in the period from the beginning of the global financial crisis will be again included in the base for the reserve requirement calculation. Also, the single reserve requirement rate of 10% was determined which will be applied by the CBBH on the base for the reserve requirement calculation. By the application of this decision as of 01 July 2016, the base for the reserve requirement calculation is higher by KM 1.77 billion compared to the last ten day period before the application of this decision. At the banking sector level, the effect of the increase of the balance in the required reserve account is KM 405.4 million, while excess required reserves decreased by KM 388.4 million. Due to the application of this decision, some banks had to carry out some adjustments of balance sheet positions in order to be able to adhere to new regulations on maintaining required reserves. The CBBH, according to a new Decision changed also the policy of remuneration on the funds exceeding the required reserves in the account with

the CBBH. The CBBH started to calculate the remuneration on the funds above the required reserve at the rate equal to 50% of the rate applied by the ECB on commercial banks' deposits⁴³. The objective of the changes of required reserve policy is creating higher liquidity buffers in the banking system, which is in case of BH very important having in mind the restricted role of the CBBH in providing liquidity to commercial banks in the currency board arrangement. By introducing a negative rate on excess funds above the required reserve, the intention is to stimulate lending activities having in mind the expected economic recovery in the period ahead. On the other hand, in case credit demand does not increase, the change of the remuneration policy could result in a continuation of the deleverage of banking groups in foreign ownership which operate in BH.

Stress Tests

The CBBH on the quarterly basis conducts top-down stress tests for the banking sector in the country, which is one of the main tools for estimating its resistance to potential shocks from macroeconomic environment and banking sector. By stress testing, the ability of the entire banking sector and individual banks is estimated in respect of tolerance of potential losses which would take place in case that assumed shocks take place.

The testing is done through two scenarios, baseline and extreme scenario. In the baseline scenario, the assumptions are based on macroeconomic projections and projections of trends in the banking sector in attempt to achieve a likely position of the banking sector in the end of the two following calendar years. Extreme scenario assumes unlikely events which will, if they take place, have considerable negative effects for the banking sector. The text below includes a brief description of shocks, basic macroeconomic assumptions and findings of stress tests conducted with the data for the 2015 end. Also, in the text box 2, the model is described which was used as a subsidiary tool in creating assumptions on credit growth in the baseline scenario.

Stress tests are based on the two assumed shocks: slow-down of economic activity and growth of interest rates. As credit risk represents the most significant risk in the banking sector of BH, the focus of stress tests is testing the resistance of the banking sector to the deterioration of the loan portfolio quality, so both shocks are reflected through the increase of non-performing loans, which finally has negative impacts on the profitability and capitalization of the banking sector.

The expected economic trends are based on the IMF projections and estimates of the CBBH and they are used as the assumptions in the baseline scenario in stress test. The baseline scenario in the stress test for 2016 assumes the recovery of economic activities in the country, which should be continued in 2017. In the extreme scenario, a significant weakening of domestic demand is projected, which takes place as a consequence of the decrease of the available income of households and also a decrease of external demand for domestic products. So, in both periods of the extreme scenario, it is assumed that the slow-down of economic activities will be more significant in comparison to the projections from the baseline scenario. Table 5.4 provides a survey of the basic

assumptions on the basis of which stress testing was done with the data for 2015 end.

Table 5.4: Basic Macroeconomic Assumptions

in%

	Baseline Scenario		Extreme Scenario	
	2016	2017	2016	2017
Growth of Real GDP ¹⁾	3,0	3,2	-2,0	-1,8
Growth of Assets	4,0	4,2	-3,0	-2,5
Nominal Credit Growth	3,8	4,0	-4,0	-2,0
Growth of Securities	15,0	10,0	-5,0	0,0
Inflation ¹⁾	-0,7	1,1	0,3	2,1

Source: IMF and the CBBH estimates

1) IMF projections taken over from publication IMF World Economic Outlook, April 2016

Text Box 2: Projections of Credit Growth

A strong impact of the economic crisis on lending activities in private sector of BH indicated a need to model the lending flows and attempt to estimate future expected trends of loan variables in private sector in BH. For that purpose, the CBBH initiated the beginning of technical cooperation with the World Bank which within the programme of strengthening technical and analytical capacities provides such kind of support. Due to the activities and the offered assistance of FinSAC centre (Financial Sector Advisory Center) of the World Bank, the model of credit growth in private sector in BH was developed. The model of credit growth in the CBBH is used for the estimation of the expected lending trends in the sectors of households and non-financial companies and the basic motive for developing this model was the improvement of the predicting capacity of the stress tests as one of the important assumptions which is used in the process of designing scenarios for conducting stress tests is the assumption on lending activities.

When modelling the credit growth, three groups of models were used, and the projection of credit variables is a combination of the projections obtained by the use of ARIMA (autoregressive integrated moving average model), ARDL (autoregressive distributed lag model) and VAR (vector autoregression model) of models. The projection of credit growth in the private sector is based on separate projections of lending activities in the household sector and sector of non-financial companies, so individual models based on ARIMA, ARDL and VAR specifications are developed for both sectors. The credit growth projection in the household sector, i.e. sector of non-financial companies is a result of the combination of projected values obtained by using the

above mentioned models, and root mean squared error – RMSE is used as weight for the share of each model in the final projection, and the models with lower RMSE are more significant.

When modelling credit flows in the household sector, i.e. the sector of non-financial companies, the quarterly values of the following variables were used: (1) loans to households, i.e. non-financial companies, (2) GDP, (3) interest rates on loans to households, i.e. non-financial companies, (4) the share of non-performing in the total loans, (5) real estate price index. By the aggregation of the projected values of loans in the sector of households and sector of non-financial companies, the projected value of loans in private sector is obtained. One of the key limiting factors in modelling lending activities both in the household sector and in the sector of non-financial companies was the absence of a wide range of variables which could be used in developing models, i.e. the absence of sufficiently long time series which were used as input data when designing models. Having in mind the mentioned restrictions and their impact on results of projections, it is necessary to stress that the reliability of these models can be estimated only if they are used for a longer period of time, i.e. by testing their vulnerability to new data, therefore they need to be subject of continuous development.

Table T2: Credit Growth Projections for 2016 and 2017

Year	Sector of Non-financial Companies	Household Sector	Private Sector
2016	5.1	2.5	3.8
2017	6.5	1.7	4.0

The basic findings of stress tests are expressed in respect of the capitalization of the banking sector in the next two years. The findings of the stress tests done on the basis of the data from 2015 end indicate the stability of the banking sector and its resistance to the assumed shocks. The results of stress tests showed that the capital adequacy rate of the banking sector of BH in case the assumed shocks take place would be kept above the regulatory minimum (Table 5.5). However, despite the satisfactory capitalization at the banking sector level, the stress tests have shown that there is a significant number of banks which would, in case the realized shocks take place, need additional capital. Although these risks are idiosyncratic, insufficient capitalization of a larger number of banks or banks which are systemically important could become a threat to the stability of the entire banking sector.

Table 5.5: Results of Stress Tests

	Baseline Scenario		Extreme Scenario	
	2016	2017	2016	2017
Capital Adequacy Rate, %	15.4	16.7	13.9	13.1
The Number of Banks which Need Recapitalization	6	7	8	11

Source: CBBH

Although in the baseline scenario, the banking sector has showed resistance to current risks and the existing low level of economic activities, recapitalization needs in 2016 in the baseline scenario were presented by six banks and in 2017 by seven, mainly smaller banks. These include three banks which during 2015 had evident problems in operations and in the end of the year a lower level of capital adequacy than the regulated one, so, assuming that banks which lack capital will not be recapitalized in the following two years, the stress test results in respect of additional requirements for capital in case of these banks are expected. One of these banks is also Banka Srpske a.d. Banja Luka, which in November 2015 was placed in receivership, and in the second quarter of 2016, its operating licence was revoked and liquidation process was started. This bank in stress tests had a significant impact on the level of recapitalization needs of the entire banking sector. The remaining two banks through the consolidation processes which will be finalized during 2016 will improve their capital positions.

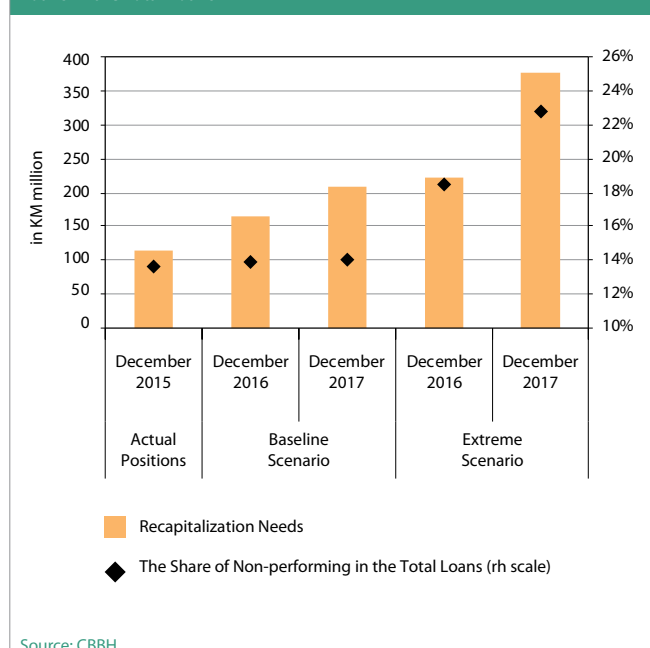
The other banks which showed recapitalization needs in the first period of the baseline scenario belong to the group of smaller banks which in stress tests appeared to

be very sensitive to the assumptions set for the entire banking sector, primarily the assumed receivable interest rates, which are lower compared to the average interest rates in these banks. Also, recapitalization needs were expressed by a bank whose weakness regarding capital arose from a considerable decrease of regulatory capital due to the accumulated uncovered losses from the previous periods. In case the assumed shocks from the extreme scenario take place, the needs for recapitalization in 2016 would be present with eight banks, while in 2017, recapitalization needs would be present with eleven banks. With several already mentioned banks which presented recapitalization needs in the baseline scenario, in the extreme scenario, recapitalization needs appear with banks which according to actual operating indicators do not have any significant problems, but in case of the assumed growth of non-performing loans and costs of financing, with a decline of lending activities, they would incur losses which they would not be able to absorb at the existing capital level.

The stress test results in the extreme scenario have shown that bank capitalization was primarily vulnerable to the quality of the loan portfolio, which, due to the assumed shocks recorded a considerable deterioration. So, if the shocks take place, the share of non-performing loans at 2016 end would increase by 4.3 percentage points, while by the end of 2017, it would be additionally increased by 4.1 percentage points. A significant increase of the costs of provisions, due to the deterioration of the loan portfolio quality, and bank financing costs in the extreme scenario resulted in a negative financial result with a high number of banks in the system, which impacted the deterioration of their capitalization. It is important to mention that in stress tests it is not assumed that banks which presented recapitalization needs in the first period compensated for the missing capital, but recapitalization needs accumulated in both stress test periods. For this reason, the results in the second period of both scenarios were worse compared to the first period. Also, stress tests do not include the assumption of the write-off of non-performing loans, i.e. the sale of this part of assets to another legal entity.

In Graph 5.9 the level of recapitalization needs was presented and the share of non-performing in the total loans according to the actual positions at 2015 end and according to stress test results in both scenarios for the next two years.

Graph 5.9: The Total Recapitalization Needs and the Share of Non-performing Loans in the Total Loans



5.2 Non-banking Financial Sector

Due to a slow recovery of the economic activities in BH, the signs of gradual recovery of the operations of the non-banking financial sector are visible during 2015. Although a contraction of the balance sheet amount is still present in the segment of microcredit organizations (MCO) and leasing companies as a result of risks accumulated earlier, a positive financial result recorded by all the mediators in non-banking sector indicates a gradual stabilization of operations in this part of the financial sector. The assets of non-banking financial sector increased by KM 106.1 million compared to 2014, as a result of the increase of assets of companies for insurance and reinsurance and investment funds (Table 5.1). On the other hand, MCO and leasing companies still recorded a contraction of the balance sheet amount, as different to the growth of the balance sheet amount of the banking sector which influenced the continuation of the downward trend of the share of non-banking financial mediators in the total assets of the financial sector.

In the end of 2015, 18 MCOs operated in BH, out of it, 13 microcredit foundations and five microcredit companies. During 2015, bankruptcy procedure was started for the assets of one microcredit organization, so in the end of 2015, it was excluded from the sector data, which was reflected in the value of the balance sheet amount, and other performance indicators. In addition, operating licence of another MCO was revoked while one new MCO started its operations. The total assets of microcredit sector in the end of 2015 amounted to

KM 640 million and were lower by KM 6.8 million or 1% compared to 2014. In the assets structure, the largest share was taken by loans (80.9%), which also decreased by 3.3% compared to the previous year. Out of the total microcredit amount, 98.3% was placed to natural persons, out of it, the largest part (35.8%) was placed for agriculture financing. Loans for services accounted for 21.2% of microcredit to natural persons, followed by the loans for housing needs (19.9%). Although a decrease of the loan portfolio was recorded at the sector level a certain number of microcredit organizations recorded a slow credit growth during 2015. Weaknesses in operations with several smaller MCOs were evident, which lost the confidence of creditors, so their loan portfolio continued to decrease. Also, the liquidity risk became increasingly prominent for these MCOs, particularly taking into account the limited access to the sources of financing and that a significant amount of loans in their liabilities is due by the end of 2016.

Provisions for loan losses dramatically decreased compared to the previous year (from KM 29 million at 2014 end, to KM 5.1 million at 2015 end), but the prevailing impact on the improvement of the asset quality indicators was the exclusion of the MCO in bankruptcy, which in the previous year recorded a dramatic deterioration of the asset quality. The remaining part of the sector did not record a considerable deterioration of the asset quality during 2015. Off-balance records, which mainly consist of written-off claims, were lower by 27% compared to the previous year and currently account for 30.8% of the loan portfolio.

During 2015, the downward trend of the sector liabilities continued, so the liabilities based on taken loans were lower by 10.9%, and the liabilities based on long-term loans decreased by 14.5% compared to the previous year. The continued downward trend of investments in microcredit sector still indicates the fact that investors show a high degree of restraint and caution when lending to this sector.

The downward trend of investments compared to the previous year was visible with several important lenders. As a result of decreased investment, several smaller MCOs were faced with the lack of funds for financing lending activities, so they were not able to achieve a positive business result.

Microcredit sector in the end of 2015 recorded a positive financial result in the amount of KM 22.3 million. Three microcredit foundations presented lower income compared to expenditures in the amount of KM 643 thousand and one micro-credit company presented an operating loss.

In the structure of the total income, the largest share was taken by the interest income, which in the end of 2015 accounted for 90% of the total income. The interest income recorded an increase of 1.82%, while the operative income remained almost unchanged compared to the previous year. The increase of the interest income was primarily the result of the increase of effective interest rates on long-term microcredits during 2015. MCO increased effective interest rates on long-term microcredits in all the activities, which was reflected in the increase of the average weighted interest rate on the total loans. The average weighted effective interest rate on the total loans in the fourth quarter of 2015 remained very high and in FBH it amounted to 24.7% and in RS 22.57%.

On the other hand, MCOs recorded a considerable decrease of the total expenses, particularly costs of provisions for loan losses and other losses, therefore, a considerable increase of profitability was recorded at the sector level compared to the previous year. In case of profitability indicators, the highest positive impact came from the exclusion of MCO in bankruptcy from the data for the end of 2015. Operative sector costs, mainly consisting of the costs of wages and contributions, were lower by 9.1% compared to 2014, but still they remained very high, although the number of employees in the microcredit sector decreased by 9%.

The total capital of the sector at 2015 end amounted to KM 268.7 million and recorded the increase of 16.6% compared to the previous year. The increase of the total capital was mostly affected by the increase of profit compared to the previous year, so the item excess income over expenses increased by 51.4%.

Although a slow recovery of operations of microcredit sector was evident, investors continued to consider this sector risky, so the return of the investors' confidence can be expected only after the necessary consolidation of the sector in which a smaller number of stronger and healthier MCOs would be operating.

In the end of 2015, 8 leasing companies had operating licences. During 2015, a new leasing company started operating. Although financial indicators and the value of newly concluded contracts in 2015 indicated the signs of stabilization of operations, leasing companies in 2015 recorded also a decrease of the balance sheet amount of 7.2% compared to the previous year (Table 5.1). Only in case of one leasing company, a growth is evident, while the other leasing companies recorded a decline of the balance sheet amount. The decline of the sector balance sheet amount can be partly explained by

the fact that two leasing companies in 2015 were not active in the market. These two companies stopped new financing in 2015 with purpose of the stabilization of operations, solving of the existing non-performing placements and transfer of the holdings from non-resident to the resident legal person. In the total assets structure, the most important balance sheet item of leasing companies is financial investments. The financial leasing accounted for 93.5% of the value of newly approved leasing contracts, and the remaining 6.5% was related to operative leasing. The total claims on the basis of financial leasing, accounting for 73.4% of the total assets increased by 5% compared to the previous year. The leasing sector in the end of 2015 recorded a positive financial result in the amount of KM 5.5 million. Three leasing companies presented a loss in the amount of KM 6.3 million (two earlier mentioned companies which were not active in the market), and five companies presented a profit in the amount of KM 11.8 million. Positive financial result of the sector, and also the increase of the value of newly concluded contracts in 2015 indicate the gradual stabilization of operations in the leasing sector.

The market of insurance represents the most developed segment of the non-banking sector. The insurance sector continued to record the growth of the premium in 2015, but the premium is still at a quite low level (2.1% of GDP), which indicates that during 2015 there were no significant changes in respect of development and the structure of the insurance market itself. The low level of household understanding regarding the importance and role of insurance, and also general economic conditions, such as low available income and standard of living are still not in favour of a stronger development of the insurance market in BH.

The total premium at 2015 end amounted to KM 595.8 million and compared to the same period of the previous year it recorded an increase of 6%. Out of the total calculated premium, non-life insurance accounted for 79.3%, i.e. KM 472.3 million, and the most important share in the total insurance premium was still related to car liability insurance. The calculated premium on life insurance amounted to KM 123.5 million, which was a continuation of the trend of increase of its share in the total premium to 20.7% from the earlier 20.4%. Although the growth of premium of life insurance was recorded in 2015 (7.9%), and also its share in the total insurance premium, low share of voluntary kinds of insurance, is still one of the indicators of weak development of the insurance market in BH and one of the basic risks in this sector. The total gross paid damages amounted to KM 252.9 million and accounted for 42.4% of the total calculated premium.

In the periods ahead, it is possible to expect some progress in the development of the insurance sector, as the adoption of the amendments and supplements of the Law on mediation in private insurance of FBH⁴⁴, created a legal framework which in the area of the entire BH makes possible for commercial banks to mediate in insurance. In this way, the necessary assumptions were created to use the insurance instrument to a higher extent as a collateral in banks' loans, which could contribute to a faster development of the insurance market.

According to the CBBH data, the insurance companies at 2015 end held in accounts of commercial banks, in different forms of deposits, 38.4% of the total assets, which indicates that asset liquidity of insurance companies is quite high. This is firstly the consequence of conservative investment policy of insurance companies, restricted possibilities of investing in domestic capital markets but also legal provisions.

In 2015, 33 investment funds had operating licences, out of it, 17 in FBH and 16 in RS. The value of assets of investment funds in 2015 recorded a growth of 5.6% compared to the end of the previous year and amounted to KM 801 million.

The total turnover on BH stock exchanges in 2015 recorded a significant increase, and the value of turnover amounted to KM 1.78 billion. Out of the total turnover, 68.5% was related to SASE and 31.5% to BLSE. The value of the total recorded turnover on BH stock exchanges in 2015 was higher by 47.7%, while the annual growth rates of turnover on SASE and BLSE amounted to 97% and -4.4% respectively. As in the previous several years, the largest volume of turnover on the domestic capital market was recorded in debt instruments issued during 2015 by the Entity governments in the total amount of KM 1.02 billion. During 2015, the Entity governments increased borrowing on the basis of treasury bills and bonds on the domestic market of capital due to the absence of the credit arrangement with international financial institutions, which is at the same time the main reason of the increased turnover on BH stock exchanges.

Regardless of the increase of turnover which took place in 2015, the volume of turnover on domestic stock exchanges can still be considered modest. Besides, domestic capital markets in respect of investment activity and potential are not at the levels which would support a faster growth of the economic activities in BH. Besides the commercial banks, which are mainly focused on the market of government debt, larger institutional investors are almost absent from the capital market. Individual investors, for a number of reasons, such as low real income, insufficient experience and tradition of trading on stock exchange, do not decide to take a more active role on the domestic capital market. On the other hand, the interest of business entities for acquiring additional capital through issues of shares and financing of new projects and development of operations through stock exchange is restricted. There is a number of preconditions which need to be met so that domestic capital markets could become more efficient and active in fulfilling their basic function, with purpose of providing a stronger support to the development of BH economy. Primarily, the problems which influence the functioning of the capital market, such as unadjusted regulations, market fragmentation, existence of correct and timely information on operations of companies, market liquidity, limited trading instruments, small number of securities which are continuously traded, slow and expensive trading and similar need to be removed. By removing these problems, domestic capital markets could have a more active role in financing business entities and providing stronger support for the development of BH economy. Also, the strengthening of the private sector and creating strong private companies would open the possibilities for using BH stock exchanges as additional source of financing and to a certain degree as alternative for the banking sector.

6. Financial Infrastructure

6.1 Payment Systems

According to its legal obligation, the CBBH in 2015 successfully supported the functions of payment system through up-to-dated settlement and payment systems for performing interbank transactions. During 2015, in the CBBH payment systems, the growth of the number of transactions was recorded, but also a decline of the total value of interbank transactions. The total number of transactions in interbank payment system increased by 3%, while the total value of transactions decreased by 3.1% compared to the previous year (Table 6.1). Decline of the value of transactions was mainly related to the transactions through the settlement system in real time, RTGS. Decrease of the transaction value in 2015 resulted in a slower circulation of currency in economy, so the number of days needed to perform transactions in the value of the annual nominal GDP increased. Although a number of interbank transactions continuously increased, a larger part of the payment transactions is still performed within the banks themselves (62% of the total number of transactions).

Table 6.1: Payment System

Year	Total Number of Transactions, in Millions	Total Turnover, KM Million	Average Daily Turnover, KM Million	GDP/ Average Daily Turnover
2005	22.9	36,195	140.3	122
2006	24.9	47,728	185.0	104
2007	28.4	60,193	234.2	93
2008	29.6	70,345	272.7	91
2009	29.0	64,458	251.8	95
2010	31.8	67,779	263.7	94
2011	32.5	76,653	298.3	87
2012	33.8	81,533	318.5	81
2013	35.8	76,605	298.1	88
2014	37.9	87,859	341.9	79
2015	39.1	85,106	326.1	87

Source: CBBH

The concentration of the total number and value of interbank transactions in payment system is illustrated by Herfindahl-Hirschman Index (HHI)⁴⁵. Table 6.2 presents the values of the index calculated on the basis of the data of the total number and amount of interbank transactions for all the participants in the payment system, in both payment systems (RTGS and gyro-clearing). The concentration of the number

and the value of transactions measured by the HHI Index, when all the banks in the system are included in the calculation is higher compared to the previous year, but does not indicate the existence of system risks in the payment systems. As a large number of small banks operates on BH market, the same analysis was also done for ten banks with largest shares in the total value of interbank transactions. The values of the HHI index are significantly higher and indicate a moderate concentration of interbank payment transactions, i.e. the fact that most of interbank payment transactions are carried out between a small number of large banks.

Table 6.2 Concentration of Transactions in Interbank Payment System (HHI)

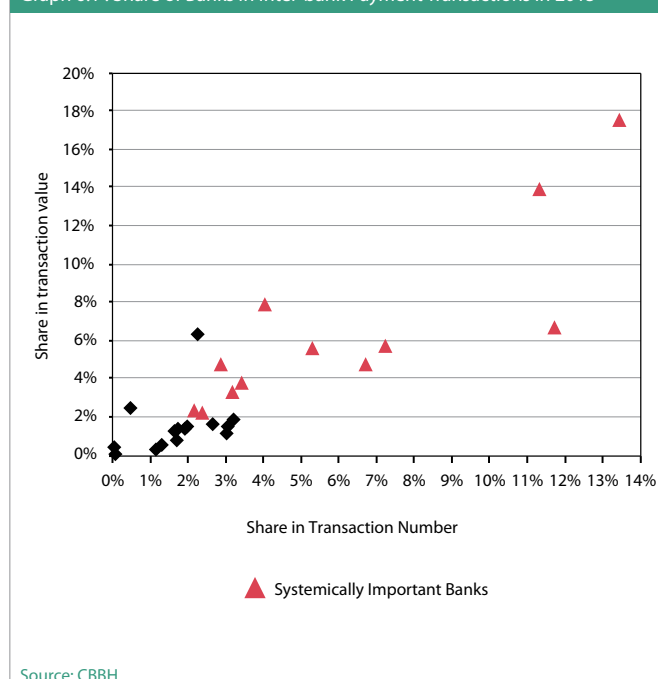
Period	All Banks		10 Banks with the Largest Shares	
	Number of Transactions	Value of Transactions	Number of Transactions	Value of Transactions
December 2008	693	908	1,271	1,381
December 2009	651	989	1,233	1,413
December 2010	651	903	1,256	1,346
December 2011	626	836	1,230	1,287
December 2012	638	844	1,278	1,295
December 2013	654	810	1,337	1,378
December 2014	660	778	1,350	1,310
December 2015	689	810	1,314	1,305

Source: CBBH

Graph 6.1 shows the shares of banks in the total number and value of interbank transactions for December 2015. Systemically important banks have a dominating share in the total value and the number of interbank transactions (78.12% and 73.81% respectively). The first five banks with largest shares account for 51.4% of the total value of transactions in the payment system in 2015.

⁴⁶ Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (Capital Requirements Directive IV – CRD IV) and Regulation no 575/2013 on prudential requirements for credit institutions and investment firms (Capital Requirements Regulations - CRR), as of 26.06.2013.

Graph 6.1 : Share of Banks in Inter-bank Payment Transactions in 2015



In 2015, the CBBH continued to maintain the Central Registry of Credits (CRC) and Single Transaction Account Registry. The data in the CRC are updated on daily basis by commercial banks, microcredit organizations, leasing companies and other institutions. The data updated on daily basis contribute to the quality of processing loan applications by enabling adequate monitoring of the customers' loan histories and insight into the customer's actual exposure at the moment of granting a loan, so they represent a good additional indicator when estimating risk in approving loans. During 2015, the CBBH, beside the single registry of transaction accounts, continued to maintain also the single data base of all the blocked accounts of business entities in BH. The list of the blocked accounts of business entities is updated once a month and published on the CBBH web site. By publishing a list of the blocked accounts, the CBBH makes possible to all the business entities to have insight into the status of their existing or potential business partners.

In 2015, the CBBH carried out the international clearing of payments among banks from BH and Serbia in the total value of EUR 176.3 million. Four banks from BH participated in the system of payments between the two countries, out of them, two are systemically important banks from the same banking group which account for the largest part of turnover.

6.2 Regulatory Framework

In 2015 and the first half of 2016, amendments and upgrade of regulatory framework have been continued, regulating the operations of BH financial sector with purpose of adjustment with the best European practices and also the improvement of business environment of financial mediators.

Entity Banking Agencies in cooperation with competent institutions, with the technical assistance of the IMF, continued their activities on harmonization and preparation of drafts of new laws on banks in both Entities, which, mainly will be harmonized with the EU directives and the best international practices. The new laws plan the strengthening of supervisory competences and the establishment of the comprehensive framework for bank restructuring. It is expected that the laws will be finalized during 2016.

During 2015, the Entity Banking Agencies continued the upgrade of the regulatory framework according to the Strategies for introduction of „International Convergence of Capital Measurement and Capital Standards" with purpose of harmonizing it with directives of the European Parliament and of the Council regulating the supervision and operations of banks in the EU⁴⁶. So, both Banking Agencies in mid 2015 published new drafts of decisions from the area of risk management and bank capital, the provisions of which are described in details in the text box 3.

Text Box 3: Upgrade of Regulatory Framework in BH according to the Strategies for Introduction of „International Convergence of Capital Measurement and Capital Standards“

By new decisions on capital calculation, the draft of legal enactment framework has been created from the area Pillar I defined by the Basel II framework, which is related to the calculation of capital requirements for credit, market and operative risk according to standardized approaches. Banks i.e. credit institutions in measuring credit risk use fixed weights according to the provisions of supervisors according to the type of claims and their credit quality, which was kept from Basel I. The novelty compared to the current regulation is that there is a higher number of exposure categories, the range of the risk weight is between 0% and 150%, and, with the application of risk weight which is based on the exposure category, the estimation of the quality of loan exposure is carried out on the basis of recognizing credit assessment of external credit assessment institutions. Also, the quality of the loan exposure can be determined on the basis of credit assessment of Export Credit Agency.

With minimum capital requirements for credit risk, banks, i.e. credit institutions are obliged to calculate also minimum capital requirements for operative and market risks. According to applicable regulations, banks calculate minimum capital requirements for operative risk according to a simple method, i.e. basic indicator approach. In new drafts of decisions on capital, with a simple method for calculating minimum capital requirements for operative risk, there is a standardized approach which represents an advanced method of calculating operative risk. According to this approach, operative risk is calculated in the way that the total bank activities are divided into 8 business lines and then the relevant indicator of each business line is multiplied with beta factor defined for each business line. Relevant indicator according to MRS is presented as a sum of the following elements: interest and related income, interest and related expenses, income from shares and other securities with variable/fixed income, income from fees and commissions, expenses from fees and commissions, net gain or loss from financial operations, other income from operations. Banks calculate capital requirements for operative risk as a three year average value of the sum of the annual capital requirements.

Banks are still not obliged to allocate capital requirements for market risk. Within the draft decisions on calculating bank capital, capital requirements are defined for market risk according to standardized approach. Market risk can arise from the change of the price of financial instrument or related instrument with financial derivatives (position risk), from the change of the currency exchange rate and/or the change of gold price (currency risk) and the change of price of commodities with commodity derivatives (commodity risk). In addition, decisions define that banks need to calculate also capital requirements for settlement risk and currency risk. With minimum capital requirements, draft decisions on capital include the techniques of credit risk mitigation (CRM) described in details, and also the principles for recognizing the effects for credit risk mitigation which are considerably expanded compared to the regulations so far.

The Banking Agencies also prepared preliminary drafts of legal enactments in the area of Pillar 2 related to the supervisory review process, which includes decisions on risk management, process of internal assessment of capital adequacy in banks (ICAAP), interest risk in bank ledger and large bank exposures. Preliminary draft of Decision on risk management represents quality requirements which the bank is obliged to implement in risk management as an integral part of a sound corporate management and it is closely related to the implementation of the process of internal assessment of bank capital adequacy. The process of internal assessment of capital adequacy is defined by a special decision, according to which banks are obliged to assess by themselves internal capital requirements for other significant risks in operations which will be determined on the basis of their risk profile. In the process of internal assessment of capital adequacy, banks have to measure risks by quantitative methods, and in case it is difficult to quantify them, to assess significant risks by using the methodology and approach most suitable for its organization and business activities. The preliminary draft of decision on managing interest risk in bank ledger regulates the minimum requirements for the establishing the system of managing interest risk in bank ledger which would be appropriate to the type, volume and complexity of operations and in accordance with the bank risk profile, which would include considerable sources of interest risk. Decision establishes also the system of reporting on exposure to interest risk in the bank ledger, and also the obligation of a bank to implement stress tests related to interest risk.

In October 2015, the Agreement on Cooperation between EBA and SEE countries was signed. The Entity Banking Agencies co-signed this Agreement by which BH acquired the status of equal participation in the exchange of information with members of the EU related to operations and supervision of the banking sector. According to the mentioned Agreement, the institutions in charge of supervision in BH will aim at adjustment of their laws, supervisory standards and institutional rules according to those in the EU, and they will have the possibility to provide suggestions on regulations in preparation.

With purpose of strengthening the market of leasing, in the beginning of 2016, the Government of the Federation of FBH defined and sent to the FBH Parliament the Draft Law on amendments and supplements of the Law on Leasing of FBH which defines three kinds of leasing: direct, indirect and sale and lease again. Also, according to provisions of the new law, leasing companies are obliged to establish a comprehensive and efficient system of risk management according to the type, volume and complexity of operations, which must include the strategies, policies, procedures and measures of risk management, risk measurement techniques and division of responsibilities in risk management.

In March 2016, the Law on Amendment and Supplements of the Law on Mediation in Private Insurance of FBH was adopted, by which the Law was adjusted to the provisions of the Law on banks which regulates that banks may be engaged in mediation in insurance. The Law on amendments and supplements of the Law on mediation in insurance in RS was adopted in 2009. In this way, the legal framework was created so that banks could be engaged in mediation in insurance in the entire area of BH.

The Government of the Federation of FBH in February 2016 defined Draft Law on Voluntary Pension Funds. Voluntary pension funds are an integral part of the document Strategy of Reform of Pension System in FBH. By the adoption of the Law on Voluntary Pension Funds in FBH, the legal base will be created for further development of the pension system in FBH and also the strengthening of capital market by introducing a new type of funds which differs by the way and criteria of investment. The RS National Assembly in 2009 adopted the Law on voluntary pension funds and pension plans, and in mid-2016, the first company for the management of voluntary pension funds should be also established.

In February 2016, the RS National Assembly adopted the Bankruptcy Law which will ensure the timely beginning of the bankruptcy procedure. The untimely beginning of bankruptcy procedures so far impacted the decrease of the value of the bankruptcy amount and consequently, a low degree of settlement of liabilities towards creditors, while the bankruptcy costs were very high, and the problem was also related to too long court processes related to bankruptcy procedures. According to the new law, the supervisory body Agency for Mediation, Information and Financial Services was appointed, which will carry out the supervision and define sanctions for offences to persons which do not start the bankruptcy procedure in a timely manner, i.e. within 30 days from the day when the reasons for starting a bankruptcy procedure take place. The law also defined the concept of pre-bankruptcy procedure, i.e. financial-operative restructuring, where the bankruptcy judge appoints the creditor, and attempt will be made to overcome all the difficulties in financial operations of a debtor in that procedure. The deadline for the completion of that procedure is 150 days, with the possibility to prolong the deadline by another 90 days. In FBH, amendments of the Bankruptcy Law are also expected which will make possible, the same as in RS, to start the bankruptcy procedure in time and ensure the protection of the creditors' rights.

During 2015, the new Law on Profit Tax was adopted in both Entities, and it will be applied to the business year 2016. According to the new laws, which are prepared according to recommendations of the IMF, the tax base is expanded in two ways, by larger coverage of tax payers and larger coverage of taxable income and allowed costs and deductions are restricted by limiting the expenses allowed for tax purposes. Expansion of tax base and the number of tax payers is needed in order to support the struggle against tax evasion.

In February 2016, the FBH Parliament adopted the Law on Factoring of FBH which established the appropriate regulations which should stimulate further development of factoring operations and provide business entities with conditions for more efficient collection of claims. The Law on Factoring regulates the rules and conditions for performing factoring by which the performance of factoring is made possible only to legal persons which are registered for performing this activity.

After BH harmonized the Criminal Code with European standards and recommendations of GRECO, MONEYVAL Committee and FATF in May 2015, BH, in mid-2016, was returned to the list of high risk countries, unsecure for financial

investments. BH did not carry out the activities to remove the legal shortcomings in the area of fighting corruption and terrorism financing in due time, according to the FATF recommendations, therefore, financial transactions with BH were again characterized as high risk transactions.

In the period ahead, a significant upgrade of regulatory framework is expected with purpose of implementing the Reform Agenda which was adopted in June 2015. The Reform Agenda defines the main plans of BH Council of Ministers, FBH Government and RS Government in respect of

social and economic reforms in the years ahead. Its objectives are: stimulating the sustainable, efficient, socially just and continuous economic growth, creating new jobs, increase and better allocation of social assistance, and creating favourable and socially just environment. The efforts in respect of ensuring fiscal and financial sustainability will be strengthened by measures to strengthen the rule of law and struggle against corruption, and by improving administrative capacities and increasing efficiency of public institutions at all levels of government.

Statistical Appendix

Table A1: Changes of the Sovereign Rating

Country	Date of Change	Standard & Poor's Rating		
		Long-term	Outlook	Short-term
Greece	until 2009	A	Stable	A-1
	09.01.2009	A	Negative, Watch	A-1
	14.01.2009	A	Stable	A-2
	07.12.2009	A	Negative, Watch	A-2
	16.12.2009	BBB+	Negative, Watch	A-2
	16.03.2010	BBB+	Negative	A-2
	27.04.2010	BB+	Negative	B
	02.12.2010	BB+	Negative, Watch	BB+
	29.03.2011	BB-	Negative, Watch	B
	09.05.2011	B	Negative, Watch	C
	13.06.2011	CCC	Negative	C
	27.07.2011	CC	Negative	C
	05.02.2012	CCC	Stable	C
	27.02.2012	SD	NM	SD
	02.05.2012	CCC	Stable	C
	07.08.2012	CCC	Negative	C
	05.12.2012	SD	-	SD
	18.12.2012	B-	Stable	B
	28.01.2015	B-	Negative, Watch	B
	15.04.2015	CCC+	Negative	C
	22.01.2016.	B-	Stable	B
Ireland	until 2009	AAA	Stable	A-1+
	09.01.2009	AAA	Negative	A-1+
	30.03.2009	AA+	Negative	A-1+
	08.06.2009	AA	Negative	A-1+
	24.08.2010	AA-	Negative	A-1+
	23.11.2010	A	Negative, Watch	A-1
	02.02.2011	A-	Negative, Watch	A-2
	01.04.2011	BBB+	Stable	A-2
	05.12.2011	BBB+	Negative, Watch	A-2
	13.01.2012	BBB+	Negative	A-2
	11.02.2013	BBB+	Stable	A-2
	12.07.2013	BBB+	Positive	A-2
	06.06.2014	A-	Positive	A-2
	05.12.2014	A	Stable	A-1
	05.06.2015	A+	Stable	A-1
Portugal	until 2009	AA-	Stable	A-1+
	13.01.2009	AA-	Negative, Watch	A-1+
	21.01.2009	A+	Stable	A-1
	07.10.2009	A+	Negative	A-1
	27.04.2010	A-	Negative	A-2
	30.11.2010	A-	Negative, Watch	A-2
	24.03.2011	BBB	Negative, Watch	A-2
	29.03.2011	BBB-	Negative	A-3
	05.12.2011	BBB-	Negative, Watch	A-3
	13.01.2012	BB	Negative	B
	06.03.2013	BB	Stable	B
	05.07.2013	BB	Negative	B
	09.05.2014	BB	Stable	B
	20.03.2015	BB	Positive	B
	18.09.2015	BB+	Stable	B

Spain	until 2009	AAA	Stable	A-1+
	12.01.2009	AAA	Negative, Watch	A-1+
	19.01.2009	AA+	Stable	A-1+
	09.12.2009	AA+	Negative	A-1+
	28.04.2010	AA	Negative	A-1+
	05.12.2011	AA-	Negative, Watch	A-1+
	13.01.2012	A	Negative	A-1
	26.04.2012	BBB+	Negative	A-2
	10.10.2012	BBB-	Negative	A-3
	23.05.2014	BBB	Stable	A-2
	02.10.2015	BBB+	Stable	A-2
Italy	until 2009	A+	Stable	A-1+
	20.05.2011	A+	Negative	A-1+
	20.09.2011	A	Negative	A-1
	05.12.2011	A	Negative, Watch	A-1
	13.01.2012	BBB+	Negative	A-2
	09.07.2013	BBB	Negative	A-2
	05.12.2014	BBB-	Stable	A-3
Cyprus	until 2009	A+	Stable	A-1
	21.07.2010	A+	Negative, Watch	A-1
	16.11.2010	A	Negative	A-1
	30.03.2011	A-	Negative	A-2
	29.07.2011	BBB	Negative, Watch	A-2
	12.08.2011	BBB+	Negative, Watch	A-2
	27.10.2011	BBB	Negative, Watch	A-3
	13.01.2012	BB+	Negative	B
	01.08.2012	BB	Negative, Watch	B
	17.10.2012	B	Negative, Watch	B
	20.12.2012	CCC+	Negative	C
	21.03.2013	CCC	Negative	C
	10.04.2013	CCC	Stable	C
	28.06.2013	SD	-	SD
	03.07.2013	CCC+	Stable	C
	29.11.2013	CCC+	Stable	B
	25.04.2014	B	Positive	B
	24.10.2014	B+	Stable	B
	27.03.2015	B+	Positive	B
	25.09.2015	BB-	Positive	B

Source: Standard & Poor's

Table A2: Real Estate Price Index

		Sarajevo	Mostar	Zenica	Tuzla	TOTAL
2004	Q1	47	84	60		52
	Q2	47	81	59		51
	Q3	47	82	60		51
	Q4	48	80	59		52
2005	Q1	49	79	61		53
	Q2	49	81	60		52
	Q3	50	79	60		53
	Q4	52	82	64		56
2006	Q1	54	84	67		59
	Q2	59	84	63		62
	Q3	58	82	66		62
	Q4	63	71	71		65
2007	Q1	69	85	72		71
	Q2	77	90	88		79
	Q3	85	86	92		86
	Q4	94	92	95		94
2008	Q1	100	100	100	100	100
	Q2	105	99	107	104	105
	Q3	103	102	113	114	105
	Q4	109	104	126	117	110
2009	Q1	99	120	129	102	102
	Q2	96	125	127	105	101
	Q3	91	124	128	114	99
	Q4	89	127	119	121	97
2010	Q1	88	119	130	119	96
	Q2	86	128	129	126	98
	Q3	85	120	126	112	94
	Q4	84	126	143	120	94
2011	Q1	83	125	138	113	93
	Q2	84	121	140	93	92
	Q3	82	118	132	102	92
	Q4	83	124	131	107	92
2012	Q1	84	132	130	111	94
	Q2	82	117	139	105	93
	Q3	80	124	122	103	89
	Q4	78	120	133	104	88
2013	Q1	81	128	135	113	91
	Q2	78	127	134	113	90
	Q3	79	124	124	116	90
	Q4	76	130	136	101	88
2014	Q1	78	121	126	104	88
	Q2	77	119	124	104	86
	Q3	77	111	126	106	86
	Q4	77	113	129	103	85
2015	Q1	79	114	127	103	87
	Q2	80	115	127	106	89
	Q3	78	116	131	107	88
	Q4	81	117	126	106	89

Source: CBBH

Table A3: Survey of Largest Debtors by Standard Loans

in KM thousand

Activity	Loans, Residual Debt	Share in Activity	Share in the Total Claims
A: Agriculture, Forestry and Fishing	167.119		2,4%
Forestry and Wood Cutting (Forest Exploitation)			
Forest Growing and Other Activities in Forestry	20.720	12,4%	0,3%
Plant and Cattle Production, Hunting and Related Service Activities, of which:			
Poultry Farming	20.664	12,4%	0,3%
B: Mining and Quarrying	151.205		2,2%
Mining of Coal and Lignite, of which:			
Mining of Lignite	35.331	23,4%	0,5%
C: Manufacturing Industry	1,564,576		22.8%
Production of Beverages, of which:			
Beer Production	63,317	4.0%	0.9%
Production of Food, of which:			
Production of Bread; Fresh Rolls and Cakes	62,956	4.0%	0.9%
Production of Milk, Milk Products and Cheese	45,847	2.9%	0.7%
Other Manufacturing and Preservation of Fruits and Vegetables	34,716	2.2%	
Manufacture of Wood and Products of Wood and Cork, except for Furniture; Production of Items of Straw and Wicker, of which:			
Sawing and Planing of Wood (Manufacture of Sawn Timber); Wood Impregnation	81,874	5.2%	1.2%
Production of Finished Metal Products, except for Machines and Equipment, of which:			
Production of Metal Structures and their Parts	55,690	3.6%	0.8%
D: Production and Supply of Electricity, Gas, Steam and Air Conditioning	162,926		2.4%
Production and Supply of Electricity, Gas, Steam and Air Conditioning, of which:			
Production and Supply of Steam and Air Conditioning	58,096	35.7%	0.8%
E: Water Supply, Sewerage, Waste Management and Environment Remedial Activities	59,515		0.9%
Water Collection, Treatment and Supply, of which:			
Water Collection, Treatment and Supply	16,863	28.3%	0.2%
F: Construction	518,127		7.5%
Civil Engineering Construction, of which:			
Construction of Roads and Highways	195,260	37.7%	2.8%
G: Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles	1,994,383		29.0%
Wholesale, except for Trade in Motor Vehicles and Motorcycles, of which:			
Non-specialized Wholesale	322,620	16.2%	4.7%
Wholesale of Solid, Liquid and Gas Fuels and Similar Products	48,548	2.4%	0.7%
Wholesale of Pharmaceutical Products	77,761	3.9%	1.1%
Wholesale of Wood, Construction Materials and Sanitary Equipment	58,183	2.9%	0.8%
Wholesale of other Household Goods	37,510	1.9%	0.5%
Non-specialized Wholesale Trade in Food, Beverages and Tobacco Products	68,002	3.4%	1.0%
Wholesale in Metal Goods, Installation Materials, Devices and Equipment for Water Supply and Heating	47,304	2.4%	0.7%
Retail Trade, except for Trade in Motor Vehicles and Motorcycles, of which:			0.0%
Retail Trade in Non-specialized Stores Mainly in Food, Beverages and Tobacco Products	154,182	7.7%	2.2%
Other Retail Trade in Non-specialized Stores	87,162	4.4%	1.3%
Retail Trade in Motor Fuels in Specialized Stores	47,075	2.4%	0.7%
H: Transportation and Warehousing	295,155		4.3%
Land Transport and Transport via Pipelines			
Transport of Goods by Road	86,668	29.4%	1.3%
Railway Transport of Passengers and Goods	62,810	21.3%	0.9%

I: Accommodation and Food Service Activities (Hotels and Catering)	169,546		2.5%
<i>Accommodation, of which:</i>			
Hotels and Similar	93,238	55.0%	1.4%
J: Information and Communications	125,881		1.8%
<i>Broadcasting, of which:</i>			
Television Broadcasting	37,658	29.9%	0.5%
K: Financial Activities and Insurance Activities	205,092		3.0%
<i>Other Financial Service Activities, except for Insurance and Pension Funds, of which:</i>			
Other Lending Mediation	22,707	11.1%	0.3%
<i>Financial Intermediation, of which:</i>			
Other Financial Intermediation	44,701	21.8%	0.7%
L: Real Estate Business	172,359		2.5%
<i>Real Estate Business, of which:</i>			
Renting and Management of own or Leased Real Estate	87,721	50.9%	1.3%
Real Estate Management on a Fee or Contract Basis	41,523	24.1%	0.6%
Agency for Real Estate Business	19,152	11.1%	0.3%
M: Professional, Scientific and Technical Activities	262,441		3.8%
<i>Veterinary Activities</i>			
Veterinary Activities	53,220	20.3%	0.8%
<i>Architecture and Engineering Activities; Technical Testing and Analysis, of which:</i>			
Architecture Activities	44,579	17.0%	0.6%
<i>Scientific Research and Development</i>			
Other Research and Experimental Development in Natural, Technical and Technological Sciences	23,518	9.0%	0.3%
N: Administrative and Support Service Activities	36,716		0.5%
<i>Travel Agencies, Travel Organizers, Tour Operators and other Booking Services and Related Activities, of which:</i>			
Activities of Travel Agencies	7,674	20.9%	0.1%
<i>Protection and Investigation Activities</i>			
Private Protection Activities	7,319	19.9%	0.1%
O: Public Administration and Defence; Compulsory Social Insurance	816,649		11.9%
<i>Public Administration, and Economic and Social Policy of Community, of which:</i>			
General Activities of Public Administration	476,990	58.4%	6.9%
<i>Activities of Compulsory Social Insurance, of which:</i>			
Activities of Compulsory Social Insurance	71,657	8.8%	1.0%
P: Education	33,133		0.5%
<i>University Education</i>			
University Education	19,546	59.0%	0.3%
Q: Activities of Health Care and Social Care	87,139		1.3%
<i>Health Care Activities</i>			
Hospital Activities	42,675	49.0%	0.6%
R: Art, Entertainment and Recreation	17,861		0.3%
<i>Gambling and Betting</i>			
Gambling and Betting	9,797	54.9%	0.1%
S: Other Service Activities	26,761		0.4%
<i>Other Personal Service Activities</i>			
Other Personal Service Activities, not Classified Elsewhere	3,881	14.5%	0.1%
T: Activities of Households as Employers; Activities of Households Producing Various Goods and Performing Various Services for Own Needs	141		0.0%
<i>Activities of Private Households Producing Various Goods for their own Needs</i>			
Activities of Private Households Producing Various Goods for their own Needs	126	92.3%	0.0%
U: Activities of Extraterritorial Organizations and Bodies	4,754		0.1%
<i>Activities of Extraterritorial Organizations and Bodies</i>			
Activities of Extraterritorial Organizations and Bodies	4,571	96.2%	0.1%

Source: CRC

Table A4: Survey of Claims on Companies by Type and Activity

in BAM thousand

	Loans		Commission Loans	Revolving Loans	Letters of Credit	Factoring	Guarantees	Potential Debt		
	Of which Overall Loans							Guarantees	Revolving Loans	Overall Loans
A	145,603	37,281	8,115	33,051	0	0	113	3,895	14,978	10,103
B	195,607	59,987	6,191	45,174	961	0	169	12,247	7,950	21,496
C	1,666,557	1,048,516	49,177	514,896	9,286	0	9,802	207,129	181,935	310,669
D	183,094	15,216	9,330	17,944	491	0	0	28,600	7,695	15,823
E	75,946	44,383	171	24,599	171	0	365	12,309	5,567	19,873
F	519,544	436,716	5,466	167,911	6,081	0	6,747	281,147	57,378	183,517
G	2,038,267	1,891,174	10,235	1,025,663	37,351	0	41,675	537,324	363,361	478,487
H	288,751	230,212	1,110	59,658	140	0	6,021	203,448	38,283	56,513
I	198,452	64,103	1,336	11,139	0	0	468	3,546	4,218	30,388
J	146,947	59,153	967	18,293	184	0	596	30,347	27,426	28,942
K	190,889	21,565	2,067	20,892	0	0	1,591	104,515	23,385	12,762
L	149,030	13,434	2,924	4,616	0	0	0	273	1,104	1,820
M	245,300	215,067	4,785	120,608	339	101	6,746	172,140	50,836	73,999
N	40,402	16,322	171	9,189	0	0	496	9,595	2,254	7,827
O	861,174	243	0	11,552	0	0	0	13,817	12,116	129
P	22,033	3,977	30	1,802	0	0	15	1,815	1,778	898
Q	98,361	22,786	459	11,077	0	0	525	7,565	6,224	10,652
R	11,114	2,766	22	847	0	0	0	1,604	247	955
S	34,622	22,281	95	8,357	0	0	0	4,012	1,911	8,755
T	0	0	0	0	0	0	0	0	13	0
U	17	0	0	2	0	0	0	0	2,132	0
TOTAL	7,111,710	4,205,181	102,650	2,107,271	55,004	101	75,328	1,635,326	810,792	1,273,609
Actual Debt:										9,452,064
Potential Debt:										3,719,727

Source: CRC

Note: Amount of claims based on Loans and Commission Loans includes a residual debt and due uncollected principal.

Table A5: Status Changes in Banks in the Period 2001-2016

Num	Banks	Type of Change	Date of Change
1.	Sparkasse Bank d.d. Bosna i Hercegovina Sarajevo	Sparkasse Bank d.d. Sarajevo changed its name into Sparkasse Bank d.d. BiH Sarajevo	Q3 2014
	Sparkasse Bank d.d. Sarajevo	ABS banka d.d. Sarajevo changed its name into Sparkasse Bank d.d. Sarajevo	Q3 2009
	ABS banka d.d. Sarajevo	Became a member of Steiermaerkische Bank und Sparkassen AG, Erste Group	Q4 2006
	Šeh-in banka dd Zenica	Merged to ABS banka d.d. Sarajevo	Q2 2002
2.	BBi d.d. Sarajevo		
3.	BOR banka d.d. Sarajevo		
4.	UniCredit bank d.d. Mostar		
	UniCredit Zagrebačka banka BiH d.d. Mostar	UniCredit Zagrebačka banka BiH changed its name into UniCredit Bank d.d. Mostar	Q1 2008
	Zagrebačka banka BH d.d. Mostar	Merger with Univerzal banka d.d. Sarajevo into UniCredit Zagrebačka banka BiH	Q3 2004
	Univerzal banka d.d. Sarajevo	Merger with Zagrebačka banka BH d.d. Mostar into UniCredit Zagrebačka banka BiH	Q3 2004
	HVB Central Profit banka d.d. Sarajevo	HVB Central profit banka Sarajevo merged to UniCredit Zagrebačka banka BiH	Q1 2008
	HVB banka d.d. Sarajevo	Merger with Central Profit banka into HVB Central Profit banka d.d. Sarajevo	Q4 2004
	Central Profit banka d.d. Sarajevo	Merger with HVB banka d.d. Sarajevo into HVB Central Profit banka d.d. Sarajevo	Q4 2004
	Travnička banka d.d. Travnik	Merged to Central Profit banka d.d. Sarajevo	Q4 2002
5.	UniCredit banka a.d. Banja Luka	Nova Banjalučka banka a.d. Banja Luka changed its name	Q2 2008
	Nova Banjalučka banka a.d. Banja Luka	Merged to HVB group, continued its operations as a separate legal person	Q4 2005
	Banjalučka banka a.d. Banja Luka	Privatised and changed its name into Nova Banjalučka banka a.d. Banja Luka	Q1 2002
6.	Hypo Alpe Adria Bank d.d. Mostar		
7.	Hypo Alpe Adria Bank a.d. Banja Luka	Kristal banka a.d. Banja Luka changed its name	Q3 2003
8.	Investiciono komercijalna banka (IKB) d.d. Zenica		
9.	Komercionalno investiciona banka (KIB) d.d. Velika Kladuša		
10.	NLB banka d.d. Sarajevo		
	NLB Tuzlanska banka d.d. Tuzla	NLB Tuzlanska banka d.d. Tuzla changed its name into NLB Banka d.d. Sarajevo	Q1 2012
	Comercebank bančna skupina NLB d.d. Sarajevo	Merged to Tuzlanska banka d.d. Tuzla, Tuzlanska banka changed its name into NLB Tuzlanska banka d.d. Tuzla	Q3 2006
11.	NLB a.d. Banja Luka		
	NLB Razvojna banka a.d. Banja Luka	NLB Razvojna banka a.d. Banja Luka changed its name into NLB a.d. Banja Luka	Q4 2015
	LHB banka a.d. Banja Luka	Merger with Razvojna banka jugoistočne Evrope into NLB Razvojna banka a.d. BL	Q2 2006
	Razvojna banka jugoistočne Evrope a.d. Banja Luka	Merger with LHB banka a.d. Banja Luka into NLB Razvojna banka a.d. Banja Luka	Q2 2006
12.	Raiffeisen Bank d.d. BiH, Sarajevo		
	Raiffeisen Bank HPB d.d. Mostar	Merged to Raiffeisen banka d.d. Sarajevo	Q1 2003
13.	ProCredit Bank d.d. Sarajevo	Microenterprise bank d.d. Sarajevo changed its name into ProCredit Bank	Q4 2003
14.	Privredna banka d.d. Sarajevo		
15.	ZiraatBank BH d.d. Sarajevo	Turkish Ziraat Bank Bosnia d.d. Sarajevo changed its name into Ziraat Bank BH	Q1 2013
16.	Union banka d.d. Sarajevo		
17.	Sberbank d.d. Sarajevo	Volksbank d.d. Sarajevo changed its name into Sberbank d.d. Sarajevo	Q1 2013
	Volksbank d.d. Sarajevo	Sberbank group acquired Volksbank d.d. Sarajevo	Q1 2012
18.	Sberbank a.d. Banja Luka	Volksbank a.d. Banja Luka changed its name	Q3 2007
	Volksbank a.d. Banja Luka	Sberbank group acquired Volksbank a.d. Banja Luka	Q1 2012
	Zepter Komerc banka a.d. Banja Luka	Became a member of Volksbank International AG, changed its name into Volksbank a.d. BL	Q3 2007

19.	Intesa Sanpaolo banka d.d. BiH		
	UPI banka d.d. Sarajevo	Changed its name into Intesa Sanpaolo banka d.d. BiH	Q3 2008
	LT Gospodarska banka d.d. Sarajevo	Merged to UPI banka d.d. Sarajevo	Q3 2007
	Gospodarska banka d.d. Sarajevo	Merger with LT Komercijalna banka Livno into LT Gospodarska banka d.d. Sarajevo	Q1 2003
	LT Komercijalna banka d.d. Livno	Merger with Gospodarska banka Sarajevo into LT Gospodarska banka d.d. Sarajevo	Q1 2003
20.	Vakufska banka d.d. Sarajevo		
	Depozitna banka d.d. Sarajevo	Merged to Vakufska banka d.d. Sarajevo	Q2 2002
21.	Nova banka a.d. Banja Luka	Nova banka a.d. Bijeljina changed its seat	Q3 2007
	Agroprom banka a.d. Banja Luka	Merged to Nova banka a.d. Bijeljina	Q1 2003
22.	Pavlović International Banka a.d. Slobomir Bijeljina		
	Privredna banka a.d. Doboj	Merged to Pavlović International banka	Q2 2003
	Privredna banka a.d. Brčko	Merged to Pavlović International banka	Q4 2002
	Semberska banka a.d. Bijeljina	Merged to Pavlović International banka	Q4 2001
23.	MOJA banka d.d. Sarajevo		
	FIMA banka d.d. Sarajevo	Changed its name into MOJA banka d.d. Sarajevo	Q4 2010
	VABA banka d.d. Sarajevo	Changed its name into FIMA banka d.d. Sarajevo	Q3 2007
	Validus banka d.d. Sarajevo	Changed its name into VABA banka d.d. Sarajevo	Q1 2007
	Ljubljanska banka d.d. Sarajevo	Established Validus banka took over a part of assets and liabilities of Ljubljanska banka d.d. Sarajevo	Q3 2006
24.	Banka Srpske a.d. Banja Luka	BIB a.d. Banja Luka changed its name into Banka Srpske a.d. Banja Luka	Q4 2013
	Balkan Investment Bank a.d. Banja Luka (BIB)	Nationalized	Q2 2013
	Una banka d.d. Bihać	Merged to Balkan Investment Bank a.d. Banja Luka	Q4 2010
25.	Komercijalna banka a.d. Banja Luka		
26.	MF banka a.d. Banja Luka		
	IEFK banka a.d. Banja Luka	Changed its name into MF banka a.d. Banja Luka	Q3 2010

The banks the operating licenses of which have been revoked since 2002:			Date of change
1	Camelia banka d.d. Bihać		Q1 2002
2	Privredna banka a.d. Gradiška		Q1 2002
3	Ekvator banka a.d. Banja Luka		Q1 2002
4	International Commercial Bank Bosnia d.d. Sarajevo		Q3 2002
5	Banka za jugoistočnu Evropu Banja Luka		Q4 2002
6	Privredna banka a.d. Srpsko Sarajevo		Q4 2004
7	Gospodarska banka d.d. Mostar		Q4 2004
8	Ljubljanska banka d.d. Sarajevo		Q3 2006
9	Hercegovačka banka d.d. Mostar		Q3 2012
10	Postbank BH Poštanska banka BiH d.d. Sarajevo		Q2 2013
11	Bobar banka a.d. Bijeljina		Q4 2014
12	Banka Srpske a.d. Banja Luka		Q2 2016

Source: CBBH

Table A6: Positions of the Non-government Foreign Debt according to NACE Rev 2 Classification of Debtors' Activities

NACE CODE	NACE ACTIVITY	-in 000 KM-			
		31.12.2012.	31.12.2013.	31.12.2014.	31.12.2015.
01	Crop and animal production, hunting and related service activities	10,465	14,569	14,692	18,348
05	Mining of coal and lignite	...	...	540,526	623,551
07	Mining of metal ores	1,333	1,640	2,232	2,348
08	Other mining and quarrying	41,890	39,506	30,872	36,851
10	Manufacture of food products	54,187	40,610	20,166	37,761
11	Manufacture of beverages	21,965	15,692	16,546	16,557
12	Manufacture of tobacco products	...	...	32,076	27,925
13	Manufacture of textiles	9,395	14,386	12,852	13,681
14	Manufacture of wearing apparel	1,280	1,187	520	-
15	Manufacture of leather and related products	6,673	6,292	5,686	5,686
16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	39,858	46,760	48,034	46,582
17	Manufacture of paper and paper products	56,274	60,722	46,042	36,999
18	Printing and reproduction of recorded media	-	-	-	1,101
19	Manufacture of coke and refined petroleum products	1,191,300	1,123,315	1,454,498	1,402,330
20	Manufacture of chemicals and chemical products	74,000	110,178	99,910	111,058
22	Manufacture of rubber and plastic products	7,855	9,484	14,753	18,459
23	Manufacture of other non-metallic mineral products	89,663	87,732	129,311	87,213
24	Manufacture of basic metals	161,457	185,656	200,888	194,455
25	Manufacture of fabricated metal products, except machinery and equipment	9,197	11,822	18,143	18,473
26	Manufacture of computer, electronic and optical products	7,237	8,664	10,620	10,656
27	Manufacture of electrical equipment	9,826	8,886	8,635	10,873
28	Manufacture of machinery and equipment n.e.c.	12,658	12,112	12,942	8,068
29	Manufacture of motor vehicles, trailers and semi-trailers	43,224	39,173	28,316	28,189
31	Manufacture of furniture	2,638	2,609	2,609	1,076
35	Electricity, gas, steam and air conditioning supply	51,327	65,622	111,612	138,127
38	Waste collection, treatment and disposal activities; materials recovery	664	664	664	664
41	Construction of buildings	3,197	2,796	2,894	2,894
42	Civil engineering	39,136	42,644	43,176	45,709
45	Wholesale and retail trade and repair of motor vehicles and motorcycles	8,582	7,615	11,494	8,740
46	Wholesale trade, except of motor vehicles and motorcycles	265,164	253,403	240,278	249,722
47	Retail trade, except of motor vehicles and motorcycles	324,596	426,891	366,168	334,391
49	Land transport and transport via pipelines	978	978	782	-
52	Warehousing and support activities for transportation	2,721	2,291	2,096	1,891
55	Accommodation	70,624	80,126	90,651	37,881
56	Food and beverage service activities	-	-	-	1,269
59	Motion picture, video and television programme production, sound recording and music publishing activities	...	2,473	3,744	3,744
61	Telecommunications	66,827	96,284	90,910	169,014
62	Computer programming, consultancy and related activities	1,772	1,007	1,007	2,043
63	Information service activities	...	...	1,280	1,276
64	Financial service activities, except insurance and pension funding	4,977,555	4,629,082	4,206,982	3,340,633
66	Activities auxiliary to financial services and insurance activities	10,708	11,472	10,855	10,855

68	Real estate activities	452,112	542,753	682,918	289,677
70	Activities of head offices; management consultancy activities	89,034	73,099	68,662	76,929
71	Architectural and engineering activities; technical testing and analysis	220,363	148,135	162,802	176,965
73	Advertising and market research	6,001	5,481	26,991	26,995
82	Office administrative, office support and other business support activities	-	-	-	1,514
86	Human health activities	12,436	10,532	5,574	6,113
92	Gambling and betting activities	1,708	3,073	622	622
93	Sports activities and amusement and recreation activities	8,741	8,827	8,696	9,161
	Unclassified	321,856	383,036	148,951	151,299
	TOTAL	8,788,477	8,639,279	9,040,678	7,846,368

Note:

Data are the result of a survey on foreign investment regularly conducted by the CBBH on quarterly and annual basis. These data include only the business entities for which we have information that they have the amounts of foreign direct investment higher than KM 100,000 and microcredit organizations in BH.

Table A7: Main Positions in Foreign Trade of Goods

Name	Value of Exports, in KM Million	Value of Exports, in KM Million	Export Price Index	Nominal Export Growth, in %	Change of Export Values, (in Percentage Points)	
	2014	2015	I - XII 2015 I - XII 2014		Price Effect	Exports Volume Effect
	1	2	3	4 = 2/1	5	6
Base Metals and Base Metal Products	1,749.1	1,652.0				
Out of it: Iron and Steel	625.9	529.5	93.8	-15.4	-5.6	-9.8
Aluminium and Aluminium Products	573.2	567.8	113.7	-0.9	11.9	-12.9
Iron and Steel Products	373.9	379.2	95.9	1.4	-4.3	5.7
Mineral Origin Products	947.1	738.2				
Of which: Mineral Fuels, Mineral Oils and Products of their Distillation, Electric Energy, Bituminous Substances and Mineral Waxes	836.3	633.8	90.8	-24.2	-7.7	-16.5
Miscellaneous Products	944.4	1,007.7				
Of which: Furniture; Mattress Supports, Bedding and Similar Products; Lamps and Lighting Fittings, not elsewhere Specified or Included; Lighting Signs, Lighting Name-plates ; Prefabricated Buildings	914.1	967.3	89.1	5.8	-12.9	18.7
Machinery, Appliances, Mechanical and Electrical Equipment	939.5	1,018.1				
Machinery, Appliances, Mechanical Equipment, Boilers and Parts thereof	591.5	596.3	97.0	0.8	-3.2	4.0
Electrical Machinery, Equipment and Parts thereof, Sound Recorders or Reproducers, Television Image and Sound Recorders or Reproducers and Parts and Equipment for such Products	348.0	421.8	101.8	21.2	2.2	19.0
Products of Chemical Industry or Related Industries	604.5	705.0				
Inorganic Chemical Products, Organic and Inorganic Compounds of Precious Metals, Rare Metals, Radioactive Elements and Isotopes	395.5	472.7	112.5	19.5	13.3	6.2
Wood and Wood Products	645.0	668.9				
Wood and Wood Products; Charcoal	640.3	664.0	108.7	3.7	8.3	-4.6

main groups of export products

Name	Value of Imports, in KM Million	Value of Imports, in KM Million	Import Price Index	Nominal Import Growth, in %	Change of Import Values, (in Percentage Points)	
	2014	2015	I - XII 2015 I - XII 2014	4 = 2/1	Price Effect	Imports Volume Effect
	1	2	3		5	6
Mineral Origin Products	2,813.2	2,258.0				
Of which: Mineral Fuels, Mineral Oils and Products of their Distillation, Electric Energy, Bituminous Substances and Mineral Waxes	2,705.1	2,142.5	78.3	-20.8	-21.9	1.1
Machinery, Appliances, Mechanical and Electrical Equipment	2,338.0	2,198.1				
Machinery, Appliances, Mechanical Equipment, Boilers and Parts thereof	1,386.7	1,293.4	101.8	-6.7	1.7	-8.4
Electric Machinery, Equipment and Parts thereof, Sound Recorders or Reproducers, Television Image and Sound Recorders or Reproducers and Parts and Equipment for such Products	951.4	904.7	92.9	-4.9	-7.2	2.3
Chemical Industry or Related Industry Products	1,565.5	1,571.9				
Of which: Pharmaceutical Products	553.8	526.1	92.5	-5.0	-7.7	2.8
Essential Oils and Resins, Perfumery, Cosmetic or Toilet Products	196.4	201.7	104.8	2.7	4.7	-2.0
Inorganic Chemical Products, Organic and Inorganic Compounds of Precious Metals, Rare Metals, Radioactive Elements and Isotopes	168.2	185.6	120.4	10.3	18.7	-8.4
Miscellaneous Chemical Industry Products	163.4	178.2	80.4	9.1	-26.7	35.7
Base Metals and Base Metal Products	1,500.3	1,536.0				
Out of which: Iron and Steel Products	513.4	458.8	84.4	-10.6	-16.5	5.8
Iron and Steel	375.9	404.8	92.8	7.7	-8.4	16.1
Aluminium and Aluminium Products	236.9	229.1	113.1	-3.3	11.2	-14.5
Food Products	1,434.2	1,446.5			0.0	0.0
Beverages, Alcohols and Vinegar	324.0	335.5	101.7	3.5	1.7	1.8
Miscellaneous Food Products	220.2	226.6	98.6	2.9	-1.5	4.4
Food Industry Waste and Scraps; Prepared Animal Food	194.0	191.8	94.1	-1.1	-6.2	5.1
Cereal, Flour, Starch or Milk Products; Pastries	175.9	173.7	103.2	-1.2	3.1	-4.3

Source: BHAS, calculation by the CBBH

main groups of import products