

F I N A N C I A L STABILITY REPORT

2012

2012 Financial Stability Report

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## Acronyms

BARS	Banking Agency of RS	IAS	International Accounting Standards
AUD	Australian dollar	NPL	non-performing loans
BCBS	Basel Committee for Banking	OMT	Outright Market Transactions
	Supervision	RS	Republika Srpska
GDP	gross domestic product	RWA	risk weighted assets
BHAS	Agency for Statistics of	USA	Unites States of America
	Bosnia and Herzegovina	SBA	Stand-by Arrangement
BH	Bosnia and Herzegovina	SDR	special drawing rights
BIS	Bank for International Settlements	SEE	South East Europe
CAD	Canadian dollar	S&P	Standard and Poor's
CAR	capital adequacy ratio	USD	U.S. dollar
CBBH	Central Bank of		
	Bosnia and Herzegovina		
CEE	Central and Eastern Europe		
CESEE	Central, Eastern and South		
	Eastern Europe		
CHF	Swiss frank		
CPU	currency pool unit		
CRC	Central Registry of Credits		
CRA	Central Registry of Accounts		
EBA	European Banking Agency		
EBRD	European Bank for Reconstruction		
	and Development		
ECB	European Central Bank		
EFSF	European Financial		
21 51	Stability Facility		
EIB	European Investment Bank		
ESM	European Stability Mechanism		
EU	European Union		
EUR	euro		
FBA	Banking Agency of FBH		
FBH	Federation of BH		
FED	Federal Reserve System		
FSB	Financial Stability Board		
FSR	Financial Stability Report		
HRK	Croatian kuna		
CEA	Classification of Economic		
CLIT	Activities		
KWD	Kuwaiti dinar		
LTRO	Long-term Refinancing Operations		
MFT	Ministry of Finance and Treasury		
MCC	micro-credit company		
MCF	micro-credit company		
IMF	International Monetary Fund		
KM	convertible mark		
MCO	micro-credit organization		
IFRS			
11.179	International Financial Reporting		
	Standards		

#### **Countries**

- AT Austria
  BE Belgium
  BG Bulgaria
  CY Cyprus
- DE Germany ES Spain FR France
- GB Great Britain
- GR Greece
  HR Croatia
  HU Hungary
  IE Ireland
  IT Italy
- ME Montenegro
  PT Portugal
  RO Romania
  SI Slovenia
  SK Slovakia

Serbia

SR

## Introduction

The Central Bank of Bosnia and Herzegovina (CBBH) considers a financial stability as the state 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.

The CBBH financial stability mandate is derived from the Law on CBBH for the following three reasons:

- the need to monitor financial stability follows from the Currency Board model which sets price and financial stability as main goals of monetary policy;
- CBBH has a role in establishment and maintenance of adequate payment and accounting systems which constitute parts of financial infrastructure:
- the Article 4 of the Law on CBBH entitles the CBBH as the relevant institution to monitor financial stability and to develop appropriate expertise in areas related to the financial stability.

By publication of the Financial Stability Reports (FSR), the CBBH seeks to contribute to financial stability by means of:

- improved understanding (and promotion of a dialogue) on risks for financial intermediaries in the macroeconomic environment;
- alerting financial institutions and other market participants to possible collective impact of their individual actions;
- creating consensus on financial stability and enhancement of financial infrastructure.

Although the focus of FSR is put on the 2012 developments, the scope of FSR has been extended also to the most important events from the first half of 2013, as per the available data in time of its preparation.

2012 FSR is organized in chapters. Chapter One represents the FSR Executive Summary. It highlights most important risks for the stability of the financial system. Chapter Two presents main international and domestic risks identified as threats to stability of the financial system. Out of external

risks from abroad, this year, we wish to single out the continuation of euro area's debt crisis and its effects on the banking sector and the real economy. Among domestic risks, we emphasized: fiscal vulnerabilities in the country; pressure on foreign exchange reserves and weak domestic demand. Chapter Three illustrates the effects of risks from claims on households identified in Chapter Two. Effects of identified risks in the legal entity sector are the focus of Chapter Four. The effects of risk on the banking sector stability are identified in Chapter Five. Stress tests constitute an integral part of Chapter Five of the FSR, and they serve to determine the appropriate level of capacity of the banking sector to absorb extreme, but likely unfavourable scenarios. Chapter Five also includes a review of developments in the other financial intermediaries' sector, but due to their relatively small share in the total assets of the financial system, the focus is still on the banking sector. Chapter Six illustrates fundamental trends in the financial infrastructure: the regulatory framework and payments systems.

This year's FSR includes three text boxes, elaborating the actual subjects, addressing the main part of text. In the Chapter on international risks, we provide a brief overview of measures taken over during 2012 and in the first half of 2013 for setting the new regulations and institutional framework within the European Union (EU).

In the text box in the Chapter related to the financial intermediaries, we explained the reasons and the consequences of the deleverage process of banking groups towards their domestic subsidiaries in the countries of Southeast Europe (SEE). The third text box, which is situated in the part of text on regulatory frame, addresses the list of criteria which are used in the Methodology for the defining the system important banks.

FSR seeks to detect the risks emerging both from the financial system itself and from the macroeconomic environment and to assess the system's ability to absorb such shocks. Lastly, it should be noted that FSR deals exclusively with the issues pertinent to systemic risks, as the supervision of operations of individual financial sector intermediaries is the tasks of supervisors who are not under the CBBH mandate.

## 1. Executive Summary

Financial system in Bosnia and Herzegovina (BH) in 2012 was functioning smoothly and it can be estimated as remaining stable in spite of increase of the systemic risks to which it has been exposed.

The European debt crisis and the recession in the EU still represent the highest risks from abroad. Regardless to all the measures taken over since the beginning of crisis, the level of stable and sustainable growth has not been achieved. In most of the EU countries, the slower economic growth was recorded the increase of unemployment and the strengthening of the fiscal pressures.

These effects spilled on the banking and real sector in BH, primarily through business policies of European banks in terms of financing economic activities in the region and the weakening demand for BH products, due to which there was an intensification of pressure on BH foreign exchange reserves, which was especially expressed in mid-year. In the second half of this year, the pressure has subsided and foreign exchange reserves have recovered and reached a higher level compared to the previous period, which was contributed by the conclusion of a new Stand-by Arrangement with the International Monetary Fund (IMF).

Consequently, there is a risk of further strengthening in domestic macroeconomic environment, which has previously been identified as a significant threat to the financial stability of the country. Weak domestic demand, deteriorating fiscal position and pressure on foreign exchange reserves are the main risks to the financial system in BH and the main generators of negative economic growth.

Weak domestic demand, which can be identified as a key domestic risk, was largely influenced by the decline in bank lending. Due to weak demand for long-term financing to households and enterprises, banks with majority foreign ownership, which have dominated the BH banking sector, continued deleverage process that largely began in 2011 and which is the most important characteristic of the BH banking sector. Weak demand, on one hand, and the more cautious investment of banks in the real sector, as a result of inadequate implementation of

credit policies in previous periods, on the other hand, led to the return of assets to foreign creditors. As a result of this process, there were recorded a decline in indicators of liquidity in the banking system and reducing of the reserves accounts balances with the Central Bank. If there is a recovery in the domestic economy, the continued deleverage process in BH could be an obstacle to stronger lending activities in the future, given the instability and inadequate domestic deposits maturities for which it will not be possible to substitute the long term foreign funding sources.

Although so far the liquidity risk was not one of the more pronounced risks in the banking sector, in the coming period growth of liquidity risk is expected, so it will be necessary to focus on policies of liquidity risk management in banks. In addition to the process of deleverage, the growth of liquidity will indirectly affect deterioration of the loan portfolio. Credit risk, which has still prevailed in the banking sector, grew in 2012 and registered a record growth of nonperforming loans, even after last year, some banks have transferred part of non-performing portfolio to a separate legal entity. The problem of growth of non-performing loans is one of the key risks for the stability of the banking and financial sector, especially if we take into account that there is still no adequate institutional framework to address them. Reprogram of the existing loan receivables is a basic policy applied by banks in an effort to improve its customers with the ability to service liabilities. However, the effectiveness of this policy is questionable given that does not lead to solving the problem, but only to the extension of the negative effects that follow from them. Replacement of existing loans with new, with increasing amounts of debt, extending the repayment period and the interest rate reduction, with increased lending to the government sector were the main lending activities in 2012.

The stress test results indicate that the banking sector in BH is resistant to shocks and it should not have trouble maintaining capitalization for the next two years. However, there were identified vulnerabilities in the quality of assets and capital structure, which due to the deterioration of macroeconomic conditions and rising risks, particularly credit risk, but also the liquidity risk and interest rate risk, would undermine both individual banks and the banking system stability.

# 2. Macroeconomic Environment

The goal of this Chapter is to identify the most important risks in the external and domestic macroeconomic environment.

The risks from the macroeconomic environment are discussed in terms of effects on the banking sector, particularly in the euro zone and in terms of the effects on the real sector of the economy of the euro zone countries, and on the basis of identified risks from the macroeconomic environment, we consider their impact on the real economy and the banking sector in BH. Effects of risks identified in this Chapter will be further discussed in the Chapters on sectors of households, legal entities and financial sector. In the Chapter on households and legal entities focus will be placed on the impact of changes in the macroeconomic environment, the change in the levels of indebtedness and creditworthiness of borrowers and the demand for resources to finance the domestic sectors. In case of the financial sector, changes in the macroeconomic environment are reflected on changes in operating policies of financial intermediaries and indirectly to changes in the size of their balance sum and the portfolio performance.

#### 2.1 Risks from Abroad

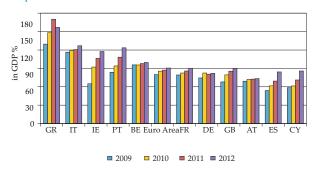
The euro area debt crisis was highlighted in the macroeconomic environment as the most significant risk in the past period. During 2012, the measures continued to be taken over for fighting the debt crisis, but its effects and consequences of restrictive fiscal measures are still felt in the countries of the euro area periphery and in the central areas of euro zone and in the countries that are economically linked to this monetary area. It was estimated that the effects of the euro zone crisis have still some negative impact on the stability of the financial system in BH, on the exports, and on capital and other cash inflows from abroad. This could further reduce domestic demand and lead to a decline in production and an increase in unemployment.

#### 2.1.1 Euro Area Main Risks

The consequences of the debt crisis and recession in the euro zone were far greater and longer lasting than the expected ones; therefore, despite signs of a slight recovery of the world economy, the economic crisis was the main feature of 2012, too. Although great efforts have been undertaken to combat the economic crisis, the taken measures have resulted mainly in partial solutions and short bursts of optimism, while the level of stable and sustainable growth was not reached. The economy of many countries in the euro zone was still recording the signs of slowing down, which, combined with the rise in unemployment, led to further strengthening of fiscal pressures and in the continuing debt crisis in the euro zone.

Public debt has remained one of the major problems in peripheral euro zone countries and several other members of the euro zone and the EU. Public debt of euro zone countries expressed as a percentage of gross domestic product (GDP) grew by 3.3 percentage points compared to 2011, while at the EU level, the rise of 2.8 percentage points was recorded. The largest increase in public debt was recorded in Portugal, Spain, Cyprus and Ireland, while the public debt of Greece has been reduced compared to the previous year due to the write-off of a part of the public debt by private investors. Nevertheless, Greece is still a country with the largest public debt, which at the end of the year amounted to 156.9% of GDP (Graph 2.1)

Graph 2.1: Public Debt in GDP %



Source: Eurostat

Fiscal sustainability in 2012 was one of the main tasks for all members of the euro zone, but also for other countries in the EU. In early March 2012, 25 member states signed an agreement on forming a fiscal union, which came into force in January 2013. By signing the Agreement, member states became obliged to implement strict fiscal rules. Implementing the strict austerity measures, the high budget deficit of a large number of member states is considerably reduced, although in many countries, it remains at a very high level<sup>1</sup>. Fiscal sustainability will in the future remain a major challenge for the EU.

Unfavourable forecasts in terms of a permanent solution of the debt crisis resulted in a new lowering of the credit rating. The largest general reduction of sovereign rating happened in mid January 2012, when the rating agency Standard & Poor's (S&P) lowered the rating of nine euro zone countries, including France and Austria, and also lowered the outlook for another six countries. During 2012 and in the first part of 2013, rating agencies revised downward the credit rating of countries affected by the crisis, such as Spain, Cyprus, Greece, Italy, Slovenia and financial institutions in these countries. Credit ratings were also lowered to the countries in the region. Croatia's and Serbia's sovereign credit rating was downgraded from the investment grade to the credit rating speculative grade, while in June 2012 and in May 2013 they downgraded the credit rating of Montenegro and Macedonia. Table A1 in the Statistical Appendix illustrates the changes in the credit rating of the countries being the most affected by the crisis, in the period since 2009 until July 2013.

As a result of uncertainty on the economic recovery and the lack of confidence in the sustainability of public debt, the yields of government bonds of countries, that had been most affected by the crisis, recorded a sharp rise at the beginning of the year. Measures taken by the end of 2011 and the beginning of 2012 by the European Central Bank (ECB) temporarily stopped the escalation of the financial crisis. Countries from the euro zone periphery continued programs of fiscal consolidation and structural reforms, strengthening the international competitiveness and credibility of these countries,

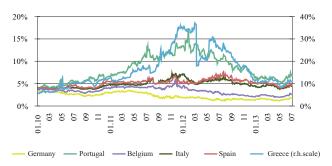
which led to the lowering of the financing costs. Thanks to the measures taken, bond yields of these countries and credit default swaps (CDS) were significantly decreased compared to the beginning of the year.

However, along with the positive effects, austerity measures have caused the negative economic consequences and political crisis, both in Greece and in several other countries of the euro zone periphery. Critical situation in Greece was calmed by the approval of a second round of aid worth 130 billion euro in February 2012, and the write-off of a part of the public debt of around 107 billion euro, or 53.5% of the nominal value of the bonds in March 2012. New wave of uncertainty hit Spain and Italy by the midyear, and questioned the sustainability of the implementation of fiscal measures and efficacy of financial mechanisms in the euro zone. The risk premium on government debt of these countries recorded again the dramatic growth. Spain was forced to turn to the EU for financial aid for the banking sector. During the year, Cyprus, also, due to its fiscal issues and problems in the banking sector requested aid from the EU and the international lenders.

The situation in the financial markets began to calm down after the August 2012, with the announcement of the ECB to buy in unlimited quantities the bonds of countries severely hit by the crisis, provided they begin structural reforms. The announcement of the ECB had the positive impact on the situation on the financial markets, so the yields on government bonds of peripheral euro zone countries significantly decreased (Graph 2.2).

<sup>&</sup>lt;sup>1</sup> According to Eurostat data, at the end of 2012, the budget deficit of Spain was 10.6%, Greece 10%, Ireland 7.6%, Portugal 6.4% and the United Kingdom and Cyprus 6.3% of GDP. The budget deficits in the EU and the euro area in the end of 2012 stood at 4%, i.e. 3.7% of the GDP. The target level of the budget deficit as per the Maastricht Treaty was 3% of GDP, while with the establishment of the fiscal pact, the budget deficit of the agreement signatories should not exceed 0.5% of the GDP

Graph 2.2: Yield on 10-year Government Bonds



Source: Bloomberg

During 2012, the leading world's central banks undertook numerous measures to combat the crisis. The aid packages and favourable loans for failed economies and financial institutions, affected by the crisis, were approved and the purchase programs of debt securities were continued, thus augmenting the initially planned amount of funds intended for the recovery of the economy. In order to stimulate economic growth, central banks have kept the reference interest rate at record low levels, and the ECB in early July lowered the interest rate by 25 basis points to a level of 0.75%, while the interest rate that this institution pays on overnight banks deposits was reduced to 0%. In early May, 2013, the ECB has again lowered its reference interest rate by 25 basis points, the interest rate at which banks borrow from ECB was lowered to 1%, and it was also discussed the possibility of introducing negative rates on deposits held by banks at the ECB. Federal Reserve System (FED), although keeping the reference interest rate at 0% to 0.25% level, continued with a third phase of quantitative easings<sup>2</sup>. Bank of England and Japan also continued with the implementation of monetary easings and fiscal consolidation.

The process of establishing a new mechanism for financial stability in the EU began to unfold in three connected levels: monetary and fiscal reform, reform of the banking system and the establishment of a new prudential framework of the system. The following text box further deals with the measures taken during 2012 to establish a new regulatory and institutional framework in the EU and with the problems in their implementation.

The taken measures reduced the tension and financial risks in the euro area, but did not lead to the end of the crisis. It became clear that for a sustainable solution to the crisis, with the austerity measures, must take additional stimulating measures of economic growth and that the recovery should be supported by the establishment of new and strengthening of the existing financial institutions and mechanisms of financial stability at the EU level.

<sup>&</sup>lt;sup>2</sup> From July 2012, a program of buying and selling government bonds was renewed within the "Operation Twist", as the third phase of intervention in the financial market. The program "Operation Twist" involves selling of short-term bonds with maturities of up to three years and buying of long-term bonds being due between 6 and 30 years. With the extension of the program to the end of 2012, the amount of planned interventions of USD 400 billion increased for an additional 267 billion U.S. dollars in order to strengthen the economic growth.

#### Text Box 1: Upgrading the Institutional Framework of Financial Stability in the EU

The first part of the upgrading of the financial stability institutional framework in the EU, so-called monetary - fiscal reform, includes the establishment of the European Stability Mechanism (ESM), fiscal union and reform of the ECB instruments, providing the possibility of buying the government bonds of crisis affected countries.

In early February 2012, 17 euro zone countries signed the final version of the Treaty on the ESM. Although the ESM start up was originally scheduled for July 2013, the ESM began operating earlier, in October 2012, in order to urgently mitigate negative trends in global financial market and, in parallel with the activities of the European Financial Stability Facility (EFSF). Thus, it was first activated in December 2012, when Spain was approved 39.5 billion for the recovery of the banking sector. The original Agreement on the ESM, which was signed in June 2011, allowed the ESM to lend the credits to the countries in financial troubles. In subsequent upgrades, this financial mechanism had at its disposal other financial instruments, such as financial arrangements, followed by precautionary credit lines, buying of government bonds on the primary and secondary markets, loan approval to the countries for the purpose of the recapitalization and the direct recapitalization of banks. Instrument of the direct recapitalization of banks in the euro area was the subject of lengthy negotiations, given that its application was conditioned with the initial entry into force of a common European banking supervision. Only in June 2013, the agreement was reached on which basis, while meeting strict conditions, banks may be recapitalized directly from the ESM fund, while the funds will not pass through the state apparatus, so that the state debt will not increase, and the cost of rescuing failed banks, should be borne by shareholders, bondholders and depositors with a total of over EUR 100,000, instead by taxpayer.

Although all ESM functions have not been yet in place and it is questionable whether the planned 500 billion euro is sufficient credit potential for the functioning of this body, it is expected from the ESM to be long term stakeholder in extremely important mission of maintaining economic and financial stability of the euro zone.

After the government of the euro zone countries with severe fiscal problems were forced to introduce austerity measures and in that way to reduce the high budget deficit, it has become clear that in the future more attention must be paid to fiscal discipline. For this reason, on early March 2012, it was signed an agreement on forming a fiscal union, being endorsed by 25 members of the EU, which came into force since January 2013. The goal of fiscal union is to prevent excessive indebting of the EU countries in the future, while the mere signing of its founding significantly contributed to a temporary mitigation of the crisis. The fiscal pact has provided the improved control over the fiscal policies of the euro zone countries, the strengthening of the capacity of the financial mechanism, the ESM and EFSF, but it also significantly limited fiscal sovereignty of individual member states.

Activating the ESM and the adoption of the fiscal pact allowed the adoption of another institutional mechanism of the ECB, Outright Market Transactions, which involves the purchase of government bonds when confronted with problems. With the decision on the OMT, from September 2012, the Securities Market Program (SMP) ceased to be operational, under it the ECB had previously purchased more than EUR 200 billion of government bonds. Intervention in the markets in the form of purchase of government bonds are not limited in amount, but they are conditioned by concluding the arrangements with the ESM, which includes meeting the criteria of the adjustment program and the participation of the IMF in the aid program.

Although the mere announcement of purchases of government bonds amplifiers optimism in the markets, a measure of bonds repurchase has not yet been implemented in practice due to unresolved status of the banking union and the set conditions for applying for the redemption of bonds, which requires the state to agree to strict fiscal adjustment measures and to make major institutional reforms of the banking system.

The second level of the mechanism of stability refers to the establishment of a banking union at the EU level and should include common banking supervision, deposit insurance system and the recovery of troubled banks. Joint supervision of banks in the euro area should be fully operational in the second half of the 2014, and other EU countries were allowed to join the joint supervision mechanism on a voluntary basis. In the preparation and supervision of its operational implementation, the main role would continue to be the one of national supervisors, which would be placed under a single supervisory framework of the ECB and its supervisory body, the European Banking Agency (EBA). Centralization of supervision would lead to harmonization of regulations and methodology, and it would create the conditions for the transformation of the existing colleges of supervisors into better organized teams to monitor. Although the original proposals for the joint supervision of banks included oversight of the entire banking system of the euro area, the last agreement provides that in the beginning of the ECB will perform this role for banks whose assets exceed EUR 30 billion, i.e. whose balance represents more than 20 % of the national GDP.

In terms of deposit insurance, the EBA will be responsible for collecting data on deposits, preparation of analysis, certification of the possibilities of mutual lending of national agencies and resolving disputes among them. The establishing of a unique system of deposit insurance, among other things, defines the same insured sum (EUR

100,000) for all countries, regardless of the level of their economic development. Also, a common system of deposit insurance implies an equal redistribution of risk and potential loss among member states.

Establishment of a common system for troubled banks recovery is aimed at removing the difficulty in solving the problems in the banks and reducing the need for involvement of taxpayers' money in the event of a banking crisis. Although it is not less important, this part of the mechanism of the unique banking union is most weakly arranged regulatory wise. By the mid of 2012, the European Commission published a draft directive to establish a framework for recovery and resolution of credit institutions and investment companies. Complex connections and interwoven functions of Deposit Insurance Fund and Funds for bank resolution, as well as a whole range of other important issues will require further upgrading.

The third level of the new framework of financial stability is a prudential mechanism related to the regulatory measures of bank operations, among which the most important is the new regulations by the Basel III standards, which refers to the new provisions in terms of capital and liquidity. New capital requirements are related to the gradual increase of the capital base until 2019, provided that regulators may impose additional requirements, for example, for system essential banks. Although the goal of establishing new regulations is to avoid a new crisis in the banking system of the EU in the future and to provide a security of deposits, new and quite strict requirements represent an additional burden for banks in the EU. Thus, some of the regulatory requirements under Basel III standards, which should be met by the end of 2013, will be doable by only 11 EU countries.

Under the influence of constant turbulence on world markets, the correction of the projections for the economic growth, and announced measures to be implemented to combat the crisis, euro exchange rate during 2012 was exposed to strong fluctuations. Due to the debt crisis in the euro zone and the U.S. indicators of the economic recovery, the first part of 2012 was marked by the weakening of the euro against the dollar, while by the mid year, the euro began to grow after reassuring statements of the ECB president and initiated institutional changes in the euro zone. The trend of euro appreciation against the dollar was present at the beginning of 2013, when there were higher effects on the movement of the dollar exchange rate by the uncertainty on the announced fiscal consolidation and measures of quantitative monetary easings in the United States. The euro exchange rate trends against the Swiss franc did not record significant changes thanks to the monetary policy and exchange rate policy, which has been implemented by Swiss National Bank since 2011.

In 2012, the central banks around the world continued to increase their gold reserves<sup>3</sup>. The average price per ounce of gold during 2012 amounted to \$ 1.669 and by 6% was higher than in the previous year. Besides that, in 2012, the long-time accelerated growth rate of this precious metal stopped. The falling trend in gold prices was present during the entire first half of 2013, while the average price in June 2013 was reduced to the level of October 2010. Considering still current crisis and instability of the world's leading currencies, this significant drop of the interest in investing in gold was not expected. The main reasons for the fall of the price of gold in 2013 are the monetary policy of the Fed, the slower growth the Chinese economy and intensified sales of gold during this period.



#### 2.1.1.1 Effects on the Banking Sector

After the first recovery signs of the euro zone financial system by the beginning of 2012, motivated by the ECB implemented measures, reexpansion of the euro zone crisis had an impact on its banking system. The crisis largely affected the banks in Spain, Italy, Slovenia and Ireland, and the increased risks in the banking system of the euro area threatened with a new wave of panic and the spill over of the banking crisis into the countries outside the euro zone. In Spain, a large number of banks was faced with significant losses, deposit outflows and increasing indebtedness with the ECB. Italian banks, burdened with large exposure to sovereign debt, were forced to seek assistance from the ECB, and the credit ratings of Italian and Spain banks were lowered several times during 2012 and 2013. A similar situation prevailed in the banking system in Slovenia, where three largest banks, including the parent bank of two BH banks had expressed recapitalization needs, recorded rapid growth in non-performing loans, so they finished one more year with a negative financial result.

Many Western European banks with subsidiaries operating in the countries of Central, Eastern and South Eastern Europe (CESEE) faced the difficulties in business on their local markets, and lowering of the credit ratings was additional hindrance for their financing. Among the banks with downgraded credit rating there were also some parent banks of BH banks (Table 2.1).

Risks for the banking system of the euro area in the second half of the year declined noticeably, especially after the statements of the ECB President that all measures would be taken to safeguard the euro zone. Also, the agreement on forming a banking union was an encouraging signal for the banking system of the euro zone, given that it should ensure the use of funds from the ESM to restore the endangered banks. This would ensure cutting of the connections between the state and

<sup>&</sup>lt;sup>3</sup> According to data of the World Gold Counsila, in 2012, central banks executed purchase of 534.6 tons of gold, which is 17% more than in the previous year and this is a new record amount of gold purchases since 1964.

Rating Agency	Bank	Date of Change	Rating	Outlook
S&P	Intesa Sanpaolo S.p.A.	before 2011	A+	
	• •	21.09.2011	A	
		07.12.2011	A	Negative
		10.02.2012	BBB+	
		12.07.2013	BBB	
S&P	UniCredit S.p.A.	before 2011	A	
		07.12.2011	A	Negative
		10.02.2012	BBB+	
		12.07.2013	BBB	
Moody's	NLB d.d. Ljubljana	before 2012	Ba1	Negative
-	- 0	25.04.2012	Ba2	Negative
		25.07.2012	B2	Negative
		12.03.2013	Caa2	Negative

Source: Bloomberg

the banking system of the euro zone, for whose safeguarding the huge funds were allocated from the state budget and this would also reduce the risk of investing in government bonds. Announcements of the optimistic developments in the banking system of the euro zone and the gradual reduction of risk partly facilitated the financing in the capital market for the banks. At the beginning of 2013, a trend of deleverage of European banks with the ECB was evident. They began with the early repayment of funds borrowed through the Long-term Refinancing Operations of European Banks (LTRO).

Despite signs of recovery in the banking system of the euro zone during 2012, which were evident in the case of indicators from financial markets for the parent banking groups of BH banks (Graph 2.4), the uncertainty is still present in the financial markets, which is manifested through prudential risk exposure of European banks and reduced crediting activity.

Graph 2.4: Price Movements of Parent Banks Stocks



Source: Bloomberg

Additional pressure on the banking system of the euro area at the beginning of 2013 caused a restructuring of the Greek debt which caused banks and other financial institutions to write off most of their claims from the Greek government bonds. Strong links of Cypriot banks with Greek banking system and write-off of the Greek debt were the main reasons for Cyprus to become a new focal point of a banking crisis that threatened the stability of the euro zone by the early 2013.

By July 2012, the EU banks were required to meet the requirements of the European Banking Agency to strengthen the capital base<sup>4</sup>, and in addition, they were obliged to carry out preparations for the fulfilment of the regulations imposed by Basel III. Significantly increased capital requirements forced the European banking group to direct themselves more to the operations in the domestic market and meeting the new capital requirements.

Regulatory requirements for increased capital base, but also the losses burdening many banks have weakened their ability to finance state and sector of the economy and forced them to start the process of deleverage. The process of deleverage represents a particular risk for CESEE countries because of their high dependence on funding from parent banks. The effect of deleverage of banking groups in the euro zone depends largely on the possibility to substitute

<sup>&</sup>lt;sup>4</sup> The aim of the new regulatory legislation was the return of confidence in the EU banking system through the strengthening of the capital base of banks, with the prescribed ratio of capital (Core Tier 1) basically increased to 9%.

the foreign funding sources with domestic sources and less affected were those banking systems in which in the past years, more conservative business policy was implemented. In the countries of the region, the risk of deleverage was recognized as one of the main risk for the banking system. Also, this risk dominates the banking system in Bosnia and Herzegovina, mostly containing the capital of the foreign banking groups<sup>5</sup>.

Burdening of the banking system by the euro zone debt crisis and higher capital requirements in the previous period caused speculations and concern about the future operations of the European banking groups in the region. After the sale of Austrian bank, Volksbank International and its Central and Eastern Europe (CEE) subsidiaries to the Russian bank, Sberbank, Austria sold a part of the nationalized Austrian Hypo Alpe Adria Bank, while sales of its commercial branches in the countries of South Eastern Europe (SEE) should be finalized until 2015.

Although it is certain that the remaining foreign banking groups will not be able to keep an earlier volume of financing in the region, their interest in staying in this market should not be questionable due to still rapid economic growth of this area in relation to the euro area and greater potential for credit growth and return on assets and equity.

#### 2.1.1.2 Effects on the Real Sector

Although in 2012, the positive developments in the world economy were expected, the recovery from the global economic crisis progressed more slowly than expected from all the forecasts. Slow recovery was significantly contributed by the implementation of the program of fiscal adjustment in the countries of the euro zone periphery, being the main generators of instability in the financial markets. In addition to the effects of fiscal consolidation, significantly slower economic growth was affected by the unstable situation in the EU banking sector, which resulted in real sector facing the problem of difficult financing. The slow recovery of the euro zone economy exerted

the pressure on the real economy of its trading partners. In April 2013, the IMF released new projections of economic growth, which in the case of euro zone and regional countries, major trading partners of BH, were lower than projected in October 2012, thus, continuing the trend of downward corrections over the economic growth projections. Looking at the group of countries, the IMF projections indicate that in the future, developing countries will be the main drivers of global growth, although it is noticeable that the countries with the fastest economic growth in recent years have felt the effects of the crisis, mainly through the weakening of trades with the euro area.

Table 2.2 provides an overview of the annual growth rate of real GDP, projections of real GDP and changes in the projected rate of growth for 2013 in relation to the projections of October, 2012.

Table 2.2: Real GDP, Annual Growth Rate								
	Real GI	OP, Annı	Forecast Change since October, 2012					
	2011	2012	2013	2014	2012	2013		
World	4.0	3.2	3.3	4.0	-0.1	-0.3		
Developed Economies	1.6	1.2	1.2	2.2	-0.1	-0.3		
Euro Area	1.4	-0.6	-0.3	1.1	-0.2	-0.5		
USA	1.8	2.2	1.9	3.0	0.0	-0.2		
Japan	-0.6	2.0	1.6	1.4	-0.2	0.4		
United Kingdom	0.9	0.2	0.7	1.5	0.6	-0.4		
Developing Countries	7.2	5.9	5.9	5.6	0.6	0.3		
Central and Eastern Europe	5.2	1.6	2.2	2.8	-0.4	-0.4		
ВН	1.3	-0.7	0.5	2.0	-0.7	-0.5		
Main Foreign Tra	de Partn	ers						
Germany	3.1	0.9	0.6	1.5	0.0	-0.3		
Croatia	0.0	-2.0	-0.2	1.5	-0.9	-1.2		
Serbia	1.6	-1.8	2.0	2.0	-1.3	0.0		
Italy	0.4	-2.4	-1.5	0.5	-0.1	-0.8		
Slovenia	0.6	-2.3	-2.0	1.5	-0.1	-1.6		
Austria	2.7	0.8	0.8	1.6	-0.1	-0.3		
Montenegro	3.2	0.0	1.2	2.0	-0.2	-0.3		

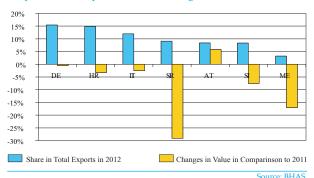
Source: World Economic Outlook, IMF, April, 2013

<sup>&</sup>lt;sup>5</sup> More details in the Chapter 5. Financial Intermediaries

Projections of real GDP in the countries - major trading partners of BH indicated that in 2013 it is to expect the decline in the volume of the economic activity in Croatia, Italy and Slovenia. Also, in Germany, which is a major trading partner of Bosnia and Herzegovina, in 2013, it is expected to have further slowdown in economic activity. Given that these four countries in 2012 accounted for 50.5% of total BH exports market<sup>6</sup>, there is a risk of further reduction of exports to these countries, which would further worsen the already bad image of BH foreign trade.

Graph 2.5 shows the reduction of BH exports into the countries - major trading partners in relation to 2011, which is largely the consequence of reduced exports demand, due to slow economic growth in these countries in 2012. The largest decrease was recorded in exports to Serbia, as a result of significantly lower volume of electricity exports in this country.

Graph 2.5: BH Exports to Main Trading Partners



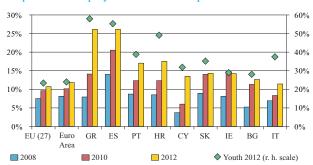
According to BH Agency for Statistics (BHAS) data, the following items have the largest share of total exports into the countries - main trading partners: goods classified by material, miscellaneous manufactured goods, machinery and transport equipment; and raw inedible materials, except fuels. If BH companies do not find alternative markets for their goods trading it can be expected to have the most pronounced decline in exports in these sectors.

less exports can be expected in the sector of food and live animals.

Also, due to the Croatian accession to the EU, much

Economic slowdown has led to record unemployment in the euro area, and the highest unemployment rate at the end of 2012 was recorded in Greece and Spain (26.1%). The upward trend in unemployment is continuing in 2013, and particular concern is the rising unemployment of the youth<sup>7</sup> (Graph 2.6).

Graph 2.6: Unemployment Rate in Europe



Source: Eurostat

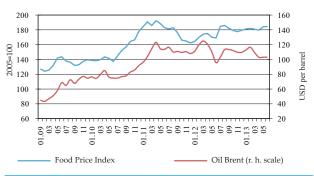
During 2012, the trend of high and variable food and oil prices in world markets continued. The wave of heat and drought in early summer in the SEE inflicted significant damage to the harvest, and the U.S. was hit by the biggest drought in the past 50 years, resulting in a significant increase of food prices in August 2012. After a surge in grain prices in late August 2012, the G20 leaders immediately reacted and agreed on measures that have had influence on the stabilization of food prices to the end of 2012. Food prices on the world markets in the future will be quite high, mainly due to bad weather conditions, which in the first half of 2013 hit the area of northern and central Europe, Russia and China and due to the decline of the world's food supply. Food prices in BH 2013 will be influenced by food prices on world markets and domestic harvest damages caused by the drought, so it is possible to expect further pressure on the available income of households and producer prices.

<sup>&</sup>lt;sup>6</sup> Data of the BH Agency for Statistics

 $<sup>^7</sup>$  According to the Eurostat Methodology, the category of the youth includes the population  $\,$  from 15 to 24 years of age.

Due to the political situation in the Middle East and North Africa, the price of crude oil on the world market in the first quarter of 2012 increased and in March it reached the amount of nearly US\$125 per barrel. In the second quarter of 2012, oil price recorded a constant decline, which had a direct effect on the reduced inflationary trends in the world. In the second part of the year, the optimistic forecasts regarding the recovery of the global economy caused the moderate rise in oil prices, given the stringent relations with Iran, disruptions in supply from Libya and the escalation of the conflict in Egypt, which makes the traffic through the Suez Canal difficult, it is possible to expect a new pressure on oil prices.





Source: IMF

#### 2.2 Vulnerabilities and Potential Risks in BH

Fiscal vulnerabilities of the country, the pressure on foreign exchange reserves and the potential difficulties in financing the current account deficit and weak domestic demand are the main risks for the financial stability, arising from the domestic macroeconomic environment. High budget deficit from the previous period and the slowness in implementing political and economic reforms have resulted in a rise of BH borrowing from the international financial institutions, including the incurrence of a new Stand-by Arrangement with the IMF, as well as a significant increase in borrowing from commercial banks and domestic capital market. Due to the fiscal vulnerabilities and political instability in the country, the sovereign rating of BH is still in the zone of speculative credit rating, with

a high credit risk. Changes in business policy of foreign banking groups in the EU are reflected in the decrease in foreign liabilities of domestic banks, which puts considerable pressure on the level of foreign exchange reserves. Negative effects on foreign exchange reserves are mitigated by a new Stand-by Arrangement concluded with the IMF, although it should be noted that the inflow of funds on this basis are of a temporary nature. Domestic demand and economic activity in the country are still at a low level.

#### 2.2.1 Country's Fiscal Position

In 2012, the country's fiscal position was again under the influence of adverse economic developments and political climate in BH, and its basic features were high budget deficit and rising public debt.

After the adoption of the Law on Budget of the Institutions of BH and 2011 international liabilities in the final days of 2011 following lengthy negotiations, the beginning of 2012 was marked by another political standstill. Although there were no financial difficulties in repayment of the public debt, in early 2012 there was a delay in issuing of the order on foreign debt servicing, which largely increased the country's reputation risk. Although the short delay in foreign debt servicing was purely of technical nature, the standstill sent a negative message to foreign creditors and all potential investors.

Following positive political progress in February with the establishment of all government levels, in late March 2012, the S&P Rating Agency confirmed the BH sovereign rating and changed its outlook from "Negative, Watch" to Stable. However, reviewing the sovereign rating at the beginning of April 2012 due to deterioration of the country's entire fiscal position and the delay in foreign debt servicing from the beginning of the year, Moody's Agency downgraded the BH credit rating from B2, Negative outlook to B3, Negative, Watch outlook. With the downgrade of sovereign rating, BH fell only one level above the rating category described as "poor creditworthiness, extremely high credit risk". Although both Agencies upgraded BH's outlook to

Stable in the next credit rating reviews, BH's rating is still in the area of speculative creditworthiness with high credit risk, and further halts in the implementation of political and economic reforms pose a danger from new credit rating downgrade, which is already the lowest in the region.

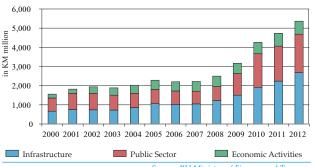
Unlike in previous years, 2013 budgets at all levels were adopted in a timely manner. However, although the trend of budget spending restrictions continues, pressured by realisation of new tranches under the new Stand-by Arrangement with the IMF, the consolidated budget deficit is still very high, amounting to KM 526.8 million in 2012. Due to the need for financing the budget deficit, the public debt was rising, primarily with local banks and at local capital markets.

The public debt was increased due to engagement of previously approved funds by foreign creditors and the new debts within the country. Compared to 2011, the public debt was increased by KM 488.3 million or by 4.9%. At the end of 2012, according to preliminary data of BH Ministry of Finance and Treasury (MFT), it amounted to KM 10,463.76 million, which makes 40.4% of GDP. The foreign debt reached KM 7,131.37 at year-end, with 7.1% increase compared to the previous year. Of the total foreign debt, the "old" debt8 accounts for 24.8%, and it was reduced by 8.4% during 2012. The foreign debt increase was mostly caused by engagement of previously approved loans and signing of the new Stand-by Arrangement with the IMF<sup>9</sup>. The new credit arrangement with the IMF was concluded in late September 2012, in total amount of SDR 338.2 million (KM 771.15 million), and by the end of 2012, the total of SDR 101.46 million (KM 234.2 million)10 was withdrawn in two tranches. Also, in the first half of 2013, two tranches totalling to SDR 67.6 million (KM 151.6 million) were withdrawn.

According to MFT data, substantial engagement of previously agreed funds from the European Investment Bank (EIB), the IMF, the European Bank for Reconstruction and Development (EBRD) and the World Bank (IDA) was recorded. These funds were in the most part used for implementation of infrastructural projects that accounted for 50% of total foreign debt at the end of 2012, based on the

"new" debt (Graph 2.8). Due to withdrawal of new, yet unused loans, further growth of foreign debt is expected in the period ahead. Although the amount of contracted and unused funds dropped by 10.6% compared to the previous year, costs of unused funds are still high, amounting to KM 3.07 million in 2012.

Graph 2.8: Sectoral Structure of Loan Purpose Based on "New" Debt



Source: BH Ministry of Finance and Treasury

Although the foreign debt was agreed under relatively favourable terms<sup>11</sup>, the market risk is not negligible, primarily due to exposure to variations in foreign currency exchange rates. Although the share of foreign debt in EUR went up compared to the previous year, given the significant share of other currencies in the foreign debt currency structure, especially USD, and oscillations in USD/EUR exchange rate, the foreign currency risk is not negligible. At the end of 2012, 36.9% of foreign debt was denominated in SDR<sup>12</sup>, 8.2% in USD, 3.5% in CPU<sup>13</sup> and 4.3% in other currencies beside EUR. Also, at the end of 2012, 48.5% of total foreign debt

<sup>&</sup>lt;sup>8</sup> The "old" debt consists of inherrited commercial debts, originating from the period before 2 April 1992 that, according to MFT data as of 31 December 2012, account for a debt to Paris Creditor Club (KM 781.67 million), the World Bank – EBRD (KM 507.1 million) and London Creditor Club (KM 479.31 million).

<sup>&</sup>lt;sup>9</sup> The planned duration of the fourth stand-by arrangement is from 2013 to 2018, and disbursement of the entire amount in eight tranches is foreseen. The loan repayment period is five years from the date of "withdrawal" of each tranch, including three-year "grace" period.

<sup>&</sup>lt;sup>10</sup> Conversion was made on tranch withdrawal date.

<sup>&</sup>lt;sup>11</sup> According to MFT's data, the total BH's foreign debt as of 31 December 2012 was agreed with the average interest rate of 1.44%.

<sup>&</sup>lt;sup>12</sup> In the SDR structure valid since 1 January 2011, USD participates with 41.9%, EUR 37.4%, GPB 11.3% and JPY 9.4%.

<sup>&</sup>lt;sup>13</sup> Currency basket used by the World Bank and other regional development banks to calculate obligations on loans that are usually disbursed in dollars.

accounted for loans with variable interest rates, whose share has risen by 3.6 pp since the end of last year. Interest rate risk will not be significant as long as the leading central banks in the world implement low interest rate policies, in order to stimulate economic activities in their countries, and the variable interest rate clause should therefore have no substantial effect on the level of BH public debt in the near future.

In 2012, the total of KM 413.31 million of foreign debt was repaid, which means that all debt servicing liabilities were fulfilled. Of this amount, principal accounts for KM 305.38 million, and interest, servicing and other costs and banking commissions account for KM 107.93 million. In 2012, the amount allocated for BH foreign debt servicing was by KM 73.29 million higher than in the previous year. Viewed by creditors, the largest share (24.4%) of the total amount serviced was paid to the World Bank. October 2012 marked the beginning of repayment of III Stand-by Arrangement, which should be fully repaid in October 2015. In the course of 2013, KM

Table 2.3: Repayment Plan for the IMF Stand-by Arrangement

(as of 30 June, 2013)

		in SDR	in KM
Year	Description	Repayment Amount	Repayment Amount
2013	SBA Principal Costs/Interest	76,095,000 2,199,552	171,733,631 4,964,019
	TOTAL	78,294,552	176,697,650
2014	SBA Principal Costs/Interest	146,271,250 3,215,709	330,109,638 7,257,315
	TOTAL	149,486,959	337,366,953
2015	SBA Principal Costs/Interest	38,470,000 2,124,825	86,820,327 4,795,373
	TOTAL	40,594,825	91,615,700
2016	SBA Principal Costs/Interest	67,640,000 1,708,264	152,652,116 3,855,265
	TOTAL	69,348,264	156,507,381
2017	SBA Principal	78,208,750	176,504,010
2017	Costs/Interest	895,187	2,020,287
	TOTAL	79,103,937	178,524,296

Source: IMF

Note: Amounts in KM are converted according to the exchange rate quoted by CBBH as of 29 June, 2013: SDR 1 = KM 2.256832. In 2013, we presented only outstanding debt, out of total KM 332.9 being due during 2013, (330.7 KM million withdrawn from the tranches of III and IV SBAs and 2.2 KM million from unwithdrawn tranches of IV SBA).

788.9 million of foreign debt matures, of which KM 332.94 million is based on III and IV Standby Arrangements (the repayment amount remaining after 30 June 2013 is presented in Table 2.3), while the first principal on the used tranches of IV Standby Arrangement matures in 2015.

According to MFT data, at the end of 2012, the internal debt amounted to KM 3.332,39 million<sup>14</sup>. The internal debt growth trend is primarily the result of difficulties that the Entity-level governments face when financing short-term liabilities, being forced to take additional debts, both based on issuance of debt securities and in the form of loans with commercial banks. Commercial banks invest in national securities and, due to the lack of quality projects and safe investments, they use excess liquidity to buy Entity-level securities. According to the CBBH data, indebtedness of the governmental sector based on issuance of securities bought by local banks at the end of 2012 grew by 46.5% compared to the end of 2011, while the governmental sector's commercial loan debt rose by 31.6% compared to the previous year (Table 2.4).

In the course of 2012, the practice of indebting on the basis of treasury bills continued, and bonds were issued in order to cover the budget deficit. Government of the Federation of Bosnia and Herzegovina (FBH) organised in 2012 five auctions of treasury bills worth KM 120 million. The cost of financing three issues of treasury bills ranged between 2.21% and 2.45%. In the last two issues, financing cost went down and amounted to 2.01%, or 2.02%. In the course of 2012, Government of Republika Srpska (RS) also organised five auctions of treasury bills, and one of the issues failed due to insufficient interest among investors. Total value of issued treasury bills amounted to KM 95 million, and average yield rates ranged between 2.85% and 3.51%. The beginning of 2013 was marked by issuance of treasury bills with maximum maturity of 12 months, collecting KM 24.1 million, with the average rate of 3.83%.

<sup>&</sup>lt;sup>14</sup> This amount does not include obligations based on restitution.

Table 2.4: Claims on the Government Sector

						i	n KM million
Claims	2007	2008	2009	2010	2011	2012	May 2013
Central Government	0.7	1.7	4.6	0.2	0.0	0.3	0.3
Loans	0.7	1.7	4.6	0.2	0.0	0.0	0.0
Securities	0.0	0.0	0.0	0.0	0.0	0.3	0.3
<b>Entity Government</b>	31.2	116.1	155.8	193.1	582.5	845.3	897.2
Loans	31.2	115.8	151.7	179.6	310.5	445.7	460.2
Securities	0.0	0.3	4.2	13.5	272.1	399.6	436.9
Cantonal Government	3.4	3.2	4.3	33.8	33.3	52.6	67.3
Loans	3.4	3.2	4.3	33.8	33.3	52.6	67.3
Securities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Municipal Government	91.6	142.3	188.2	225.6	273.9	314.0	303.7
Loans	91.6	141.5	186.0	222.5	269.8	309.4	299.5
Securities	0.0	0.9	2.2	3.1	4.1	4.6	4.2
TOTAL	126.9	263.4	352.9	452.6	889.8	1,212.2	1,268.5
Loans	126.8	262.2	346.6	436.0	613.6	807.7	827.0
Securities	0.0	1.2	6.4	16.6	276.1	404.5	441.5

Source: CBBH

In addition to the treasury bills issued by Ministries of Finance in order to mitigate the effect of imbalance between budget inflows and outflows, the Entities took on an additional debt of KM 160 million in 2012 by issuing bonds maturing in two to seven years. Both Entities planned to use these funds to cover budget deficits. The FBH Government issued three series of bonds maturing in two, three and five years, in the nominal amount of KM 130 million in total, with average yields of 4.3%, 5.25% and 6.1%<sup>15</sup>. During 2012, the RS Government issued two series of bonds in auctions organised in April and June, on which occasion it borrowed additional KM 30 million at Banja Luka Stock Exchange. A common feature of these issues is that the bonds were issued with the identical 6% yield and maturity in seven years.

In the course of 2012, there was an increase in the debt, resulting from the issue of Entity bonds based on war-time claims, in the total value of KM 77.3 million. Also, bonds of both Entities and Brčko District based on pre-war foreign currency savings were issued worth KM 156.1 million in total.

In view of the fact that as much as 90.9% more of the foreign debt matures in 2013 than in 2012, new debts of the government are expected, including new issues of securities. The growing level of debt and rising annual annuities for foreign debt repayment, combined with the projected slow economic growth and high budget deficit intensify the concerns about sustainability of the public debt in the forthcoming period. The government's practice of incurring new debts in order to repay the existing due debts is of a particular concern. For this reason, more attention should be paid to the purpose of borrowed funds in the years ahead, and new debts should be used for production and infrastructural projects, which will encourage the economy development and limit additional debt increase for the purpose of budget spending.

<sup>&</sup>lt;sup>15</sup> Auction that took place in June was proclaimed unsucessful, and it was repeated in August, when the Government borrowed 12.8 million to a period of five years, with the average rate of 6.1%.

## **2.2.2** Pressure on Foreign Currency Reserves and Financing of Current Account Deficit

Pressure on BH foreign currency reserves was present in 2012 as well, primarily due to maturity of foreign liabilities of the banking sector and of a portion of the public foreign debt. The Stand-by Arrangement with the IMF had the biggest positive impact on the level of foreign currency reserves. Apart from the rise in the level of direct foreign investments, other effects on foreign currency reserves come from the financial sector, and are mostly caused by banks' harmonisation with regulatory requirements in terms of maturity, currency and capital positions at the end of the reporting periods.

After decline of the foreign currency reserves level in the first half of 2012, foreign currency reserves recorded an increase in the second half of the year, largely due to withdrawal of two tranches of the Stand-by Arrangement with the IMF. It should be noted that the effect of the increase in foreign currency reserves, due to withdrawal of the Standby Arrangement tranches, is temporary, and it will go down at the time of debt repayment to the IMF.

Graph 2.9 shows the impact of BH Stand-by Arrangement with the IMF on the level of foreign currency reserves. One series shows the actual level of foreign currency reserves, and the other shows the assumed foreign currency reserve level in case BH was not approved funds based on the arrangements with the IMF, indicating that the foreign currency reserve would be lower without those funds.

Graph 2.9: Effects of Stand-by Arrangements on Foreign
Currency Reserves

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Foreign Currency Reserves

Source: CBBH

Foreign Currency Reserves Adjusted for the Effect of Stand-by Arrangements

Shortly after the CBBH establishment, tranches from I and II Stand-by Arrangements were withdrawn, which increased the level of foreign currency reserves and influenced the difference between the two series shown on the Graph. The difference between the two series was decreasing with time and it was completely gone when all liabilities stemming from the initial two arrangements with the IMF were repaid. Withdrawal of tranches from III and IV Stand-by Arrangements had the same, but much stronger effect on the foreign currency reserve level. Table 2.5 shows the time and amounts of withdrawn tranches from the last two Stand-by Arrangements.

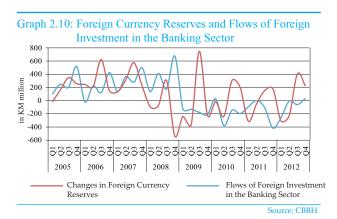
For servicing of the debt to the IMF (Table 2.3), repayment of debt worth KM 176.7 million was foreseen in the second half of 2013, and the repayment planned in 2014 amounts to KM 337.4

Table 2.5	Table 2.5: Withdrawn Funds from III and IV Stand-by Arrangements							
(as of 30 J	June, 2013)				in SDR			
	Tranche	Date od Withdrawal	Amount Withdrawn	Amount Repaid	Outstanding Debt			
	I Tranche	10 July, 2009	182,630,000	68,486,250	114,143,750			
SBA	II Tranche + III Tranche	26 March, 2010	121,750,000	15,218,750	106,531,250			
≣	IV Tranche	19 October, 2010	33,820,000	0	33,820,000			
		TOTAL	338,200,000	83,705,000	254,495,000			
	I Tranche	26 September, 2012	50,730,000	0	50,730,000			
Ą.	II Tranche	21 December, 2012	50,730,000	0	50,730,000			
IV SBA	III Tranche	8 May, 2013	33,820,000	0	33,820,000			
N	IV Tranche	28 June, 2013	33,820,000	0	33,820,000			
		TOTAL	169,100,000	0	169,100,000			

Source: CBBH

million. Forthcoming payments on this ground shall have an impact on reduction of foreign currency reserves, and if they fail to rise based on other inflows, foreign currency reserves shall converge to the values shown with the series of foreign currency reserve adjusted for the Stand-by Arrangement effect.

Activities of the banking sector in BH also have a strong impact on foreign currency reserve developments, where a distinction should be made between short-term and long-term effects. Shortterm effect involves oscillations of the foreign currency reserve level within one month due to fulfilment of regulatory requirements. The 2011 Financial Stability Report explains in details how the fulfilment of regulatory requirements reflects on the condition i.e. oscillations of foreign currency reserves. Long-term effect on foreign currency reserves is caused by developments with banks' foreign liabilities due to changes in their business policies. Since 2009, in SEE region, including BH, a process of settling accounts among foreign banking groups has started, gradually changing their business policies towards stronger reliance on local sources of funding. Reasons behind it are multiple, and they will be further discussed in Chapter 5 herein. When it comes to foreign currency reserves, the settling of accounts can only have negative effects. Negative developments in banking sector's foreign liabilities have marked the BH banking system since the onset of the economic crisis. Since the end of 2008, foreign liabilities fell by more than two billion KM. Nevertheless, the foreign currency exchange level is similar as at the end of 2008, mostly due to the aforementioned arrangement with the IMF (Graph 2.10).



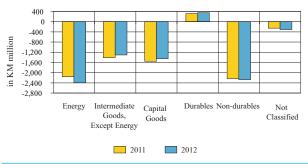
In the event of failure to renew foreign sources of funding, the negative trend in banks' foreign liabilities may continue in the period ahead, given that data on maturity match between assets and liabilities of the banking sector shows that KM 348.55 million of liabilities will mature by the end of 2013, based on loans and other borrowings, as well as KM 41.28 million of liabilities arising from subordinated debts. It is worth noting that this is only a portion of foreign liabilities maturing in 2013, as it can be expected that a portion of nonresident deposits maturing in this period will not be renewed. In view of the amount of liabilities maturing based on the Stand-by Arrangements and given the changed business policies of banking groups, pressure on the foreign currency reserve level can be expected in the forthcoming period as well. Withdrawal of the remaining tranches from IV Stand-by Arrangement shall have a temporary positive effect on foreign currency reserves.

Unfavourable payment balance developments continued throughout 2012, mostly due to growing current account deficit, i.e. rising trade deficit of goods and decrease of surplus on services account. Deficit of the current account for 2012 amounted to KM 2.45 billion, which is by 0.9% higher than in 2011. Although the current account deficit increase was much lower than in 2011, the value of annual deficit is gradually reaching the values from precrisis years. In 2012, lower values of imports and exports than in the previous year were recorded, due to decreased demand in main trading partner countries, which was already mentioned above. In addition, the price effect was very strong in case of most significant exports products (Table 4.1 in the chapter on legal entities), and prices fell in five out of nine main exports product groups. The strongest price effect was recorded in the group of mineral fuels, mineral oils and products of their distillation; electricity: bituminous substances: mineral waxes. which also recorded reduction in the quantity of exports. Weak domestic demand reflected on the lower value of realised imports, with negative volume effect (Table 4.1) in the majority of main groups of imports products, i.e. lower imported quantities. The most significant fall of imported quantities was recorded in the following groups of imported products: sugars and sugar products;

iron and steel and mineral fuels, mineral oils and products of their distillation; electricity; bituminous substances; mineral waxes; in the last product group, higher imports price additionally reduced the demand for this product group. The effect of weak domestic demand was felt in the first six months of 2013 as well, when the realized value of imports was by 1.3% lower, according to data from the Agency for Statistics (BHAS).

The structure of net exports by economic purpose shows that the trade deficit in 2012 was the strongest in the industry group energy, which recorded a drop in exports by 37.9% compared to the previous year, mostly caused by the substantial decrease in exports of electricity to Serbia, while imports level dropped by 6.3%, increasing the trade deficit by KM 235 million. Trade deficit is still high in the category of consumables - non-durable products, which recorded a slightly higher imports growth compared to exports growth for these goods. Compared to the previous periods, deficit on intermediary products recorded a slight decrease, except for the energy and capital products, while the surplus on durable products continued to grow in 2012, although much lower than deficit in the other categories.

Graph 2.11: Changes in Trade Balance by Economic Category

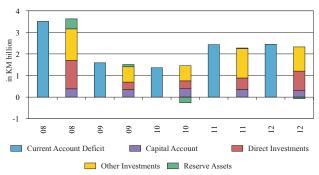


Source: BHAS

In trade deficit financing, the most significant contributor is the surplus on secondary income account, which covers 42.4% of trade deficit, and personal transfers that recorded an increase in 2012 are of particular importance. Given the recession developments in European countries that record significant money inflows, it is possible to expect a decrease or stagnation of these inflows. As for

financial account, it is important to note that the level of direct foreign investments in the country grew substantially, being by 80.2% higher than in the previous year. Net direct foreign investments went up by 70.6%, and their share in financing of current account deficit rose significantly compared to the previous three years. In addition to direct foreign investments, other investments were the most important item in financing of current account deficit in 2012, and were by 17.5% lower than in the previous year. In view of the high foreign trade deficit, coverage of imports by exports with only 51% and financing of current account deficit with unstable categories, such as foreign remittances, direct foreign investments and different types of foreign debts, financing of current account deficit in the period ahead may face difficulties.

Graph 2.12: Financing of Current Account Deficit



Source: CBBH

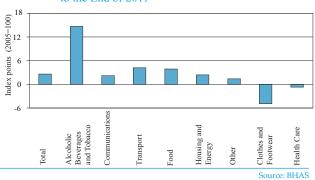
Due to further decrease of available income, the weak domestic demand is expected to impact the reduction of imports volume by the end of 2013, although it is difficult to foresee at the moment to what extent will the price effect be represented in its value. If the main trading partner countries fail to see significant recovery in the forthcoming period. demand for BH main exports products will stay low, which will negatively impact the exports value of goods, especially those in which the quantity effect is higher than the price effect. In view of the trends in the first half of 2013, the imports were reduced by 1.3% compared to the first half of 2012, while exports recorded 8.7% increase. Considering the foreign trade exchange developments in the first half of the year and the fact that the current account deficit is mostly determined by goods account, improvement of the country's payment balance position can be expected due to a decrease of current account deficit.

#### 2.2.3 Weak Domestic Demand

Domestic demand decreased in 2012, due to negative employment trends and real wages. Forecast for 2013 and 2014 (Table 2.2) indicate that a weak real growth of economy is expected in the next period. Along with expected inflation pressures from abroad, primarily through rising prices of energy and food, available incomes will continue to shrink, resulting in weaker demand by the household sector. Significant deceleration of economic activities, which is expected in the main trading partner countries, will result in decreased demand for BH products.

Domestic demand also decelerated in 2012, due to the increase in general price levels and the decline in available incomes of households. The general price level in BH was under the influence of prices of food and oil in world markets. 2012 inflation was 2.1 % in annual terms, which was 1.6 percentage points lower as compared to the previous year (Graph 2.13). Although the inflation pressures were somewhat weaker than in the previous year, they are still mostly dependent on the increase in the prices of transport, food, housing and energy-generating products, including gas, because of the significant weighting of these components in the general level of prices. Even 14.7% price increase of alcoholic beverages and tobacco, relative to 2011, did not significantly affect the general price level.

Graph 2.13: Changes in Consumer Price Index Compared to the End of 2011



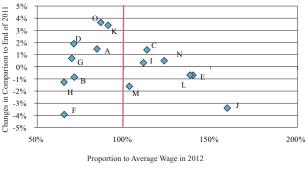
Similar price trends are expected in the next year. Food prices will remain considerably high, due to poor yields as a result of draught in 2012 and unfavourable weather in spring 2013 that affected Europe, Russia and China. As no significant decline in prices of energy-generating product, primarily oil and gas, is expected, the costs of transportation, housing and energy-generating products will remain high; however, no significant inflation pressures are expected.

The rise in living costs due to inflation was not accompanied by a proportional increase in average net wages. While the prices were 1.8% higher at end of 2012 relative to the end of the preceding year, the average net wage increased only by 0.4% over the period. At the end of 2012, more significant increases in average wages relative to the end of the preceding year were recorded in the following economic activities (Graph 2.14)<sup>16</sup>: Other Community, Social and Personal Service Activities (O), Real Estate, Renting and Business Activities (K), Manufacturing (D), Agriculture, Forestry and Fishing (A), Mining and Quarrying (C). However, increase of average wage in these activities could not contribute to a more significant increase of the

<sup>&</sup>lt;sup>16</sup> A – Agriculture, Hunting and Forestry; B – Fishing; C – Mining and Quarrying; D – Manufacturing; E – Electricity, Gas and Water Supply; F – Construction; G – Wholesale and Retail Trade; Repair of Motor Vehicles, Motorcycles and Personal and Household Goods; H – Hotels and Restaurants; I – Transport, Storage and Communications; J – Financial Intermediation; K – Real Estate, Renting and Business Activities; L – Public Administration and Defence; Compulsory Social Insurance; M – Education; N – Health and Social Welfare; O – Other Community, Social and Personal Service Activities.

average wage in BH, because the level of average wages in the a.m. activities, except in activity C, still remains below the BH average. On the other hand, the average wage increase in industrial activity C does not have a great impact on the average prices in BH, because the number of employees in this industrial activity is only 2.9 % of the total number of employed people. In the same time, there has been a decrease of average wage in as many as seven industrial activities. The most significant decrease of average net wage is recorded in Construction (F) and Financial Intermediation (J), bearing in mind that the average net wage in industrial activity F is significantly lower than the average wage in BH.

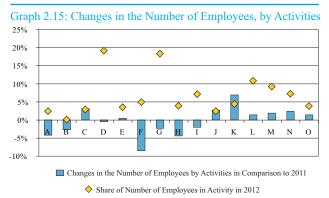
Graph 2.14: Changes in Average Wages, by Activities



Source: BHAS

In addition to rising living costs and declining average wages of employed persons, the unemployment rate also increased. According to the data of the BH Agency for Statistics, at the end of 2012, the number of unemployed persons in BH increased by 13,527 or 2.5% compared to the end of 2011. Over the same period, the number of employed persons decreased by 0.5 %, although a small increase in the number of employees was recorded in eight out of fifteen observed industrial activities (Graph 2.15)<sup>17</sup>. The most significant decrease in the number of employees was recorded in the Construction activity, which decreased by 8.5 %. Additionally, the most significant decrease in the average wage was recorded in this industrial activity. In 2012, construction works decreased by 5%. The decrease effect was significantly mitigated by the public

companies' investments in the maintenance of existing infrastructure, given that the construction of residential buildings and non-residential buildings dropped by 15% and 13.4% respectively, due to the decreased demand and interest of the banks to finance such projects. The decreased demand for the purchase of new real estate, as a consequence of decreased available household income, is another critical factor that affected the mentioned decrease in construction works. The decrease of average wage and number of employees in the Construction activity indicates that regardless of the weak labour market in BH, the negative impact of decreased activities in certain sector directly reflects on the number of employees and the income achieved.



Source: BHAS

The trend of rising unemployment, recorded since the end of 2008, continued in the first months of 2013. Thus, according to the official data on registered unemployment, between the end of 2012 and the end of May 2013, the number of unemployed persons increased by 2,862 (0.23 % of working-age population at the end of May 2013). The increased number of unemployed persons during this period can be attributed to the new labour inflow to the labour market, taking into consideration that at the end of May 2013, the number of unemployed persons remained approximately the same as the one at the end of 2012

<sup>&</sup>lt;sup>17</sup> See footnote 16.

Although the data for the first half of 2013 indicate a growth of the real sector, primarily the exports of products (8.7%) and the field of industrial production (7%), it is evident that these indicators are resulting from a low base used in the same period of the previous year, rather than being a sign of recovery of the BH economy. In the coming period, the unemployment will remain one of the major problems for domestic economy, which is also indicated by the statistics for the first five months of 2013, whereas the real wage increase will remain negative. Given that the wages increase in the first five months of 2013 is lower than the recorded inflation rate, we may expect further decrease of purchasing power of households, which will have a negative impact on the country's GDP along with the decrease in public spending which is a precondition for the new Stand-by Arrangement with the IMF.

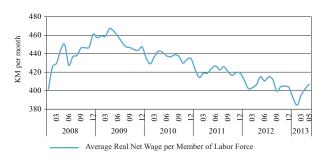
#### 3. Households

Among the risks to financial stability identified in the previous Chapter, the household sector is directly linked to weak domestic demand, which is, to a considerable extent, determined by the trends in the household sector. Effects of the decrease in disposable household income are transmitted to the financial sector both directly and indirectly. The direct effects on the financial sector include, in particular, further weakening of the demand for long-term loans, along with the increase of shortterm debt, primarily the debt on all types of cards, and further worsening of the bank credit portfolio performance. Activities undertaken to reprogram existing long-term clients' liabilities facilitated the financing of short-term liabilities of households. However, the existing negative trends in the real economy imply that the positive effects of the credit reprogram might be short term ones. The indirect effect of the decrease of domestic household demand on the financial sector is reflected through a decline in demand for loans by legal entities in domestic market-oriented activities.

Changes in the average real net wage per member of active population (Graph 3.1) and the real estate price index (Graph 3.2) indicate a significant erosion of the household sector's welfare since middle of 2009. Although the average nominal net wage in BH showed a rising trend in 2012 as well, the effect of prices and changes in the number and structure of active population caused a significantly lower average real net wage per member of labour force in BH in the second quarter of 2013, being at the level recorded in early 2008<sup>18</sup>. The inflation effect has existed since the middle of 2009, when more significant deviations of the average real wage from the average nominal wage became evident.

Due to the ongoing trend of unemployment growth, as a result of job losses and the inflow of new labour force, the decline of the average real net wage per member of active population was much faster than the decline of the average real net wage per employed person. The significantly decreased average real monthly net wage per member of active population (Graph 3.1), the increased consumer price index since January 2008 by 11.9 index points, to 125.3 in May 2013, and the increasing costs of borrowing in post-crisis periods suggest a significant decline of the living standard.

Graph 3.1: Average Net Real Wage per Member of Labor Force



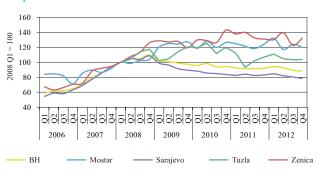
Source: BHAS, CBBH

Decrease of the real net wages also reflected on the purchase of residential real estate and prices of real estate. Unlike 2011, when the area of sold residential space increased as compared to almost frozen real estate market in the preceding two years, during 2012 the demand for real estate dropped and so did the prices of residential space real property. The decrease in demand was also observed in the cases of all categories of apartments regardless of their size. Additionally, the decline in the real estate prices in 2012 was observed in Sarajevo as well as in other BH regional centres which were covered with the analysis of the real estate prices<sup>19</sup>.

<sup>&</sup>lt;sup>18</sup> The analysis used the BHAS data on average net wage by economic activity, employment and unemployment levels and the consumer price index. The average net wage was adjusted to real levels relative to January 2008 through application of the Consumer Price Index (2005 = 100). Therefore, all values in Graph 3.1 are directly comparable with January 2008. Then, the real net wage was multiplied by the number of employed persons. Real wage costs for each month were calculated this way. This amount is then divided by the total number of working-age population.

<sup>&</sup>lt;sup>19</sup> The methodology for calculation of this index is defined in 2007 FSR. The Real Estate Price Index for the City of Sarajevo excludes the Old Town Municipality, which had not responded to the invitation to submit data since 2008. The Municipality of Tuzla, included since 2010, submitted the data for 2008-2012. The RS Tax Authority was unable to submit the data for the City of Banja Luka in the required format. According to the data received, the changes in the residential real estate prices in Banja Luka followed a trend similar to other regional centers in BH.

Graph 3.2: Real Estate Price Index

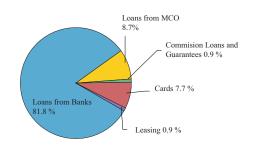


Source: CBBH

According to the Central Registry of Credits (CRC), in 2012 the total debt of households to all types of financial intermediaries was KM 7.39 billion, which is by 2.1 % higher from the previous year. The household debt grew in all segments of receivables, except in the category of financial leasing, where the receivables for leasing decreased by 6.6% in relation to 2011. The major increase of debt was observed in the category of commission loans, whereas the households' debt related to conventional loans with commercial banks increased by 0.9% in relation to the previous year. According to the CBBH, by the end of 2012, the total receivables from households <sup>20</sup> increased by 1.35% compared to the end of 2011.

The structure of total receivables from households (Graph 3.3) has not changed significantly as compared to the previous years. Over 90% of total receivables from households include bank claims, most of which are conventional loans. The share of conventional bank loans in the overall receivables from households decreased by 1 percentage point compared to the previous year, due to a faster increase of other receivables from households in comparison with the increase of conventional loans.

Graph 3.3: Claims on Households by Type



Source: CRC

According to the CRC, in 2012 the average indebtedness increased by 0.7% for all types of cards in relation to the previous year. Although the average indebtedness increase (cards) was not significant, the trend of the indebtedness growth indicates that the households continue to use this type of short-term and far more expensive loan in order to overcome the difficulties in their daily financial liabilities.

The most significant increase in the used up cards limit was observed in the segment of deferred payment cards (12.9%), where the average indebtedness was 23.3% higher than the previous year. Although the used amount of the limit on credit cards increased by 9.3%, the average debt on credit cards was 11.9% lower than the previous year due to a significant increase in the number of issued credit cards during 2012 (24%). The used up limit on debit cards increased by 10%, compared to the end of the previous year. However, given the higher number of issued cards in 2012, the average indebtedness on debit cards increased by 80 basis points. The average indebtedness on debit cards amounted to KM 508, which is 61.1% of the average net wage at the end of 2012.

<sup>&</sup>lt;sup>20</sup> According to CBBH, the receivables from general population include the receivables on all types of cards.

Table 3.1: Claims on Households, Cards, December 2012 in KM Number of Issued Cards Approved Amount Used up Amount Debt per Card Debit Cards 639,517 687,352,601 324,629,849 Credit Cards 178,757 346,766,369 191,144,570 1,069 Deferred Payment Cards 496 106,411 142,721,648 52,787,677 TOTAL 924,685 1,176,840,618 568,562,096 615

Source: CRC

The potential debt used amounts with commercial banks, where the approved limits on all types of cards account for a significant portion, increases considerably in poor macroeconomic conditions, with the increased use of cards limits usually most evident in households with low monthly incomes. The limit on debit cards is most often determined according to the average monthly incomes. Therefore, the used up portion of the cards limit may be used as an indicator of the extent to which average monthly spending of households in different pay categories exceeds their monthly incomes. Relative to 2011, the highest increase of used up limit on debit cards (18.7%) was recorded for the household group with lowest incomes (approved limit up to KM 400).

limits approved. The ratio of non-performing loans within the overall receivables on debit cards with approved limit up to KM 400 is by 1.1 percentage points higher than the ratio of non-performing receivables in all debit cards. As many as 91% of the total number of debit cards classified as non-performing receivables are in the group of debit cards with the approved limit of KM 400.

According to the CBBH data, during 2012 the household sector received KM 235 million of short-term and KM 1.77 billion of long-term loans. This amount of loans to households is still considerably below the volumes from the pre-crisis period<sup>21</sup>. The fact that KM 1.77 billion was granted during 2012, and that the balance of long-term loans at the end

Table 3.2: Used up Limits on Debit Cards, December 2012						
Range of Allowed Limit					in KM	
		up to 400	401-800	801-1,200	1,201-1,600	over 1,600
Used up Part of Limit	Dec 2011	77	307	500	699	1,119
	Dec 2012	91	325	533	745	1,172
	Increase, %	18.7	5.9	6.7	6.6	4.7

Source: CRC

According to CRC data, 32.7% of the total number of all issued debit cards were in the segment of monthly income up to KM 400. This household category was most affected by the worsening economic conditions in the country, and under the stringent bank loan approval requirements they were forced to increase the use of debit card limits. Additionally, this category has a higher ratio of non-performing loans in the overall receivables in relation to the categories of clients with higher

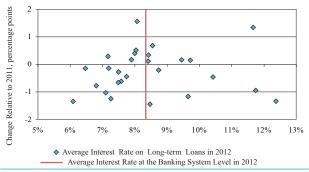
of 2012 (KM 6.79 billion) was 0.5% higher than at the end of 2011, implies that a portion of these long-term loans involves reprogrammed old receivables from the household sector.

<sup>&</sup>lt;sup>21</sup>For comparison, new long-term loans granted to households amounted to KM 2.94 billion during 2007.

By the loan reprogramming, the banks allow the clients not yet assigned to the non-performing category to ease the pressure of their existing financial liabilities, and avoid the increase of provisions due to the credit portfolio deterioration. However, the slow recovery of the real economy identified in Chapter 2 suggests that the loan reprogram will not resolve but only delay the expected problems in the collection of some receivables.

Graph 3.4a illustrates the level of average interest rates on long-term household loans by bank in December 2012 and a change relative to December last year. In 2012, the average interest rate on long-term bank loans for households ranged between 6.1% and 12.4%, whereas at the level of banking system the average interest rate was 8.34%, which was by 17 basis points lower as compared to the end of 2011.

Graph 3.4a: Interest Rates on Long-term Household Loans

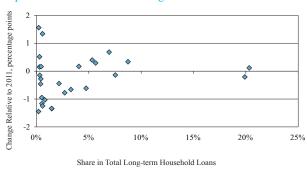


Source: CBBH

The average interest rates of banks, which are significantly different from the banking system average interest rates, were observed in small banks that are primarily oriented to the financing of legal entities. Also, a number of small banks in the system decreased average interest rates on long-term loans, which may be a consequence of aggressive credit policy or finding more favourable financing sources. However, bigger banks in the system did not have significant changes in the interest rate policy relative to the previous year (Graph 3.4b). The decrease of average interest rate for long-term household loans, concerning the entire banking sector as well as most commercial banks, including

a considerable growth of new long-term loans that cause barely any increase in the balance of long-term loans, implies that a portion of the existing loans was reprogrammed by extending the repayment deadline and decreasing the interest rate.

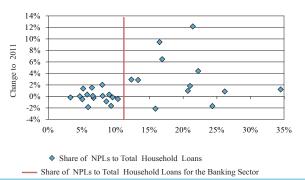
Graph 3.4b: Interest Rates on Long-term Household Loans



Source: CBBH

According to the Banking Agencies data, the amount of non-performing loans at the end-2012 totalled to KM 754.57 million, while their share in the overall receivables from households amounted to 11.17%. When compared to the end of the previous year, the share of non-performing loans in the overall receivables increased by 16 basis points. This may imply that the banks undertook a series of activities to decrease the credit risk and increase the efficiency of repayment, given that the real GDP in 2012 had a negative growth rate and that there was no observable increase of available income in the household sector. Although there was no significant deterioration in quality of the household credit portfolio in 2012, we may expect that the risks from foreign and domestic macroeconomic environments, identified in the previous Chapter, will result in a lower payment capacity of households and affect regular payment of their loans.

Graph 3.5: NPLs to Total Household Loans



Source: FBA and BARS

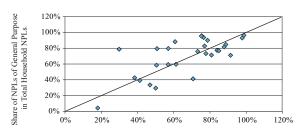
Graph 3.5 illustrates non-performing loans in the total household loans per bank at the end of 2012, and a change of this ratio relative to end of 2011. The share of non-performing loans in the total household loans ranges between 5% and 10% in most banks, whereas in the case of four small and two big banks in the system the share exceeds one fifth of the total household loans. A significant growth of non-performing loans since the beginning of the economic crisis was observed in all banks that implemented inadequate credit risk evaluation policy during the expansion period. Out of 12 banks with an above-the-average share of non-performing loans in the total household loans, we may single out three small banks with considerably increased share during 2012, namely by 12.2, 9.4 and 6.5 percentage points. The total of 18 banks in the system experienced a growth of non-performing loans in the total household loans during 2012. At the system level, the trend of growth of non-performing households loans stopped in the first quarter of 2013, however, the share of non-performing loans in the total household loans increased in as many as 15 banks, relative to end-2012.

According to the Banking Agencies, the structure of receivables from households by specified purpose has not changed considerably as compared to the previous years. In the structure of loans classified by purpose, consumer loans, which include claims on all types of cards, were predominant. General-purpose receivables amounted to 70.5% at the end of 2012, and their share in the total receivables from households was increased by 48 basis points as compared to the end of the previous year. Given the

high share of general-purpose household receivables in the total receivables of the banking sector (31.3%), it is necessary to focus on the quality of portfolio in this segment of receivables from households. According to data from end-2012, the share of nonperforming loans in the total receivables of this type amounted to 9.7% and is slightly higher than in the previous year. Although no significant increase of this share was observed since end-2011, and the share is still below average of overall loans for households, the risk is not insignificant, especially in relation to some banks in the system. Graph 3.6 illustrates a considerable exposure of many banks to this type of household loans and a high share of nonperforming receivables of this type in the overall non-performing receivables from households. In 14 banks, three quarters of the total household credit portfolio are related to these loans, and five small banks in the system are exposed to this type of loan below 50%. Additionally, over three quarters of the total non-performing loans in 16 banks are related to this type of household loans.

It is worth noting that at the end of 2012, as compared to the previous year, the trend of the credit portfolio quality deterioration in this type of receivables was observed in 17 banks in the system (Graph 3.7).

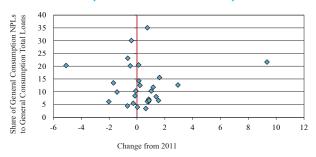
Graph 3.6: Exposure to the General Consumption of Households in 2012



Exposure to the Loans of General Purpose

Source: FBA and BARS

Graph 3.7: Changes of Loans Performance for General Consumption Household Loans Compared to 2011



Source: FBA and BARS

Housing loans made 25.3% of the receivables from households, while the remaining 4.2% was related to the loans intended for business activities. The share of non-performing loans in the total housing loans was above the average for the total household loans and amounted to 13%. This type of receivables include idiosyncratic risk, because as many as 60% of the total non-performing loans of this category of receivables occurred in a single bank, in which 49% of this type of receivables were classified as non-performing loans. Given that the share of this bank in the total banking sector receivables is not insignificant, in case of further deterioration of the credit portfolio quality for this type of receivables, the idiosyncratic risk could become a systemic risk.

At the end of 2012, the share of non-performing loans in the total household loans intended for business activities was as high as 25.3%. The poor quality of credit portfolio in this category of loans does not raise concern in terms of the systemic risk, due to a low share of these loans in the total household loans. However, there is idiosyncratic risk, particularly in terms of three small banks in the system, where this type of loan amounted to 66.9%, 38.4% and 27.5% of the total household loans, while the share of non-performing loans in this type of loan in these banks amounted to 36.4%, 28.5% and 17.2%.

In the analysis of the currency structure of household loans, it was observed that trend of decreasing the foreign currency loans continued during four years in a row. According to the CRC data, at the end of 2012, the euro loans amounted to 23.9%, and the loans in Swiss franc amounted to 6.6%. The loans

shown in the loan index in foreign currencies, which dominate in the currency structure of the household loans, are recorded by the banks into CRC according to the approved currency, specified in the loan agreement, so that a portion of these loans is recorded in KM, and the rest is recorded in a foreign currency<sup>22</sup>. The loans in Swiss franc decreased by 8.7% relative to the previous year, as a consequence of repayment, reprogram or conversion to other currency on one hand, and no approval of loans in Swiss franc in the other hand. However, the quality of this part of portfolio is still deteriorating. At the end of 2012, 22.8% of the total number of loans approved in Swiss franc was classified as nonperforming loans<sup>23</sup>. The euro loans also decreased and the outstanding debt in this currency decreased by 4.2% in relation to the end of the previous year.

Table 3.3: Loans to Households, Maturity and Currency Structure

Budetare								
			in KN	A thousands				
O	Outstanding Debt and Overdue Principal							
Maturity	КМ	EUR	CHF	TOTAL				
up to 1 year	86,680	1,913	0	88,593				
1 - 3 years	301,835	42,248	11,391	355,474				
3 - 5 years	604,345	107,882	13,984	726,211				
5 - 10 years	1,789,553	504,602	19,676	2,313,831				
over 10 years	1,416,311	789,266	356,667	2,562,244				
TOTAL	4,198,724	1,445,912	401,718	6,046,354				
				C CDC				

Source: CRC

In the maturity structure of household loans, as was the case in the previous periods, most of the receivables pertain to the loans over 10 years, and then to the loans with the remaining maturity between five and ten years. As compared to the end of 2011, the increase of household loans was observed in the category of loans up to one year, and the loans between one and three and those over ten years. The loan reprogram greatly affected the changes in the loan maturity structure.

<sup>&</sup>lt;sup>22</sup> Within the project of upgrading of CRC, financial institutions are allowed to add indexing currency for individual loans as additional detail in the reporting, therefore we may expect that this practice will be harmonized in the coming period.

<sup>&</sup>lt;sup>23</sup> At the end of 2011, 19% of the total number of lots in CHF was classified in the categories of non-performing loans.

The reprogramming process or replacement of the existing loan with a new loan with different contractual elements, especially in terms of the maturity and interest rate, significantly lowers the degree of using the debt collection instruments, guarantors in particular. According to the banking agencies, during 2012, around KM 15.8 million was repaid by 4,391 guarantors / co-debtors in relation to 3,829 loan lots. Although the amount of loans and the number of lots involving repayment by guarantors instead of principal debtors were reduced during two consecutive years, according to the official supervisory data, and it does not involve system relevant indicators, the CRC data indicate that 14.4% of the total number of conventional loans with guarantors were classified in one of the nonperforming loan categories. The foregoing implies that the problem of loan repayment by guarantors will persist in the future periods for a certain number of households that often have their own debts with banks or other financial institutions.

# 4. Legal Entities

Receivables of banks from the sector of legal entities, in addition to the negative growth rate of the real GDP, increased by 4.5% in relation to 2011. However, the achieved loan growth rate in the sector of companies is lower as compared to the previous years. The slower credit activity in this sector is a result of lower demand for the main exports products and a lower payment capacity of resident sectors. Low domestic demand, as one of the risks identified in the Second Chapter, caused a lower share of receivables from business activities oriented to domestic markets in the total receivables from legal entities. The increase of non-performing receivables in the sector of legal entities was one of the main characteristics of this sector in 2012. The share of non-performing loans at the end of 2012 reached 15.3%, despite the fact that in late 2011 two banks transferred non-performing receivables to a separate legal entity, a major portion of which involved NPL of legal entities. The growth of nonperforming loans particularly occurs in business activities dependent on the domestic demand. Lower average short-term and long-term interest rates indicate the trends of the banks to adjust the terms of financing the companies in 2012. Changes in the business policies of banks that resulted from the process of deleverage could impact the credit activity in the sector of legal entities in the coming periods.

Foreign-trade exchange in 2012 decreased in relation to the previous year, along with the reduced value of both imports and exports. Weakened domestic demand affected the imports in 2012, which were lower than in 2011 in terms of both the value and the volume. As regards the exports, a decrease in value was observed, but the quantity of exported goods was higher than in the previous year. Table 4.1 shows the most significant groups of imports and exports products, i.e. groups with the highest participation in the foreign-trade exchange. According to the BH Agency for Statistics data on the imports and exports of goods classified as per the harmonized code system, there was an assessment of the effects of price and changes in the volume of imported and exported products on the value of

imports and exports in the most significant product groups as compared to 2011. Based on the data on values and the volume of exchange of the main exports and imports products in 2011 and 2012, a calculation of changes in the average prices of exported and imported products was made (column 3). Column 4 shows nominal change in the value of exports and imports in relation to the values in 2011. The last two columns of Table 4.1 show the assessed effects of price and volume of the foreign trade exchange on the values of exports and imports in 2012. The price effect in column 5 measures the change in the value of exports and imports in 2012, which is a result of change in the exports or imports prices. The quantity is fixed, and a change in the value of exports and imports is calculated on the basis of average prices of products. This change is compared to the nominal growth in exports and imports of individual product groups. The effect of the volume of external trade (column 6) is measured by keeping the price fixed, and the change in the value of exports and imports is measured on the basis of quantities of exported and imported goods. The greatest decrease in the nominal value of exports is recorded in the following product groups: mineral fuels, mineral oils and their distillation products; electric power, bituminous substances; mineral waxes; and a group of inorganic chemical products, organic and inorganic compounds of precious metals, rare metals, radioactive elements and isotopes. In both groups of products, the reduced value of exports was caused by the reduction of average price and the exported quantity of goods, given that the effect of exported goods in the first product group had a greater impact on the reduction of exports, unlike the second group where the price effect had a greater significance. The exports also decreased in the following product groups: machinery, appliances and mechanical devices, boilers and parts thereof; iron and steel products; and aluminium and aluminium products. In the first two groups of products, the value of exports decreased primarily due to the lower quantity of the exported goods, whereas in the case of aluminium and aluminium product it was the price effect that had a sole impact on the decrease of exports. the groups of products with significantly increased value of exports in relation to 2011, such as electrical machinery, equipment and parts thereof,

sound recorders or reproducers, television image and sound recorders and reproducers and parts and accessories for such articles, and pharmaceutical products, the higher exports were primarily caused by an increased quantity of exported goods, and not by the price which was in both cases lower than in the previous year.

Due to the decrease of domestic demand, the implemented imports of goods during 2012 were lower in terms of both the value and the quantity

as compared to 2011. In the case of eight out of 13 significant groups of imports products, nominal growth of imports was negative in almost all product groups; the decrease was a consequence of lower quantity of imported goods, except in the case of aluminium and aluminium products, where the lower value of imports was a result of lower imports price. In two groups of products, the price effect, in addition to the quantity, affected the decrease of imports.

Name	Value of Exports, in KM million	Value of Exports, in KM million	Export Price Index	Nominal Export Growth, in %	Change of Values, in P	ercentage
	2011	2012	<u>I - XII 2012</u> I - XII 2011		Price Effect	Exports Volume Effect
	1	2	3	4 = 2/1	5	(
<b>Base Metals and Products Thereof</b>	1,934.6	1,908.8				
Of which: Iron and Steel	671.7	684.3	101.6	1.9	1.6	0
Aluminum and Aluminum Products	670.6	650.3	93.7	-3.0	-6.5	3.:
Iron and Steel Products	411.8	392.0	107.5	-4.8	6.7	-11.5
Mineral Products	1,316.0	872.0				
Of which: Mineral Fuels, Mineral Oils and Products of their Distillation, Electrical En- ergy, Bituminous Substances and Mineral Waxes	1,178.3	730.5	77.0	-38.0	-18.5	-19.:
Miscellaneous Products	760.1	821.2				
Of which: Furniture; Mattress Supports, Bedding and Similar Products; Lamps and Lighting Fittings, not elsewhere Specified or Included; Illuminated Signs, Illuminated Name-plates and the like; Prefabricated Buildings	749.1	795.2	101.6	6.2	1.7	4.
Machinery, Appliances, Mechanical and Electrical Equipment	815.1	791.3				
Machinery, Appliances, Mechanical and Electrical Equipment, Boilers and Parts thereof	559.8	515.5	110.2	-7.9	8.5	-16.
Electrical Machinery, Equipment and Parts thereof, Sound Recorders or Reproducers, Television Image and Sound Recorders and Reproducers and Parts and Accessories for such Articles	255.3	275.8	95.6	8.0	-5.0	13.
Chemical Industry and Related Industry Products	570.6	533.2				
Of which: Inorganic Chemicals, Organic or Inorganic Compounds of Precious Metals, Rare Metals, Radioactive Elements and Isotopes	388.5	342.8	91.3	-11.8	-8.4	-3.
Pharmaceutical Products	84.0	90.7	91.5	7.9	-10.0	17.

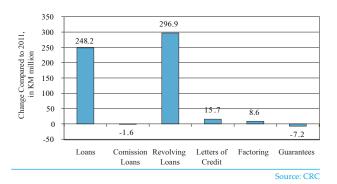
	Name	Value of Imports, in KM million	Value of Imports, in KM million	Import Price Index	Nominal Import Growth, in %	Change of Imi	
		2011	2012	<u>I - XII 2012</u> I - XII 2011		Price Effect	Imports Volume Effect
_		1	2	3	4 = 2/1	5	6
	Mineral Products	3,456.7	3,229.0				
	Of which: Mineral Fuels, Mineral Oils and Products of their Distillation, Electrical energy, Bituminous Substances and Mineral Waxes	3,340.7	3,131.5	112.3	-6.3	10.3	-16.6
	Machinery, Appliances, Mechanical and Electrical Equipment	1,870.2	1,881.1				
-	Machinery, Appliances, Mechanical and Electrical Equipment, Boilers and Parts thereof	1,099.1	1,115.2	97.4	1.5	-2.7	4.2
	Electrical Machinery, Equipment and Parts thereof, Sound Recorders or Reproducers, Television Image and Sound Recorders and Reproducers and Parts and Accessories for such Articles	771.1	765.9	104.4	-0.7	4.2	-4.9
-	Chemical Industry and Related Industry Products	1,475.5	1,522.5				
	Of which: Pharmaceutical Products	449.6	479.0	107.4	6.5	7.3	-0.8
	Inorganic Chemicals, Organic or Inorganic Compounds of Precious Metals, Rare Metals, Radioactive Elements and Isotopes	238.1	217.5	100.2	-8.7	0.2	-8.8
	Essential Oils and Resins, Perfumery, Cosmetic or Toilet Products	183.9	178.9	100.0	-2.7	0.0	-2.7
	Food Products	1,527.1	1,513.9				
_	Beverages, Alcohols and Vinegar	313.4	325.4	101.6	3.8	1.6	2.2
_	Miscellaneous Food Products	207.4	211.8	101.3	2.1	1.3	0.8
	Sugars and Sugar Confectionery	262.0	200.3	93.1	-23.6	-5.6	-17.9
	Food Industry Waste and Scraps; Prepared Animal Food	162.6	187.8	114.9	15.5	14.9	0.6
	<b>Base Metals and Products Thereof</b>	1,384.0	1,330.1				
	Of which: Iron and Steel	466.3	394.8	98.4	-15.3	-1.4	-14.0
	Iron and Steel Products	372.9	362.3	103.1	-2.8	2.9	-5.8
	Aluminum and Aluminum Products	231.6	228.9	95.2	-1.2	-5.0	3.8

Source: BHAS, CBBH Calculation

The total receivables of all groups of financial intermediaries from the sector of legal entities at the end of 2012 amounted to KM 10.38 billion. The banking sector still has major share in the total receivables from legal entities and amounts to 92.5% or has increased by 3.7% in relation to the previous year. In the group of non-banking financial institutions, leasing companies have the highest share, whereas the share of other institutions from the non-banking sector is insignificant. According to CBBH data, bank receivables from non-financial companies in 2012 increased by 4.5% and reached KM 8.03 billion.

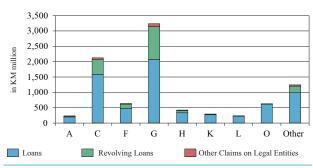
According to CRC data, the receivables related to conventional and revolving loans are the most significant items in the bank receivables from legal entities, whereas the receivables related to guarantees, letters of credit, and commission loans and factoring, have no systemic significance. Changes in the loan categories for legal entities, as compared to 2011, are illustrated in Graph 4.1. The increase of conventional and revolving loans had the major effect on the increase of total bank receivables from legal entities. Changes in other categories of legal entities' debts had no significant effect on the overall debt of companies.

Graph 4.1: Changes in Type of Legal Entities' Liabilities to Banks



Graph 4.2 illustrates receivables from legal entities by sector, which is similar to previous years. Bearing in mind the characteristics of BH economy and trends in the foreign-trade exchange, dominant participation of manufacturing industry (C) and trade (G) in the total banking sector receivables from legal entities was expected. Receivables from companies in the field of manufacturing industry and trade still make the major portion of bank receivables from legal entities (61.9%), although when compared to 2011, the share of these two business activities in the overall receivables has been reduced. The share of receivables from companies in the field of agriculture (A), companies dealing with the supply of electric power, gas, steam and air-conditioning (D), and companies in the categories of activities I, J, L, O, P, Q and R, has decreased in relation to 2011, according to 2010 BH Classification of Economic Activities<sup>24</sup>. Table A4 in the Statistical Appendix provides an overview of receivables at the end of 2012, for all categories of debt and economic activities.

Graph 4.2: Claims on Legal Entities by Type and Economic Activity



Source: CRC

The sector-related allocation of total loans shows a reduced share of domestic market-oriented companies, primarily the wholesale and retail sale

<sup>&</sup>lt;sup>24</sup> According to 2010 BH CEA, the activities are grouped as follows: Agriculture, Forestry and Fishing (A); Mining and Quarrying (B); Manufacturing Industry (C); Electric Power Generation, Gas and Steam Supply and Air-conditioning (D); Water Supply; Waste Water Management, Waste Management and Environmental Restoration Activities (E); Construction (F); Wholesale and Retail Trade, Repairs of Motor Vehicles and Motorcycles (G); Transport and Storage (H); Activities on Providing Accommodation and Preparation and Serving Food (Hotels and Catering) (I); Information and Communication (J); Financial and Insurance Activities (K); Real Estate (L); Professional, Scientific and Technical Activities (M); Administrative and Support Service Activities (N); Public Aministration and Defense; Compulsory Social Insurance (O); Education (P); Health Care and Social Work (Q); Arts, Entertainment and Recreation (R); Other Services (S); Household Activities as Employers; Undifferentiated Goods- and Servicesproducing Activities of Households for Own Use (T); Activities of Extraterritorial Organizations and Bodies (U).

companies, the share of which in the total loans reduced by 1.9 pp. In the trade sector, the following activities have the most significant share in the total loans wholesale and retail sale of fuels, wholesale and retail sale of food, beverages and tobacco products, wholesale of pharmaceutical products, and wholesale in non-specialized shops. Additionally, the share of the manufacturing industry (C) in the overall conventional loans decreased by 1.6 pp. The highest receivables from the manufacturing industry include companies dealing with the production of beer, sawn timber, bread and pastry, and milk and dairy products. Loans to companies dealing with agriculture, forestry and fishing amounted to 2.96% of overall loans to legal entities at the end of 2012. The highest increase in share of individual activities in the overall conventional loans was recorded in the field of public administration and defence (O), which include receivables from governments (the share increased by 1.18 pp relative to 2011), and in the finance and insurance (K). Outstanding debt from conventional loans to legal entities at the end of 2012 was KM 248.22 million higher than at the end of 2011. Table A3 in the Statistical Appendix provides an overview of all receivables related to conventional loans at the end-2012 for all economic activities.

The used up amount of revolving loans was much lower in 2012 than in the prior periods, whereby the amount of the total granted loans did not change significantly. This indicates that legal entities are getting closer to the limit for this type of loan. A significant change in the share of individual activities in the entire category of revolving loans

was recorded in sector G (Wholesale and Retail Trade, Repairs of Motor Vehicles and Motorcycles) where the share increased by 1.59 pp as compared to 2011. At the same time, the share of conventional loans in this sector decreased within the entire category of conventional loans. This may imply two things, given that revolving loans are normally used for short-term financing, while conventional loans are mostly used for long-term financing. The first implication is that the companies of this sector have a higher need to finance their operating assets or liquidity as opposed to investment-related finances; and the second is that the banks recognize a higher risk and are not willing to provide long-term loans to companies in this sector. The second conclusion presents the data related to number of blocked accounts and the balance of non-performing loans, which will be further elaborated hereinafter.

Although it is evident that the outstanding loan-related debts with over ten year remaining maturity period has decreased, and that the outstanding loan-related debt with up to one year remaining maturity has increased, the maturity structure of loans predominantly include the loans with over one year remaining maturity period. This development is a consequence of shortening the maturity dates for the existing loans; it contributes to the reduced readiness of banks to provide long-term loans, as well as to weaker investment activities of domestic legal entities.

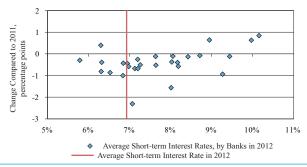
Table 4.2: Loans to	Table 4.2: Loans to Legal Entities – Maturity and Currency Structure of Outstanding Debt						
						in KM thousands	
Maturity		Outstanding	Debt and Overdue	Principal			
	KM	EUR	CHF	USD	OTHER	TOTAL	
up to 1 year	771,686	114,995	0	41,461	1,825	929,967	
1 - 3 years	756,664	72,871	0	1,950	2,166	833,651	
3 - 5 years	829,871	183,357	0	7	436	1,013,672	
5 - 10 years	1,734,523	684,513	5,123	489	2,988	2,427,635	
over 10 years	685,095	796,703	94,274	2,120	3,022	1,581,214	
TOTAL	4,777,839	1,852,438	99,396	46,026	10,438	6,786,138	

Source: CRC Other: KWD, CAD, HRK, AUD In the currency structure of receivables from legal entities, loans granted in KM still have the greatest share, although this period was marked with a significant increase of euro-denominated loans, as compared to 2011. It is worth noting that banks have different practices of reporting to CRC in terms of loans denominated in euro. In doing so, some banks report these loans as domestic currency loans, and the others are reported as eurodenominated loans, wherefore the aforementioned increase of total euro-denominated loans should be viewed as harmonization between banks in terms of the reporting to CRC<sup>25</sup>. The outstanding debt denominated in Swiss franc is lower than in the previous year, which is a consequence of loan repayment and the fact that banks that granted loans in Swiss franc allowed their clients to reprogram and/or convert the existing loan liabilities to KM.

According to CBBH data, KM 9.27 billion of shortterm and KM 1.45 billion of long-term loans were granted to non-financial companies during 2012. The value of short-term loans granted during 2012 was by 13.37% higher, whereas the value of longterm loans granted during 2012 was 18.6% lower in relation to 2011. The lower amount of granted longterm loans may be a consequence of deleverage in the BH banking system, in addition to the lower demand and a lack of quality projects. A decrease of foreign sources of financing, which are normally long-term in terms of their maturity, due to the rules of maturity harmonization of assets and liabilities, affected the business policies of banks and their readiness to provide long-term loans for business entities. The deleverage process and its effects will be further elaborated in the next chapter. At the same time, the increased amount of granted shortterm loans to legal entities indicates their growing need to finance operating assets and a problem of liquidity that the BH legal entities have faced. The average weighted short-term and long-term interest rates on newly approved loans to legal entities were lower in 2012 relative to the previous year. The interest rates on short-term loans to legal entities significantly dropped. The average interest rate on this type of loan was 6.91%, which was 57 bp lower

than in 2011. Interest rates on long-term loans also dropped as compared to 2011, but to a lesser degree. The changes of interest rates indicate that in 2012 the banks preferred short-term loans, due to the changes in the maturity structure of the sources of financing as a result of the deleverage process.

Graph 4.3: Short-term Interest Rates of Loan to Companies, by Banks



Source: CBBH

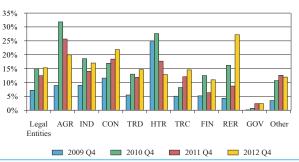
In 2012, there was again an increase of nonperforming loans share in the sector of legal entities, following a temporary decrease in 2011 (Graph 4.4)<sup>26</sup>. It is worth noting that the decrease in 2011 was a result of the transfer of nonperforming loans in two banks to a separate legal entity, which occurred in late 2011. According to the Banking Agencies, the share of non-performing loans in the total loans in this sector made 15.3% at the end of 2012. The increase of non-performing loans occurred in particular in the business activities that depend on domestic demand, such as construction and trade. According to the banking agencies, the manufacturing, construction and real estate companies had a considerable share of non-performing receivables. Although the nonperforming receivables decreased in agriculture and catering during the last two years, the share of non-performing receivables in these two sectors is

<sup>&</sup>lt;sup>26</sup> Activities under AGR include agriculture, forestry and fishing; IND include mining and quarrying; manufacturing and electric power generation, gas and water supply; CON include construction; TRD include wholesale and retail sale; repairs of motor vehicles and motorcycles; HTR include accommodation and food preparation and serving (hotels and catering); FIN include financial activities and insurance; RER include real estate business; GOV include public administration and defense, compulsory social insurance.

<sup>&</sup>lt;sup>25</sup> See footnote 22.

still high. The decrease of share of non-performing receivables from legal entities dealing with the a.m. activities is also a result of the afore-mentioned transfer of non-performing receivables to a separate legal entity. Due to the weakening of foreign trade exchange in 2012, there was a growth of non-performing receivables from companies engaged in the transportation and storage activities.

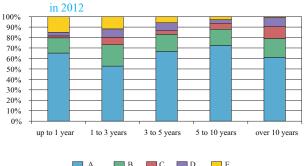
Graph 4.4: Share of NPLs to Total Loans to Legal Entities, by Economic Activities



Source: FBA and BARS

Unlike the previous year, when the share of NPLs increased across all observed maturity categories, save for the 3-10 year category, in 2012 all maturity categories recorded declining shares of NPLs. Such developments in NPLs in the observed maturity categories were caused by of the effects of economic crisis and slower economic activity in the country; it illustrates the trend of increase in non-performing loans in the sector of legal entities. Loans with the maturity between one and three years have the highest share of NPLs in 2012 (26.8% of the observed category). However, due to much higher share in the total loans to legal entities (Table 4.2), the credit risk in the coming periods will be more significant in long-term loans with maturity over three years and, in particular, the loans with maturity over ten years, which already have the NPLs share over 20% (Graph 4.5). If we bear in mind the expected weak economic growth in the coming periods, the credit risk in the sector of legal entities will not be insignificant. Out of the total value of loans with over three year maturity period, at the end of 2012, over one fourth were the loans to companies in manufacturing, construction and real estate, which had a high share of non-performing loans.

Graph 4.5: Classification and Maturities of Loans to Legal Entities

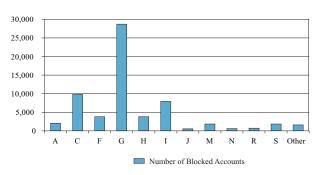


Source: CRC

In November 2012, CBBH began publishing a list of blocked accounts of legal entities in BH. The list of blocked accounts of legal entities in BH is composed on the basis of data submitted by the banks to the blocked accounts database on daily basis. Data from this database were used as a basis for the analysis of blocked accounts by economic activity and time period when the account was blocked (Graphs 4.6 and 4.7).<sup>27</sup> In early July 2013, the number of blocked accounts of legal entities was 62,790, whereby 38,382 companies had at least one blocked account. The following business activities had the highest rate of blocked accounts: G (wholesale and retail sale; repairs of motor vehicles and motorcycles), C (manufacturing), I (hotels and catering), F (construction) i H (transportation and storage).

<sup>&</sup>lt;sup>27</sup> The analysis was made on the basis of data from the Central Register of Accounts of the CBBH on 3 July 2013. The data base of blocked accounts contains only the accounts of legal entities that had the status of blocked account on the day concerned. Due to this limitation in the database structure, it was not possible to see the accounts that were blocked prior to that time period and had the active status on 3 July. Therefore, Graph 4.7 does not illustrate all the blocked accounts per quarter, but provides an overview of time period when the blockade occurred only for the accounts that were blocked on 3 July 2013.

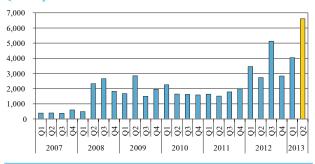
Graph 4.6: Legal Entities' Blocked Accounts, by Economic Activities



Source: CRA, Data on July 3, 2013

The number of blocked accounts of legal entities has increased continuously, due to the liquidity problem of BH companies, as a consequence of a long-term stagnation of their economic activities. During the first six months of 2013, the number of blocked accounts increased by 3,666, and the number of legal entities with at least one blocked account increased by 2,159. The number of blocked accounts per quarter started increasing in mid-2008, and reached its peak in the second quarter of 2009, when one of the lowest values of the guarter GDP was recorded following the beginning of crisis in 2008. Thereafter, the number of newly blocked accounts per quarter started declining, but in the beginning of 2012 it again started rising. Graph 4.7 illustrates that in the second quarter of 2013, there was a significant increase in the number of newly blocked accounts. However, it is impossible to make a direct comparison of the second quarter with the previous quarters, since the analysis was made as soon as the quarter ended, and the effect of possible activation of a number of blocked accounts was not observable, as was the case in the previous quarters.

Graph 4.7: Number of New Blocked Accounts of Legal Entities, Quarterly Basis



Source: CRA, Data on July 3, 2013

During 2013, we may expect further increase of the credit risk in the sector of legal entities, given the expected decline of domestic demand and insufficient recovery of the external demand. The significant share of non-performing loans in the sector of legal entities, particularly in terms of loans with maturity period over three years, and the weak prospects of economic recovery in 2013 and 2014 suggest that the issue of high credit risk in the banking sector will have to be dealt through systemic restructuring of non-performing loans, including all participants in the financial market. Possible changes in the business policies of the banks caused by the deleverage process, would primarily affect small and medium size companies that have no other available forms of financing except through the banks.

# 5. Financial Intermediaries

The effects of macroeconomic trends from abroad and unfavourable economic situation in the country during 2012 made the risks for the financial system stability in BH more complex. The basic characteristics of the financial system in 2012 were developments in business policies of banks under the pressure of deleverage process of bank groups from Europe and the upward trend of nonperforming claims. In the period ahead, further decrease of exposure of large bank groups towards BH is expected, and the appropriate changes of business models of BH banks which will go in the direction of finding alternative, domestic sources of financing. Banking sector in BH is still adequately capitalized, there were no regulatory changes during the year which would significantly impact the level of assets and capitalization of the banking sector.

In 2012, the growth of banking sector assets was recorded as well as that of its share in the total assets of financial intermediaries. The results of the economic crisis were more considerably felt with financial intermediaries from non-banking sector. A low level of demand due to the decrease of purchasing power of households and credit potential of economy in 2012 resulted in the contraction of the total balance sheet sum of non-banking sector.

Only the insurance sector recorded a growth, while the other financial intermediaries faced a significant decrease of business activities. Beside the weak demand, the reasons for the decline of activities of non-banking sector should be searched in the underdevelopment of the infrastructure of the local capital market, which as such does not attract foreign investors, as it cannot offer the minimum conditions and legal security which foreign investments require. The insurance companies are not institutional investors with a significant role on the domestic capital market, and the pension reform, by which new institutional investors could appear, has not been conducted.<sup>28</sup> The following table shows the values of assets of financial intermediaries over the previous three years.

#### **5.1 Banking Sector**

BH banking sector retained its stability, and managed to resist the shocks from the country and foreign countries. Yet, systemic risk is still present and directly connected to the negative growth of gross domestic product and unsatisfactory level and dynamics of domestic demand. In addition to the mentioned factors, which inherently arise from BH economy, banking sector is particularly related to the developments at the international capital markets described in the second chapter.

Table 5.1: Assets of Financial	Intermediaries					
	20	10	2	011		2012
	Value, in KM million	Share, in %	Value, in KM million	Share, in %	Value, in KM million	Share, in %
Banks 1)	20,416	85.6	20,923	86.0	21,187	86.3
Leasing Companies 2)	744	3.1	767	3.2	716	2.9
Microcredit Organizations 3)	853	3.6	752	3.1	681	2.8
Investment Funds 4)	888	3.7	810	3.3	795	3.2
Insurance and Reinsurance 5)	941	3.9	1,077	4.4	1,174	4.8
Total	23,843		24,328		24,552	

Source:

1, 2, 3 - FBA and BARS

4 - Securities Commissions of FBH and RS

5 - Entity Level Insurance Supervising Agencies

<sup>&</sup>lt;sup>28</sup> The exception is one pension fund in RS, established in accordance with the Law on Pension Reserve Fund of RS.

A considerable presence of foreign bank groups to a high extent resulted in the spill-over of problems from the euro area over the banking sector in BH. Here it is important to mention that indirect effects are in question arising as an answer of foreign bank groups to the economic crisis, but with significant consequences on banking systems where these groups operate. Beside the internal and external economic shocks, a significant impact of political crisis in the previous year must not be neglected. Foreign investments require political solutions which make possible the investment and offer security for foreign investors. Political environment in 2012 had a negative influence on the perception of foreign investors of BH as a fruitful ground for their investments.

Liquid positions of balance sheet in 2012 continued their downward trend. The amounts of funds in bank accounts with the CBBH and in accounts of correspondent banks were constantly decreasing. Decreases of these positions were a direct consequence of decrease of foreign liabilities (deposits and loans from non-residents) in the total amount of 5.8% (KM 235 million). Such trend was continued in the first five months of 2013, and in this period, foreign liabilities decreased by KM 275 million. The above mentioned is the result of effect of deleverage of foreign bank groups and their attempts to decrease exposure to the SEE region. Decrease of foreign liabilities was one of the most significant characteristics of BH banking sector in

Table 5.2: Simplified Balance Sheet of	Commercial	Banks		in KM mill	lion
Assets			Liabilities		
	2011	2012		2011	2012
Cash	471	533	Deposits of Residents	13,042	13,376
Reserve Accounts with the CBBH	3,162	3,019	Deposits of Non-residents	2,137	2,053
Foreign Correspondent Accounts	2,019	1,797	Loans from Non-residents	1,932	1,781
Securities other than Shares	684	799	Shares and Other Equity	2,893	3,033
Claims other than Securities	15,176	15,815	Loan Loss Provisions	1,395	1,514
Non-financial Assets	1,280	1,305	Other Liabilities	2,024	2,098
Other Assets	629	587			
TOTAL	23,422	23,855	TOTAL	23,422	23,855

Source: CBBH

According to the data of the CBBH, the balance sheet position of banking sector claims increased by 4% (KM 639 million). Credit growth was largely a consequence of refinancing by which the banks prolong the repayment periods for their existing clients and provide new loan resources for the continuation of operations. Refinancing of the existing debts by new credit lines with other banks was mainly accompanied by additional debts of clients. The appearance of a significant number of refinanced loans reflects the attempts of some banks in the system to decrease exposure to the sector of small and medium companies. Also, the increase of lending is a result of aggressive policy of several banks, but also stronger financing of the government sector, where the growth of loan debts to banks by KM 173 million was recorded during 2012.

2011 and 2012. Aversion of foreign bank groups to the risk of investment in the real sector created a financial burden for banks which in their balance sheets created the so-called "cash-drag", and the only solution was the return of the borrowed funds to foreign creditors. Such rational and reasonable step of banks resulted in significantly lower liquidity indicators which will be discussed later. Banks partly compensated for large decreases of foreign liabilities by the increase of deposits of domestic sectors of 2.6% (KM 334 million). The increase of domestic liabilities was also recorded with banks which transferred the claims to special legal entities, i.e. with banks which had, and still have problems with high level of non-performing loans. The other positions of assets in 2012 remained approximately at the same level as in 2011.

Investors in government bonds and treasury bills were only domestic banks, which in the absence of good quality projects and other investments with acceptable risk, directed the excess liquidity into Entity securities. With purpose of protecting net interest margin, banks were guided only by high yields provided by these instruments.<sup>29</sup> High yields on Entity securities, according to maturity periods, clearly indicate increased risk of investment in instruments whose purpose is financing of budget deficits. As the exposure of the banking sector to the government sector increases year after year, growth of portfolio of the Entity securities in BH banks should be monitored with particular attention. particularly taking into account that banks still do not have an obligation to allocate capital reserves for market risks. This risk is also impacted by the underdevelopment of domestic capital market, which does not provide sufficient security to institutional investors from foreign countries or sufficient liquidity on the domestic market.

Although capitalization at the level of the banking sector is still at the satisfactory level, the prominent idiosyncratic risks which were present during 2012 with several banks in the system, were materialized in the fourth quarter. The level of capitalization of the banking sector was approximately at the same level as in the previous year (17% in 2012 compared to 17.1% in 2011). Yet, several banks

recorded considerable losses, which in the case of one bank resulted in the decline of capital adequacy rate far below the limit of the prescribed regulatory minimum. The combination of the effects from macroeconomic and local surrounding still has a negative impact on BH banking system, so in the period ahead, it can be expected that risks in banks with prominent vulnerabilities would materialize. Although in 2012, most of the banks in the system was successful in absorbing negative effects from real economy, weak perspectives for the recovery of economic activities in the following periods will represent one of the main sources of risks for the banking system in BH. The prolonged period of stagnation of economic and lending activities could bring about the new wave of deterioration of the loan portfolio, which would, taking into account a relatively high share of non-performing loans in the total loans currently, could lead to significant deterioration of capitalization indicators at the system level.

Regulatory changes which resulted in the decrease of risk weighted assets (RWA) in 2011 did not have any significant effects on RWA in 2012. However, despite the growth of loans, risk weighted assets increased by only KM 67 million. The reason of such disproportion is a considerable increase of non-performing loans in 2012, by which RWA was decreased by the amount of provisions for non-

Table 5.3: Basic Features of the B	anking Sector		
		2011	2012
	Regulatory Capital, in KM million	2,826	2,815
Stable Capitalization	Total Weighted Risk, in KM million	16,485	16,552
	Capital Adequacy Ratio	17.1%	17.0%
	Total Loans, in KM million	14,637	15,213
Weaker Loan Portfolio Quality	Non-performing Loans, in KM million	1,726	2,049
	Non-performing to Total Loans	11.8%	13.5%
	Liquid to Total Assets	27.3%	25.4%
Slightly Weaker Liquidity	Liquid Assets to Short-term Liabilities	46.7%	44.1%

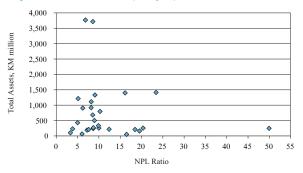
Source: CBBH

 $<sup>^{29}</sup>$  Short-term securities in 2012 brought yields for banks from 2.01% to 3.51%, while the long-term securities were issued with yields of around 6%.

performing assets as banks are obliged to present RWA on net basis. Unlike the previous year, when regulatory changes mainly affected the perception of capitalization, the characteristic of 2012 was the situation of decline of the quality of loan portfolio. The decline of the loan portfolio quality took place at the same time when banks recorded a quite good profitability, by which the stable capitalization level relative to the previous year is presented through the capital. The fact that banks, through a healthy part of portfolio can maintain capitalization, does not mean that risk is not present and that it does not threaten the financial system stability. The continuation of growth of non-performing loans with several banks can result in transfer of claims to a separate legal entity, as it was done by two banks in 2011. The effects of transfer of claims by which a better capitalization was presented were temporary, so in these banks the growth of ratio of non-performing loans relative to the total loans was continued. The risk was additionally enhanced by the fact that the question of transfer of claims and status of legal entities which claims are transferred to is still not regulated.

Non-performing loans in 2012 recorded a growth of KM 321 million, which was reflected in the increase of the ratio of non-performing loans relative to the total loans from 11.8% in 2011 to 13.47% in 2012, which is a record value of this indicator. Graph 5.1 shows a share of non-performing loans of banks in BH at the end of 2012.

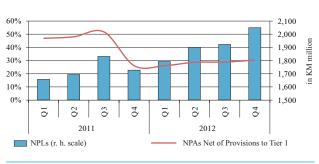
Graph 5.1: Loan Portfolio Quality, Q4 2012



Source: FBA and BARS

In the previous paragraph, the effect of nonperforming loans on RWA was mentioned, which has a "positive" impact on capitalization of the banking system. However, a better understanding of this appearance requires analysis of another indicator of assets quality - ,,non-performing loans decreased by provisions relative to Tier 1 capital". The Tier 1 capital is the most stable component of the capital which is seldom changed (it is decreased in case of enormous losses or increased through recapitalization) and it can be compared excellently with a dynamic category such as non-performing loans. Profitability, as the earlier identified reason of maintaining the banking sector capitalization at the stable level, has no effect on the Tier 1 capital. This indicator was significantly decreased from 46.92%, amounting in the third quarter of 2011, to 25.92% in the fourth quarter of 2011, after the two banks transferred their claims (Graph 5.2), when the amount of non-performing loans and provisions was decreased at the system level. In the end of 2012, the value of indicator was 30.03% which was a significant increase relative to the previous year and means that 30.03% of Tier 1 capital was exposed to high risk of further deterioration of the existing portfolio of non-performing loans. The analysis of non-performing loans in legal entities and household sector was presented in the previous Chapters.

Graph 5.2: NPAs Net of Provisions to Tier 1 and NPLs



Source: FBA and BARS

Profitability indicators of the banking sector were at the similar level as in the previous year. Return on average assets was 0.61% compared to 0.67% in the previous year, while the return on capital was 4.96% in 2012 relative to 5.78% from the previous year. The profit of the banking sector in 2012 amounted to KM 127.3 million, which was lower by 12.3 million than in 2011. The structure

of income in 2012 was very similar to the structure of income from the previous periods and does not indicate any significant changes in banks' business policies. Yet, a slight decline of interest income was recorded, which banks try to compensate through a continuous development of products and services offered to clients. As it could be expected, in the structure of expenditures, there was an increase of the share of non-interest expenditures as a result of the growing amount of provisions for nonperforming claims. The level of profitability of BH banking sector remained stable, having in mind that most of the banks had a positive financial result and that there were no significant losses, except in the case of two banks. Yet, financial systems of small and open economies such as BH depend largely on the international markets trends. The changes in West Europe countries where the owners of the biggest banks in BH banking sector come from will

still have a considerable impact on the development and direction of economic flows in BH.

Speaking of the influences coming out of BH, the deleverage effect is primarily in question, which has become the way how banks in the euro area combat the economic crisis and strictly imposed considerably tighter regulations on capitalization. In circumstances of low interest rates and low profitability of the banking system of the euro area, it is difficult to obtain a fresh capital, so for foreign bank groups, it is easier to achieve the required capitalization through the decrease of exposure on the markets outside the countries of their origin. Also, deleverage has helped foreign banks to reduce risks on the markets which have significant shares of non-performing loans in the total portfolio and where the profitability of their subsidiaries is declining. The effect of deleverage will be further discussed in the second part of this chapter.

# Text Box 2: Process of Deleverage of European Bank Groups to Local Subsidiaries in the SEE Countries

Intensification of debt crisis in the euro area in the second half of 2011 had a strong effect on the real and financial sectors in the region. These events created a number of risks for economic growth and stability of financial systems of SEE countries. Within the financial sector, the most prominent risk was reduction of financing of West Europe bank groups to local subsidiaries in the countries of SEE region.

Banks from Austria, Italy and Slovenia dominate in the financial systems in the region, which was one of the reasons of spill-over of the global financial crisis to the countries of the region. Also, financial crisis has showed that subsidiaries of large European banks mainly depended on foreign financing in "good times", and that there was no balance in financing of loan growth between the foreign and local financing. The deleverage effect was strengthened by the fact that banks representing institutions which are systematically important for some countries, in their bank groups represent quite a small share, therefore policies at the level of bank groups have very strong effects on local micro-markets. For purpose of illustration,

the share of subsidiaries of entire SEE region was from 1% to 8% in the total assets of foreign bank groups. The share of BH banks in regional exposure of foreign bank groups was among the lowest ones in the region.

The deleverage process in SEE region countries is a result of demand and supply, and factors on some markets are combined, while on some markets, some of the factors are especially prominent. In the analysis of the supply factor, two of its dimensions should be distinguished – foreign and local, especially when it is about the activities of regulators at the level of bank groups (the first half of 2012).

With foreign factors of supply, over the observed period, a high level of debt of bank groups at the international markets in the pre-crisis period was characteristic, where, with the beginning of crisis and dramatic turbulences on international markets, the business model of West Europe bank groups based on wholesale funding, complex derivative operations and low capitalization aimed at realizing higher profitability rates was strongly jeopardized.

In crisis, systems of functioning of large bank groups, faced with financing problem, had to be adjusted, partly through deleverage and decrease of exposure on foreign markets.

In the second half of 2011, EBA and the national regulators of bank groups operating in SEE established a more demanding regulatory framework in respect of financing and capital. New regulations additionally influenced decrease of financing of subsidiaries by parent banks.

The BIS study, which included 2011 and analysed lending on the emerging markets, showed that decrease in cross-border financing was primarily the result of weakening of economies and banks of EU countries. Also, unfavourable trends on international markets made the financing of subsidiaries in SEE countries considerably more expensive. This fact contributed that subsidiaries in the absence of good performing investments were forced to return foreign sources of financing, as that was in their best financial interest. Local factors of supply also influenced the return of expensive sources of financing to foreign creditors. The local dimension of the supply factors includes forecasts on the future of the local economy, expected changes in the regulations and the growth of non-performing loans, as the most significant problem of the banking systems in the countries in the region.

Also, regarding the demand factors, insufficient demand for loans and decline of creditworthiness of business entities, due to the effects of global financial crisis, made particularly prominent the deleverage of large bank groups in the region. After a credit boom in the period 2003 – 2008, the need of the companies and households for new loans was decreased, while some companies and households remained burdened with excessive debt with significantly reduced level of income in the period of crisis and decreased creditworthiness to return the taken over obligations. The constant growth of ratio of non-performing loans is certainly the evidence that a large number of business entities were burdened with excessive debt and those banks and regulators obviously had too relaxed lending policies.

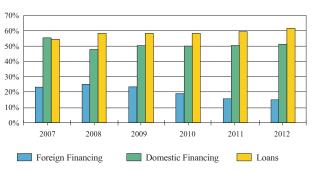
The main unknown fact related to deleverage process is whether West Europe bank groups in the near

future would remain dedicated to SEE region. A large number of EU banks announced medium term plans of restructuring in order to improve their capital indicators and decrease dependence on short-term financing. Also, in their plans, they clearly indicate the need that subsidiaries should rely more on the local sources of financing. In March 2012, Austrian regulator introduced into practice the guidelines aimed at restricting exposure of the three largest Austrian banks to CESEE region. The guidelines are a part of the set of supervisory measures aimed at improving the sustainability of business models of the three largest Austrian banks. Preliminary findings of the new research of European Investment Bank (EIB) show that West Europe bank groups would remain to be present in the region, but they will certainly be more selective regarding selection of some markets. Also, the study has shown that foreign bank groups would continue to insist on the credit growth supported mainly by the local sources, and that is the model and direction where their operations will be further developed in the region. The countries where local financing is significantly weaker will face the largest changes, but after that they will be more resistant to shocks caused by the withdrawal of cross-border financing of foreign bank groups.

The impact of plans for deleverage by European banks in the SEE region will depend on the capability of banks to fill the emptiness created after the repayment of foreign liabilities by local sources. Local markets where large bank groups operate are very small, and they are still not the reason why West Europe bank groups would change their business plans. The conclusion of the last meeting of the Standing Committee of the Vienna Initiative was that instantaneous and complete withdrawal of foreign sources of financing in the local subsidiaries and their replacement with local sources is not a realistic option. Although deleverage is a process which will make possible for European banks to have a more solid and stable business model, this process has to be gradual, particularly for the fact that majority of systemically important banks in the countries of the region are in the ownership of West Europe bank groups. Sudden steps in respect of deleverage would result in very unfavourable effects on the liquidity of financial systems of the region, drastic decline of lending, particularly with banks which do not have alternative sources of financing.

Deleverage of the European bank groups was a feature of bank sector in BH as well. In BH banking system, in respect of ownership of capital, West Europe bank groups are dominating, primarily those from Austria and Italy, and risks partly spill over to BH economy. Subsidiaries of foreign bank groups have a significant market share and their importance for the local economy increases year after year in respect of the share in the total assets and profit of banking sector. In the end of 2012, foreign bank groups had a share in the total assets of the banking sector in the amount of 92% (75% of GDP BH) and the share of 91.6% in the banking sector profit. Most of foreign banks largely relied on foreign sources of long-term financing, which was in the particular moment justified, as there was no sufficient domestic accumulation for credit growth which happened in the period 2003-2008. Yet, such a policy of banks in BH, taking into account that credit lines from foreign countries decreased and became more expensive, resulted in more difficult financing in the domestic banking system. The share of cross-border financing, measured by percents of GDP, decreased by 10% (Graph 5.3) since the beginning of the crisis in 2008 until the end of 2012. The largest withdrawals of foreign assets were recorded in the last quarter of 2011 and the first quarter of 2012 (Graph 5.4).

Graph 5.3: Foreign and Domestic Financing and Loans as of GDP %

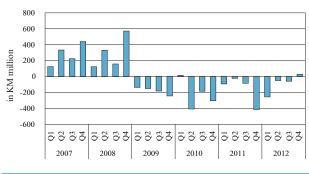


Source: CBBH, BHAS, FBA and BARS

Efforts of regulators to facilitate the refinancing of obligations of the categories affected by the economic crisis recorded very modest results. Although deleverage process in BH is largely determined by the factors of supply, the factors of demand

also have a significant role. Factors of demand are directly related to the cash drag effect, as banks, in the absence of good quality investments, were in the situation that "most profitable" business move was the return of expensive sources of financing to foreign creditors. Therefore, negative effects of deleverage did not have significant influence on BH banking sector.

Graph 5.4: Flows of Foreign Liabilities



Source: CBBH

Decrease of foreign liabilities was compensated by the growth of local deposits. Yet, there is no room for exaggerated optimism in this case, as the growth of domestic deposits can be only temporary, and current savings will become spending of domestic sectors at the moment of beginning of recovery of BH economy. It can also be concluded from maturity structure of local sources which are mainly short-term and inadequate for long-term financing. Underdevelopment of the local capital market largely influences dependence of BH financial system on foreign investments and financing from foreign countries. BH, as a small open economy, does not have enough of its own sources to finance the existing level of investments, so it is forced to rely primarily on banks in foreign ownership. In this moment, it is important to mention that the government sector largely relies on financing by the local banks which are actually the only buyers of securities issued by the Entities with purpose of covering budget deficits. The segment of small and medium companies will particularly feel the effects of deleverage as their only source of financing are the banks which will, if they do not have enough loan resources for BH market at the

level of bank groups, will cause problems for a large number of companies of this kind. Partly foreign banks solve this potential problem themselves by the transfer of clients and their claims among banks, by refinancing. The process of refinancing was helped by the arrival of new bank groups on the local market.

Finally, the deleverage process does not need to have only negative consequences for the local market. This process is at the same time counterbalance for overestimated values of assets and excessive debt of various segments of society. Deleverage will contribute to a better allocation of available resources, more sound lending policies of banks and make it possible for the economy to go back to sustainable path of development, on realistic bases. In the situation where we are now, it is desirable that such process should be as mild as possible.

#### Stress Tests

Stress tests conducted by the CBBH on the basis of data from the end of 2012 have shown that the banking system of BH, measured by capital adequacy rate, is resistant to the assumed shocks and it would not have difficulties with maintaining the prescribed level of capitalization in 2013 and 2014. Yet, adequate capitalization at the system level does not mean sufficient capitalization of some banks in case of realization of the anticipated shocks in some of scenarios. Despite a significant growth of non-performing loans, it is expected that, due to decrease of RWA, the level of capitalization will not significantly decline, and that the banking sector of BH will be able to keep the satisfactory level of profitability. In case of extreme scenario, i.e. the set of the assumed events of low probability and disastrous effects, BH banking sector could experience significant losses. Table 5.4. provides a survey of basic macroeconomic assumptions on the basis of which stress tests have been prepared for the next two years. It is evident that the baseline scenario in the test for 2013 assumes weak economic activities in the country, while for 2014, a slow economic recovery is expected.

Table 5.4: Basic Mac	Table 5.4: Basic Macroeconomic Assumptions in %					
	Baseline Scenario		Extreme So	cenario		
	2013	2014	2013	2014		
Real GDP Growth <sup>1)</sup>	0.5	2.0	-3.0	0.0		
Asset Growth	1.5	2.0	-2.0	0.0		
Nominal Loan Growth	2.0	4.0	-1.0	-0.5		
Changes in Securities	10.0	11.8	-9.4	-4.9		
Of which Debt Securities of Domestic Governments	90%	90%	100%	100%		
Inflation 1)	1.8	1.8	2.8	2.8		

Source: IMF and CBBH 1) Real GDP Growth and Inflation for the Baseline Scenario are the Projections of IMF, WEO, April, 2013

For the extreme scenario, slow-down of economic activities is assumed by 3.5 percentage points in 2013 and by 2 percentage points in 2014, compared to the projections from the baseline scenario. Slow-down of economic activities in the country will bring about a slight growth of assets of banking sector and weak lending activity in 2013.

Extreme scenario envisages a significant decline of domestic demand, which appears as a consequence of decrease of the available income of households. but also decrease of external demand for domestic products. Therefore, for both years of this scenario, a negative growth rate of claims on domestic sectors was envisaged. Significant changes in the structure of assets are related to the increase of debt securities issued by Entities in the baseline scenario, and a significant decline of this position in the extreme scenario, when banks, due to excessive debt and excessive exposure of government sector lose interest for investing in the Entity securities. In the extreme scenario, it is assumed that inflationary pressures will increase. It is also assumed that the inflation in the extreme scenario will increase by 100 basis points compared to the projections from the baseline scenario

Stress tests assume two possible sources of increase of non-performing loans: negative trends in the real sector and changes in the amount of interest rates. Slowed- down economic activity in West Europe

additionally slows down the growth of GDP in BH, while the increase of perception on the country risk is reflected in the interest rate trend in the country. According to the above, scenarios of stress tests are divided into two shocks (Table 5.5). The first shock assumes the increase of non-performing loans due to the slow-down of economic activities, while the other shock assumes increase of NPLs due to the growth of interest rates. Assumptions do not include rescheduling of the existing claims.

Table 5.5: Increase of NPL Shar	re to Tot	al Loan	S	
	Baseline Scenario		Extreme Scenario	
	2013	2014	2013	2014
Shock A - Slowdown in Economic Activity Increase of NPL Share to Total Loans	1.6%	1.2%	4.5%	3.0%
Shock B - Interest Rate Increase Increase of NPL Share to Total Loans	0.0%	0.2%	0.0%	1.8%
			Sour	e: CBB

Due to the weak demand for loans and low credit growth, significant changes in the level of interest rates in any of scenarios or periods have not been assumed.

One of the basic assumptions in stress tests which significantly affects the results in the second period in both scenarios is the assumption that any possible recapitalization needs of the bank in the first period will not be covered in the following year, so they are accumulated in the second stress test period. Taking into account the above, it is clearly visible why the results in the second period are worse than in those in the first period.

The used assumptions are equal for all the banks in the system and in case that one of the banks by its parameters significantly deviates from the average value of the sector, it will be reflected in the obtained results and capitalization of the individually observed bank.

Table 5.6 provides a survey of the stress test results at the level of BH banking system based on the data from the end of 2012. The basic finding of the conducted stress test has been presented through the level of capitalization of the banking sector on the whole.

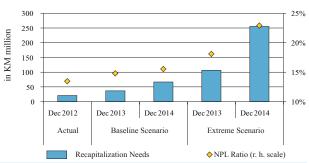
Table 5.6: Stress Test Results				
	Baseline Scenario		Extreme Scenario	
	2013	2014	2013	2014
Capital Adequacy Ratio %	17.6	16.8	15.1	13,7
Number of Banks with Recapitalization Needs	2	3	8	11

Source: CBBH

Note: One Bank under Provisional Administration is Not Included in Total Stress Test Results

The results from Table 5.6 show that the banking system in each of the scenarios was adequately capitalized. In the baseline scenario, the banking sector has shown resistance to the actual risks and the existing low level of economic activity. Observing the results by the individual banks, in the baseline scenario for 2013, recapitalization needs were recorded with two banks and in 2014 with three banks. In the extreme scenario, insufficient capitalization was shown with a higher number of banks. In case the assumed shocks from the extreme scenario are realized, the needs for additional capital in 2013 would be present with eight banks, while the number of banks with the presented recapitalization needs in 2014 would increase to 11, which is also influenced by the assumption that capital shortages that appeared in the previous period would not be covered. The level of recapitalization needs and the number of banks with lower coefficient of capital adequacy than the prescribed one in both scenarios and periods is presented in Graph 5.5. The low level of capitalization in the extreme scenario is primarily the result of a significant decrease of regulatory capital which is decreased due to the losses in operations, repayment of subordinated debts, the decreased level of provisions for the general credit risk due to weaker lending activities.

Graph 5.5: Total Recapitalization Needs and NPL Ratio



Source: CBBH

Most of the banks which in the extreme scenario have recapitalization needs can be classified into a group of smaller banks or banks which traditionally keep the capital adequacy rate close to the lower limit, so with the assumption of stronger shocks in the extreme scenario of stress tests, they regularly present the need for additional capital. Results of stress tests also showed that bank capitalization with the assumed shocks is sensitive primarily to the quality of the loan portfolio.

The obtained results of stress tests are significantly influenced also by the way of financing. Banks which maintain the capitalization level considerably by the category of Tier II capital, with the particularly prominent share of subordinated debt in the Tier II capital, are exposed to potential risk speaking of the stability of sources of financing. Assumption from the stress test that the subordinated debt will be regularly repaid has a significant impact on the results related to capitalization and in 2014 it results in a significant decrease of capital with these banks.

Also, the structure of non-performing loans impacts the results of stress tests. So, with banks where a significant share of NPLs consists of the loans classified into the lowest category (E category), in the extreme scenario, in 2014, the cost of provisions for non-performing claims is growing, which results in negative financial results with a higher number of banks in the extreme scenario.

The trend of growth of NPLs still represents the biggest threat to the soundness of the banking sector and financial stability in BH. The share of

NPLs in the total loans (NPL ratio) for the banking sector at the end of 2012 amounted to 13.47%. In the Graph 5.5., it is evident that the slow-down of economic activity results in continuation of growth of NPL ratio relative to the total loans. Until the end of 2013, further growth of NPL share in the total loans is expected by 1.6 percentage points, and also additional increase by 1.4 percentage points in 2014, while in the case of shocks assumed in the extreme scenario, NPL ratio would increase by 4.5 percentage points in 2013 and by additional 4.8 percentage points in 2014.

#### **5.2 Non-banking Sector**

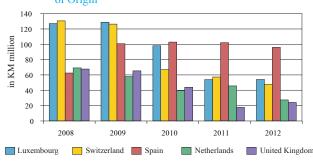
Low level of the economic activities in the country has mainly determined the trends in non-banking sector in BH. Weak domestic demand, shown in the constant decrease of the purchase power of households and weak activity of economy sector was reflected in the operations of non-banking sector. Weak performances of this sector, contrary to the operations of the banking sector, was influenced by fragmented and inadequate regulations of the sector in the previous period, particularly in the area of operations of investment funds which are in the competence of the Entity Commissions for Securities. Assets of non-banking sector, being presented in Table 5.1, decreased by KM 40 million in 2012. Except for the insurance sector, all the other segments of this sector recorded a contraction of the balance sheet sum.

Speaking of micro-credit sector, consequences of the global economic crisis on financial sector on the whole with inadequate lending policies and internal controls in MCO sector and general excessive level of debt of micro-credit users, resulted in very negative consequences on this sector, particularly in the area of the quality of the loan portfolio. Indicators show a slight improvement of MCO portfolio quality, however, it is a result of write-off of a part of claims, but also refinancing of clients with purpose of repayment of the existing delayed loans.

On BH market, in 2012, 22 MCOs operated, out of it, 18 micro-credit foundations (MCF) and four micro-credit companies (MCC). During 2012, Banking Agencies revoked operating licences of two micro-credit foundations, due to mergers with other MCFs, and one micro-credit company which is in bankruptcy procedure due to illiquidity. On the other hand, in 2012, one MCF and one MCC started operating. Oversaturated market and excessive level of debt of clients necessitate the consolidation of the sector and strengthening of the capital base of more solid MCOs; with purpose of facilitating the process of investing in micro-credit companies and optimization of the available resources.

Constant decrease of liabilities, particularly longterm sources of funds (liabilities under long-term loans are lower by 24% compared to 2011) and maturities of short-term liabilities with weak collection of loans can in the periods ahead cause significant problems with the liquidity of some MCOs. Graph 5.6 shows the trend of investment of the most significant creditors of MCO sector in the period 2008-2012.30 In addition to the general downward trend of the total investments in MCO sector, which made many small MCOs face the shortage of funds for financing of credit portfolio. we notice also a significant increase of share of investments from Spain, unlike the investors from other countries which gradually decrease their investments on BH market. The survey of the biggest investors in MCO sector in BH is provided in order to show a clear difference in the origin and the way of sources of financing of MCOs compared to the sources of financing of the banking sector. The only common element of the structure of sources of financing of MCOs and banking sector are international financial institutions such as EBRD, EFSE and IFC. Domestic banks often appear as sources of financing MCOs.

Graph 5.6: The Most Significant Lenders to MCO, by Country of Origin



Source: FBA and BARS

The total assets of this kind of financial intermediaries decreased by 9.5% compared to 2011, which is mainly the result of decreased loan portfolio and possible decrease of exposure of the group of investors which estimated that the business environment in BH, due to economic and political crisis, will not be improved soon.

Lending activities of MCOs still have a downward trend, so loans in 2012 were lower by 7.4% compared to the previous year. Disproportional decline of provisions for loan losses of 43% is a result of write-off of a part of claims. The concerning trend of clients repaying a large number of delayed loans by funds of new approved loans was noticed. The purpose of refinancing of clients was the reduction of provisions for loan losses and presenting a better business result.

Off-balance sheet records, which mainly consist of written-off claims, were higher by 1% compared to the previous year. Micro-credit organizations continued to invest efforts in the collection of claims based on written-off loans, which increased extraordinary income by 16% compared to the previous year.

Average weighted effective interest rates on short-term loans in FBH were in the spread from 31.99% to 32.88% and recorded a growth relative to the same period of the previous year, while the rates on long-term loans were in the spread from 28.15% to 30.72% and they recorded a slight decline compared to the previous year. Average weighted effective interest rates of MCOs in RS amounted to 34.92%

<sup>&</sup>lt;sup>30</sup> The most significant creditors: Luxembourg (EFSE – European Fund for Southeast Europe, Microfinance Enhancement Facility), Switzerland (Blue Orchard, Symbiotic, Dexia Microcredit, Responsibility SICAV), Spain (AECI – International Cooperation Agency of the Kingdom, ICO- Instituto de Credito Oficial), The Netherlands (Oikokredit, Triple Jump, Triodos-Doen), Great Britain (EBRD – European Bank for Reconstruction and Development).

on short-term and 27.83% on long-term loans and recorded a growth of 0.37% and 1.1% respectively, compared to 2011.<sup>31</sup> The differences in the reporting methodology make impossible the calculation of the average weighted interest rate on micro-credits at the level of BH, but available data indicate that the level and trend of rates do not significantly differ between the Entities.

The high level of interest rates at which MCO extend their funds is a special issue both for the Banking Agencies and for agencies which take care of the consumer protection. Observing the structure of interest rates of this sector, we conclude that MCOs use at least two thirds of the average cost (around 20%) as compensation for risk, operative costs and projected margin, while one third maximum is a financing cost (in the analysis, the interest rate of 10% was used as financing cost, at which MCO can ensure funds on the market even under the unfavourable circumstances). Such structure of interest rates could additionally contribute to the growth of credit risk in micro-credit sector, particularly taking into account that a considerable number of clients of MCO already reached the upper limits of debt with commercial banks or the clients are in question who, according to opinion of commercial banks, are not creditworthy. It indicates that it is necessary to continue the activities of more efficient management of credit risk in MCO, so further reforms in this sector can be expected in this respect.

At the end of 2012, nine leasing companies operated in BH, out of it, two in RS and seven in FBH. The total number of leasing companies in BH remained the same compared to 2011. During 2012, leasing companies in FBH territory closed seven branches due to decreased volume of operations. The leasing sector, unlike banks and MCOs which recorded a positive business result, recorded a negative result. During 2012, the loss in the amount of KM 24.6

<sup>31</sup> The already recorded problem of non-harmonized regulations in MCO sector brings about shortcomings such as the impossibility of calculating average interest rate which MCOs and MCFs charge to their clients, as publicly available reports of Banking Agencies in this segment of their responsibility include different time periods and reporting base (quarterly average as opposite to the annual average, average loan balance at the end of the period as opposite to the new approved loans).

million, as a result of bad collection, was recorded. Losses in 2012 brought about decline of assets and decrease of the total capital.

Unfavourable trends in BH real sector were reflected in the decreased financing volume through the financial and operative leasing. The total claims on the basis of operative and financial leasing amounted to KM 545 million, which was lower by 11% compared to the balance in the end of the previous year. Weighted average nominal and effective interest rates for the financial leasing contracts in 2012 recorded a slight decline compared to the previous year.

Despite bad economic conditions in the country, the insurance sector in 2012 recorded a continuous growth of the premium (over 3% at the annual level), which in the end of the year amounted to KM 505.1 million. Out of the total calculated premium, KM 418.9 million was related to non-life insurance, i.e. 82.9%. The calculated premium for life insurance amounted to KM 86.2 million, so it increased the share in the total premium to 17.1% from the previous 16.4%. The total gross paid damages amounted to KM 188.2 million and accounted for 37.2% of the total calculated premium. The ratio of paid damages and the total premium was lower by 0.8% compared to 2011.

Resistance of insurance market to bad economic circumstances can be only attributed to the fact that legally defined mandatory kinds of insurance have a dominating position in the portfolio, with the most significant share of the car responsibility insurance (48.47% of the total premium). Further development of insurance area will mainly depend on the regulatory framework from the area of activities of insurance companies and markets of securities. The change of regulations is necessary, which would make possible the affirmation of institutional investors, including the pension reform. Also, participants in the insurance market have to work more on education of citizens and business people, in order to change their awareness related to voluntary insurance.

# 6. Financial Infrastructure

### **6.1 Payment Systems**

For 12 years, the CBBH has been successfully supporting the payment system function in BH through an up-to-dated system for performance of interbank payment transactions. In the reports on financial stability for the previous years, the entire chronological survey was provided for the development of payment systems since their establishment in January 2001. During 2012, the process of development and improvement of some payment system functions was continued.

During 2012 and in the first half of 2013, the payment system functions were carried out without any disturbances, according to operative rules, no deviations were recorded or extraordinary situations which would jeopardize safety or stability of the system. In 2012, the number of transactions in interbank payment system of BH increased by 4.1%, and the total value of transactions by 6.4% compared to the previous year (Table 6.1). Although the number of interbank transactions was increased, most of the payment transactions (66% of the total transactions) was carried out by internal settlement in accounts within banks. The growth of the value of interbank transactions in 2012 resulted in faster circulation of money in economy, while at the same time, the evident decrease of the number of days needed to perform transactions in domestic interbank payment system in the value of annual nominal GDP, indicates a faster circulation of money among domestic banks.

The use of CRC for legal entities and physical persons during 2012 was more intensive, which is also confirmed by a number of enquiries in the Registry which was higher by 9.8% compared to the previous year. During 2012, data on the investments were submitted to CRC by all the banks and leasing companies and also 20 micro-credit organizations, while two MCOs still did not start submitting data. As the data from CRC on debts of legal and physical entities represent one of the important elements in estimating creditworthiness of clients by financial institutions, the CBBH has continuously undertaken activities for providing the best possible quality data base within CRC. In April 2012, the CBBH ended the project of upgrade of CRC, which made possible for financial institutions to perform daily update of data, so, instead of the monthly information on claims, these can be obtained on daily basis now. In this way, it was made possible for financial institutions to have a better quality monitoring of debts of the existing and potential clients and accordingly, a better quality processing of loan applications.

Also, upgrade was made related to the coverage of data, by making a correction of a part of the existing data, and completely new data were added which should provide a better quality report to all the financial institutions, users of CRC. From the technical point of view, upgrade of the network for submission of data to CRC was done, by which a faster delivery and manipulation of data in the Registry was made possible, through new channels.

Since November 2012, a single data base of all the blocked accounts of business entities in BH was established. The list of blocked accounts of

Table 6.1: Payments Syste	m			
Year	Total Number of Transactions, in million	Total Turnover, in KM million	Average Daily Turnover, in 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

Source: CBBH

business entities in BH is made on the basis of data which the banks submit to a newly formed base, and it is announced on the web site of the CBBH and updated once a month. By publishing the list of blocked accounts, the CBBH enabled all the business entities to have insight into the status of their existing or potential business partners.

### **6.2 Regulatory Framework**

Amendments and development of the regulatory framework for operations of the banking sector in BH were continued during 2012 and the first half of 2013.

During 2012, Entity Banking Agencies passed a decision on prolonging provisional measures for rescheduling of loan liabilities of physical and legal entities for another year, which made possible for physical and legal entities to submit a request to commercial banks for rescheduling the loan liabilities during 2013.

In mid 2013, in FBH, amendments and supplements of the Law on Leasing and Microcredit Organizations were adopted, which are mainly related to the harmonization with the Law on Preventing Money Laundering and Financing Terrorist Activities. Amendments and Supplements of the Law on Leasing also regulated the obligation of establishing internal controls and internal audit in leasing companies. Additional provisions were defined related to the starting of liquidation procedure and supplement of mandatory elements of the contract on financial leasing with purpose of improving a protection of users of leasing services. Amendments and Supplements of the Law on Micro-credit Organizations specified restrictions on lending to persons related to micro-credit organizations, with purpose of protecting property of MCOs. The function of provisional administrator was introduced which can be appointed by the Banking Agency of FBH (FBA) when it estimates that operations of MCO could jeopardise its liquidity and solvency or cause a significant capital deterioration.

With purpose of insuring adequate bank capitalization due to the growth of risk of deterioration of loan portfolio quality and withdrawal of foreign deposits, i.e. premature return of loans from foreign countries, the Banking Agencies in both Entities in the beginning of 2013 passed Decisions on Provisional Restriction and Minimal Conditions for Payment of Dividends, Discretionary Bonuses and Purchase of their own Shares by Banks. These decisions regulated the capital buffer, and the mentioned payments are possible under the condition that the capital adequacy rate and the Tier I capital rate in relation to risk weighted assets should not be below the minimum regulated rates increased by 2.5%.

The Law on Internal Payment System in RS and the Law on Single Account Registry of Business Entities in RS were passed in mid 2012, with purpose of solving the problems of compulsory collection. The introduction of the main account of the client was done to prevent previous practice of opening and using of unlimited number of accounts by clients. Adoption of these laws is in procedure in FBH as well.

After the RS Banking Agency (BARS) in 2011 passed a Decision on Appointment of Ombudsman for Banking Sector, during 2012, a new Law on FBA was passed by which an independent organization unit is established within the agency, which includes one or more ombudsmen for banking sector, with purpose of promotion and protection of rights and interests of consumers, i.e. physical persons as users of financial services. The institution of ombudsman should make possible that all the disputes between banking system institutions and financial service users, i.e. households, could be fairly and quickly solved by independent professionals, with the minimum formalities by harmonization, mediation or another peaceful way.

In order to insure a consistent application of regulatory framework for creating and presenting financial reports of banks according to International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS), in 2012, FBA published instructions for banks related to creating of regulatory provisions for loan losses

and correction of the value of balance sheet assets and dynamics of presenting amounts of the missing provisions for loan losses in the regulatory capital.

The most important structural reforms realized with purpose of meeting the obligations taken over by the Letter of Intent, as a condition for the approval of financial assistance of the IMF in 2012, are stated below.

In May 2013, Proposal of the Law on Amendments and Supplements of the Law on Deposit Insurance in BH Banks was adopted. The Amendments of the Law introduced insurance of deposits of legal entities and staying of member banks with provisional administration in deposit insurance programme is defined, as the previous solution required termination of membership of such banks. Amendments exclude the possibility of participation of bank representatives and bank associations in the work of the Governing Board of BH Deposit Insurance Agency, and include the introduction of extraordinary premium for restoring the Deposit Insurance Fund and payment of the insured deposits.

In the first half of 2013, Draft Laws on Amendments and Supplements of the Laws on Banks in both Entities were defined, and in the period ahead, their adoption is expected. Amendments of the Laws were primarily aimed at restricting the time period of duration of provisional administration in banks to 12 months, with the possibility of extension for another 6 months, within which it is possible to evaluate the probability of bank recovery and its functioning in the usual regime of operations. Draft laws envisage the introduction of efficient instruments and preventive measures in case when liquidity and solvency of banks is jeopardized for purpose of protecting interests of depositors, and preserving confidence in the financial sector on the whole. Draft Law in RS more precisely defines mechanisms of regulator activities, i.e. much larger authorities for the activities of BARS are given in case of banks in problems. Among other, BARS will be able, according to its estimates, to convene an assembly of bank shareholders and carry out the control of financial position and legality of bank operations and legal entities related to banks by property, management and business relations.

Amendments and Supplements of the Law on RS Banking Agency, with regard to adjustment of treatment of confidential information with the EU standards, were also submitted for adoption, while the same was already adopted in FBH during 2012. Amendments and Supplements of the Laws on Banking Agencies should create conditions for the signing of multilateral agreements with supervisors from the member countries of EU, particularly Austria and Italy.

In the area of financial stability, the activities undertaken with purpose of strengthening the resistance of the financial system and the coordination between the Entity Banking Agencies and the CBBH include the signing of two important documents by the mentioned institutions. The guidelines for preparation of stress tests and use of prudential instruments in the CBBH, BARS and FBA were signed in March 2013, and by defining the obligations and responsibilities of all the institutions included in the process, the activity of conducting stress tests was formalized. Memorandum of Understanding by which the Methodology for Defining the List of Systemically Important Banks in BH was set up was signed in June 2013, with purpose of differentiating systemically important banks from the other banks in the system so that, if appears needed, the application of different supervisory approach for such institutions could be make possible. In the following text box, detailed explanations are provided of the importance of adopting the mentioned methodology and the description of the criteria used when making the list of systemically important banks in BH.

#### Text Box 3: Methodology for Defining the List of Systemically Important Banks in BH

Identification of systemically important financial institutions within the leading international financial organizations started due to the increasingly prominent need of defining clear macro-prudential policies with purpose of strengthening financial stability. So, at the international level, in cooperation of the IMF, Financial Stability Board (FSB) and Bank for International Settlements (BIS), the Guidelines were prepared which generally define the methodology and criteria of assessment of systemically important institutions, markets and instruments, and leave space for national regulators to define their national methodologies according to specific features of their financial systems.

As in BH, in the previous period, the concept of systemically important banks was not different from the other banks in the system, one of the recommendations of the Final Report of the IMF Technical Mission from May 2012 was to make a list of systemically important banks for BH, so that a different approach could be used in supervision of these institutions and in preparation of the comprehensive plan for contingency situations. On the basis of the proposal of the IMF Technical Mission, the CBBH, in October 2012, started the preparation of proposal of Methodology for Defining the List of Systemically Important Institutions. As a starting base for the creation of the methodology, i.e. criteria for making a list of systemically important banks, the recommendations were used from the previously mentioned documents of the BCBS. The suggested criteria and indicators with the accompanying weights were adjusted to the specific features of the banking system in BH. In cooperation with the Banking Agencies, the final Methodology for Defining the List of Systemically Important Banks in BH was agreed, so in June 2013, the Memorandum on adoption of the Methodology among these three institutions was signed. As criteria for the preparation of list of systemically

important banks, the following were selected: size, correlation, changeability and complexity.

The size of the financial institution is one of the basic criteria for determining its systemic importance, as in the case that one of the large financial institutions finds itself in difficulties; it is much more difficult to compensate for the operations of such institution by the activities of other institutions without serious consequences on the financial system itself. A possible problem in one of the largest financial institutions would undermine confidence in the entire financial system.

Correlation is selected as criterion for the preparation of the list of systemically important banks because financial difficulties in one institution increase the probability of appearance of difficulties in other institutions, taking into account the network of contractual obligations among the institutions of the system. The higher the degree of correlation of the bank with other institutions, the higher is the bank's systemic importance.

The importance of the criterion of changeability is reflected in the fact that it is very difficult to replace the bank which has a dominating role in a specific business segment with another bank, so a possible insolvency of this institution would lead to difficulties for clients requiring the same services in another bank and would have a negative impact on other bank services and market liquidity.

The importance of the criterion of complexity arises from the fact that there is a positive correlation between business, operative and structural complexity of banks and possible difficulties in operations of these institutions, as more complex the bank, more time and resources are needed to restore the situation in that institution.

The Proposal of the Law on Amendments and Supplements of the Law on Financing Institutions of BH was adopted. The Proposal specified that BH Parliament should adopt the law on the budget of BH institutions and BH international liabilities by the end of March of each year, otherwise, the current costs necessary for the functioning of BH institutions and the undisturbed servicing of BH external debt will be realized.

FBH Government adopted the Proposal of the Law on Budgets in FBH in order to limit the growth of public spending at all the levels of authorities in FBH, to increase the fiscal responsibility of managers, improve the control of spending of budget funds and improve the process of budget adoption, its performance and reporting.

The Law on Premature Beneficial Retirement of Soldiers of the Defence War in FBH was adopted in April 2013 and it already took effect which is an important step towards achieving mediumterm fiscal sustainability. The same reforms were previously adopted in RS in the beginning of 2012.

BH Indirect Taxation Administration, Tax Administrations of the Entities and Brčko District signed the Memorandum of Understanding and Exchange of Data on Tax Payers, which is the assumption for the automatized system of data exchange which should become operative by January 2014. By the establishing of official cooperation between the Tax Administrations of BH, the possibility of misuse of the system by tax payers was decreased, as BH fiscal system is decentralized and that Entities and the District have exclusive competences for direct taxes.

## STATISTICAL APPENDIX

			Standard & Poor's Rating	
Country	Date of Change	Long - term	Outlook	Short - tern
	before 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	В
40	02/12/2010	BB+	Negative, Watch	BB+
Greece	29/03/2011	BB-	Negative, Watch	В
Эrе	09/05/2011	В	Negative, Watch	C
$\circ$	13/06/2011	CCC	Negative	C
	27/07/2011	CC	Negative	C
	05/02/2012	CCC	Stable	C
	27/02/2012	SD	Not meaningful	SD
	02/05/2012	CCC	Stable	C
	07/08/2012	CCC	Negative	C
	05/12/2012	SD	Not meaningful	SD
	18/12/2012	B-	Stable	В
	before 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+
Ireland	23/11/2010	A	Negative, Watch	A-1
Je.	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
	before 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
gal	27/04/2010	A-	Negative	A-2
tug	30/11/2010	A-	Negative, Watch	A-2
Portugal	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	В
	06/03/2013	BB	Stable	В
	05/07/2013	BB	Negative	В

Country	Date of Change	Long - term	Outlook	Short - term
	before 2009	AAA	Stable	A-1+
	12/01/2009	AAA	Negative, Watch	A-1+
	19/01/2009	AA+	Stable	A-1+
п	09/12/2009	AA+	Negative	A-1+
Spain	28/04/2010	AA	Negative	A-1+
S.	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
	before 2009	A+	Stable	A-1+
	20/05/2011	A+	Negative	A-1+
ly	20/09/2011	A	Negative	A-1
Italy	05/12/2011	A	Negative, Watch	A-1
	13/01/2012	BBB+	Negative	A-2
	09/07/2013/	BBB	Negative	A-2
	before 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
ns	27/10/2011	BBB	Negative, Watch	A-3
Cyprus	13/01/2012	BB+	Negative	В
<del>ن</del>	01/08/2012	BB	Negative, Watch	В
	17/10/2012	В	Negative, Watch	В
	20/12/2012	CCC+	Negative	C
	21/03/2013	CCC	Negative	C
	10/04/2013	CCC	Stable	C
	28/06/2013	SD	Not meaningful	SD
	03/07/2013	CCC+	Stable	C

Source: Standard & Poor's

		Sarajevo	Mostar	Zenica	Tuzla	TOTA
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

Source: CBBH

Table A3: Largest Debtors per Conventional Credits			in KM thousand
Sector	Loans, Debt Balance and Due Uncollected Principal	Share in the Sector	Share in the Total Claims
A: Agriculture, Forestry and Fishing	200,632		3.0%
Plant and Cattle Production, Hunting and Related Service Activities, of which:			
Poultry Farming	32,216	16.1%	0.5%
B: Mining and Quarrying	114,161		1.7%
Mining of Coal and Lignite, of which:			
Mining of Lignite	31,730	27.8%	0.5%
C: Manufacturing Industry	1,588,005		23.4%
Production of Beverages, of which:			
Beer Production	93,728	5.9%	1.49
Production of Food, of which:			
Production of Bread; Fresh Rolls and Cakes	67,496	4.3%	1.09
Production of Milk, Milk Products and Cheese	67,185	4.2%	1.09
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	105,047	6.6%	1.5%
Production of other Joinery and Elements	32,392	2.0%	0.59
Production of Finished Metal Products, except for Machines and Equipment, of which:			
Manufacture of Metal Structures and their Parts	61,603	3.9%	0.99
D: Production and Supply of Electricity, Gas, Steam and Air Conditioning	116,315		1.7%
Production and Supply of Electricity, Gas, Steam and Air Conditioning, of which:			
Production and Supply of Steam and Air Conditioning	91,656	78.8%	1.49
E: Water Supply, Sewerage, Waste Management and Environment Remedial Activities	37,033		0.5%
Water Collection, Treatment and Supply, of which:			
Water Collection, Treatment and Supply	21,621	58.4%	0.39
F: Construction	476,849		7.0%
Construction of Buildings, of which:			
Construction of Residential and Non-residential Buildings	236,401	49.6%	3.59
Civil Engineering, of which:			
Construction of Rails and Subways	47,358	9.9%	0.79

G: Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles	2,072,841		30.5%
Wholesale, except for Trade in Motor Vehicles and Motorcycles, of which:			
Non-specialized Wholesale	503,737	24.3%	7.4%
Wholesale of Solid, Liquid and Gaseous Fuels and Similar Products	123,669	6.0%	1.8%
Wholesale of Pharmaceutical Products	91,964	4.4%	1.4%
Intermediation in Trade of Various Products	62,972	3.0%	0.9%
Wholesale of other Household Goods	61,788	3.0%	0.9%
Non-specialized Wholesale of Food, Beverages and Tobacco Products	58,935	2.8%	0.9%
Wholesale of Wood, Construction Materials and Sanitary Equipment	58,453	2.8%	0.9%
Retail Trade, except for Trade in Motor Vehicles and Motorcycles, of which:			
Retail Trade in Non-specialized Stores Mainly in Food, Beverages and Tobacco Products	128,860	6.2%	1.9%
Other Retail Trade in Non-specialized Stores	103,787	5.0%	1.5%
Retail Trade in Motor Fuels in Specialized Stores	76,918	3.7%	1.1%
Retail Trade of Metal Products, Paints and Glass in Specialized Stores	52,221	2.5%	0.8%
H: Transportation and Warehousing	335,290		4.9%
Land Transport and Transport via Pipelines			
Passenger and Freight Rail Transport	103,806	31.0%	1.5%
Freight Transport by Road	93,749	28.0%	1.4%
I: Accommodation and Food Service Activities (Hotels and Catering)	149,642		2.2%
Accommodation, of which:			
Hotels and Similar	99,636	66.6%	1.5%
J: Information and Communications	172,475		2.5%
Broadcasting, of which:			
Television Broadcasting	53,724	31.1%	0.8%
K: Financial and Insurance Activities	271,674		4.0%
Financial Intermediation, of which:			
Other Financial Intermediation	176,710	65.0%	2.6%
Other Financial Service Activities, except for Insurance and Pension Funds, of which:			
Other Lending Operations	42,313	15.6%	0.6%
L: Real Estate Business	227,574		3.4%
Real Estate Business, of which:			
Renting and Management of own or Leased Real Estate	122,807	54.0%	1.8%
Real Estate Management on a Fee or Contract Basis	78,797	34.6%	1.2%
Purchase and Sale of Own Real Estate	17,865	7.9%	0.3%

M: Professional, Scientific and Technical Activities	186,316		2.7%
Architecture and Engineering Activities; Technical Testing and Analysis, of which:			
Architecture Activities	94,612	50.8%	1.4%
Technical Testing and Analysis	20,244	10.9%	0.3%
Legal and Accounting Activities			
Accounting, Bookkeeping and Audit Activities; Tax Consultancy	19,953	10.7%	0.3%
N: Administrative and Support Service Acitivities	73,311		1.1%
Travel Agencies, Travel Organizers, Tour Operators and other Booking Services and Related Activities, of which:			
Activities of Travel Agencies	12,926	17.6%	0.2%
O: Public Administration and Defence; Compulsory Social Insurance	623,075		9.2%
Public Administration, and Economic and Social Policy of Community, of which:			
General Activities of Public Administration	591,634	95.0%	8.7%
Activities of Compulsory Social Insurance, of which:			
Activities of Compulsory Social Insurance	31,045	5.0%	0.5%
P: Education	31,950		0.5%
Higher Education			
Higher Education	8,412	26.3%	0.1%
Q: Activities of Health Care and Social Care	77,339		1.1%
Health Care Activities			
Hospital Activities	43,523	56.3%	0.6%
R: Art, Entertainment and Recreation	10,378		0.2%
Sports, Entertainment and Recreation Activities			
Work of Sports Facilities	4,033	38.9%	0.1%
S: Other Service Activities	18,719		0.3%
Activities of Membership Organizations			
Activities of other Membership Organizations, NES	9,199	49.1%	0.1%
T: Activities of Households as Employers; Activities of Households Producing Various Goods and Performing Various Services for Own Needs	60		0.0%
Activities of Households as Employers Employing Domestic Personnel			
Activities of Households as Employers Employing Domestic Personnel	60	100.0%	0.0%
U: Activities of Extraterritorial Organizations and Bodies	2,500		0.0%
Activities of Extraterritorial Organizations and Bodies			
Activities of Extraterritorial Organizations and Bodies	2,500	100.0%	0.0%

Source: CRC

Table A4: Clair	Table A4: Claims on Legal Entites by Type and Activities							in KM thousands		
	Lo	ans					Potential Debt			
		out of which Commitment Loans	Commission Loans	Revolving Loans	Letter of Credits	Factoring	Guarantees	Guarantees	Revolving Loans	Commitments Loans
A	200,632	41,553	6,262	27,137	140	0	501	5,964	7,810	4,489
В	114,161	61,005	3,847	11,360	0	0	525	12,193	5,694	8,801
С	1,588,005	761,630	27,617	475,035	15,795	233	18,831	195,691	92,298	176,993
D	116,315	8,333	0	6,025	7,612	0	50	24,435	5,670	522
Е	37,033	20,848	423	24,326	0	0	292	3,677	2,289	6,129
F	476,849	319,141	2,330	141,964	2,911	6,934	13,920	228,106	39,297	129,893
G	2,072,841	1,515,812	7,287	1,071,517	29,633	1,218	54,818	509,451	228,427	257,419
Н	335,290	158,929	7,547	75,579	0	241	7,935	195,784	19,502	26,306
I	149,642	37,069	1,281	11,837	58	0	164	1,943	4,640	5,135
J	172,475	40,588	2,203	15,081	30	0	446	22,269	14,681	14,376
K	271,674	21,468	1,755	17,251	0	0	1,661	121,401	38,309	13,265
L	227,574	23,098	1,606	3,320	41	0	908	7,450	311	1,113
M	186,316	234,182	1,361	121,841	4,798	0	5,523	130,095	20,434	46,015
N	73,311	20,032	223	8,804	0	0	1,010	9,946	2,105	3,244
0	623,075	322	1,639	387	0	0	160	12,036	12,602	290
P	31,950	136	42	4,492	0	0	9	335	1,428	304
Q	77,339	5,502	38	6,800	0	0	6,191	1,575	1,286	2,793
R	10,378	3,815	54	2,505	0	0	1,270	4,360	912	375
S	18,719	12,455	316	1,997	0	0	215	12,388	2,014	3,347
T	60	0	0	0	0	0	0	0	0	0
U	2,500	0	246	2,287	0	0	13	578	104	0
TOTAL	6,786,139	3,285,917	66,077	2,029,543	61,017	8,626	114,443	1,499,677	499,813	700,810
Real Debt:	9,065,845									
Potential Debt:	2,700,300									

Source: CRC

Note: The amount of claims from Loans and Commission Loans includes Outstanding Debt and Overdue Principal.

Table A	A5: Status Changes in Banks		
No.	Bank	Type of Change	Date of Change
1	Sparkasse Bank d.d. Sarajevo	ABS banka d.d. Sarajevo changed the name	Q3 2009
	ABS banka d.d. Sarajevo	Acquired by Steiermaerkische Bank und Sparkassen AG, Erste group	Q4 2006
	Šehin banka dd Zenica	Acquired by ABS banka	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 the name to UniCredit Bank d.d. Mostar	Q1 2008
	Univerzal banka d.d. Sarajevo	Acquired by Zagrebačka banka	Q3 2004
	HVB Central profit banka d.d. Sarajevo	HVB Central profit banka Sarajevo acquired by UniCredit Zagrebačka banka BiH	Q1 2008
	HVB banka d.d. Sarajevo	HVB banka d.d. Sarajevo changed the name to HVB Central profit banka d.d. Sarajevo	Q4 2004
	Central profit banka d.d. Sarajevo	Acquired by HVB banka d.d. Sarajevo	Q4 2004
	Travnička banka d.d. Travnik	Acquired by Central profit banka	Q4 2002
5	UniCredit banka d.d. Banja Luka	Nova Banjalučka banka a.d. Banja Luka changed the name	Q2 2008
	Nova Banjalučka banka a.d. Banja Luka	Acquired by HVB Central Profit banka, continued operations as a separate legal entity	Q4 2005
6	Hypo Alpe Adria Bank d.d. Mostar		
7	Hypo Alpe Adria Bank a.d. Banja Luka	Kristal banka Banja Luka changed the name	Q3 2003
8	IKB d.d. Zenica		
9	KIB banka d.d. Velika Kladuša		
10	NLB banka d.d. Tuzla	NLB Tuzlanska banka d.d. Tuzla changed the name	Q1 2012
	NLB Tuzlanska banka d.d. Tuzla	Tuzlanska banka d.d. Tuzla changed the name	Q2 2006
	Comercebank bančna skupina NLB d.d. Sarajevo	Acquired by NLB Tuzlanska banka d.d. Tuzla	Q3 2006
11	NLB Razvojna banka a.d. Banja Luka	LHB banka a.d. Banja Luka changed the name	Q2 2006
	Razvojna banka jugoistočne Evrope	Acquired by LHB banka	Q2 2006
12	Raiffeisen Bank d.d. BiH, Sarajevo		
	Raiffeisen Bank HPV d.d. Mostar	Acquired by Raiffeisen banka d.d. Sarajevo	Q4 2002
13	ProCredit Bank d.d. Sarajevo	Microenterprise bank d.d. Sarajevo changed the name	Q4 2003
14	Poštanska banka BiH d.d. Sarajevo	Provisional administration introduced	Q4 2010
15	Privredna banka d.d. Sarajevo	Provisional administration revoked	Q3 2008
16	ZiraatBank BH d.d. Sarajevo	Turkish Ziraat Bank Bosnia d.d. Sarajevo changed the name	Q1 2013
17	Union banka d.d. Sarajevo		
18	Sberbank d.d. Sarajevo Volksbank d.d. Sarajevo	Volksbank d.d. Sarajevo changed the name Sberbank acquired Volksbank a.d. Banja Luka	Q1 2013 Q1 2012

No.	Bank	Type of Change	Date of Change
19	Sberbank a.d. Banja Luka	Volksbank a.d. Banja Luka changed the name	Q1 2013
	Volksbank a.d. Banja Luka	Sberbank acquired Volksbank a.d. Banja Luka	Q1 2012
	Zepter banka a.d. Banja Luka	Acquired by Volksbank International AG, changed name to Volksbank a.d. Banja Luka	Q3 2007
20	Intesa Sanpaolo banka d.d. BiH, Sarajevo		
	UPI banka d.d. Sarajevo	UPI banka d.d. Sarajevo changed the name	Q3 2008
	LT Gospodarska banka d.d. Sarajevo	Acquired by UPI banka d.d. Sarajevo	Q3 2007
		Acquired by Privredna banka Zagreb (PBZ)	Q4 2006
		Gospodarska banka d.d. Sarajevo changed the name to LT Gospodarska banka	Q1 2003
	LT Komercijalna banka d.d. Livno	Acquired by Gospodarska banka d.d. Sarajevo	Q1 2003
21	Vakufska banka d.d. Sarajevo		
	Depozitna banka d.d. Sarajevo	Acquired by Vakufska banka d.d. Sarajevo	Q2 2002
22	Nova banka a.d. Banja Luka	Nova Banka a.d. Bijeljina changed the Head Office seat	
	Agroprom banka Banja Luka	Acquired by Nova banka a.d. Bijeljina	Q1 2003
23	Bobar banka a.d. Bijeljina		
24	Balkan Investment Bank Banja Luka	Provisional administration introduced	Q3 2013
	Una banka d.d. Bihać	Acquired by Balkan Investment Bank Banja Luka	Q4 2010
25	Pavlović banka International Slobomir Bijeljina		
	Privredna banka Brčko	Acquired by Pavlović banka	Q4 2002
	Privredna banka Doboj	Acquired by Pavlović banka	Q2 2003
26	MOJA banka d.d. Sarajevo	FIMA banka d.d. Sarajevo changed the name	Q4 2010
		VABA banka d.d. Sarajevo changed the name	Q3 2007
27	Komercijalna banka a.d. Banja Luka	Established	Q3 2006
28	MF banka a.d. Banja Luka	IEFK banka changed the name to MF banka a.d. Banja Luka	Q3 2010
anks v	with the Revoked Licence:		
1	Camelia banka d.d. Bihać		Q1 2002
2	Privredna banka Gradiška		Q2 2002
3	Ekvator banka Banja Luka		Q2 2002
4	International commercial bank Bosnia d.d. Sarajevo		Q3 2002
5	Privredna banka Brčko		Q4 2002
6	Banka za jugoistočnu Evropu Banja Luka		Q4 2002
7	Privredna banka S. Sarajevo		Q4 2004
8	Gospodarska banka d.d. Mostar		Q4 2004
9	Ljubljanska banka d.d. Sarajevo		Q3 2006
10	Hercegovačka banka d.d. Mostar		Q3 2012

Source: CBBH

