

# DIGITALES ARCHIV

ZBW – Leibniz-Informationszentrum Wirtschaft  
*ZBW – Leibniz Information Centre for Economics*

## Periodical Part

### Financial stability report / Central Bank of Bosnia and Herzegovina ; 2017

#### Provided in Cooperation with:

Central Bank of Bosnia and Herzegovina, Sarajevo

*Reference:* Financial stability report / Central Bank of Bosnia and Herzegovina ; 2017 (2017).

This Version is available at:

<http://hdl.handle.net/11159/2989>

#### Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics  
Düsternbrooker Weg 120  
24105 Kiel (Germany)  
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)  
<https://www.zbw.eu/>

#### Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte.

<https://savearchive.zbw.eu/termsfuse>

#### Terms of use:

*This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence.*



# Financial stability report

2017



# **FINANCIAL STABILITY REPORT 2017**

PUBLISHER

Central Bank of Bosnia and Herzegovina

25 Maršala Tita St, 71000 Sarajevo

Tel. (387 33) 278 100

Fax (387 33) 278 299

Internet: [www.cbbh.ba](http://www.cbbh.ba)

e-mail: [publications@cbbh.ba](mailto:publications@cbbh.ba)

For all information concerning this publication please contact:

Financial Stability Division

Editorial Board:

Senad Softić, Ph.D

Milica Lakić, Ph.D

Želimira Raspudić

Ernadina Bajrović, M.A.

Vesna Papić

Dejan Kovačević

Belma Čolaković, Ph.D

Amir Hadžiomerađić, M.Sc

DTP:

MINT d.o.o Banja Luka

Printed by:

Štamparija Fojnica d.d.

Circulation:

100 copies

ISSN 1840-4138

Publication and reproduction for education and non-commercial purposes is allowed provided that the source is stated.

© Central Bank of Bosnia and Herzegovina/All rights reserved

## Contents:

|   |           |
|---|-----------|
| <b>Abbreviations</b>  | <b>7</b>  |
| <b>Introduction</b>   | <b>9</b>  |
| <b>Summary</b>  | <b>10</b> |
| <b>1. The Trends and Risks from International Environment</b> | <b>12</b> |
| 1.1 The Trends in International Environment                   | 12        |
| 1.2 Survey of the Main Risks in the EU and the Euro Area      | 15        |
| 1.2.1 <i>The Effects on the Banking Sector</i>                | 15        |
| 1.2.2 <i>The Effects on the Real Sector</i>                   | 18        |
| <b>2. The Macroeconomic Trends in BH</b>                      | <b>21</b> |
| <b>3. Government</b>  | <b>28</b> |
| <b>4. Households</b>  | <b>33</b> |
| <b>5. Corporates</b>  | <b>42</b> |
| <b>6. Financial Mediators</b>                                 | <b>51</b> |
| 6.1 Banking Sector  | 51        |
| <i>Stress Tests</i>   | 62        |
| 6.2 Non-banking Financial Sector                              | 63        |
| <b>7. Financial Infrastructure</b>                            | <b>68</b> |
| 7.1 Payments Systems  | 68        |
| 7.2 Regulatory Framework                                      | 69        |
| <b>STATISTICAL APPENDIX</b>                                   | <b>71</b> |

## Tables:

Table 1.1: Real GDP, Annual Growth Rate

Table 3.1: Indicators of the Fiscal Sustainability

Table 3.2: Repayment Schedule of the Stand-by Arrangement to the IMF

Table 3.3: Commercial Banks' Claims on Government Sector

Table 4.1: Claims on Households, Cards

Table 4.2: Used Overdraft per Debit Card

Table 4.3: Loans to Households, Maturity and Currency Structure

Table 5.1 : Loans to Corporates, Maturity and Currency Structure of the Remaining Debt

Table 6.1: The Financial Intermediaries Assets

Table 6.2: Simplified Balance Sheet of Commercial Banks

Table 6.3: Main Characteristics of the Banking Sector

Table 6.4: Main Assumptions in Stress Tests

Table 6.5: Results of Stress Tests

Table 6.6: Simplified Balance Sheet of Micro Credit Organizations

Table 7.1: Interbank Payment Transactions

Table 7.2. Concentration of the Transactions in Interbank Payment System (HHI)

## Graphs:

Graph 1.1: Change of the Annual Growth Rate of Real GDP in 2017

Graph 1.2: Trend of the USD to EUR Exchange Rate

Graph 1.3: Food and Oil Prices

Graph 1.4: The Share of NPLs in the Total Loans in the Selected EU Countries

Graph 1.5: The Price Trend of the Local Banks' Mother Banks' Shares

Graph 1.6: Public Debt Changes Expressed as Percents of GDP in 2017

Graph 1.7: Spread in Relation to Ten Year German Government Bonds

Graph 1.8: The Main Market Indices Trend

Graph 1.9: The Unemployment Rate in the EU

Graph 1.10: BH Exports to the Main Trade Partner Countries

Graph 2.1: Financing the Current Account Deficit

Graph 2.2: The Average Nominal Net Wage and Consumer Price Index

Graph 2.3: The Growth Rates of the Average Net Wage and Unemployment

Graph 2.4: Changes in the Number of Employees by Activities

Graph 2.5: The Unemployment Rate in the Region Countries, Q4 2017

Graph 2.6: Long-term Unemployment and Working to Inactive Population Ratio

Graph 2.7: Real Estate Price Index

Graph 3.1: Budget Balance of BH General Government Sector, in Percents of GDP

Graph 3.2: BH Public Debt, in Percents of GDP

Graph 3.3: Structure of Foreign Debt by Purpose

Graph 3.4: Costs of Foreign Debt Servicing, in Percents of GDP

Graph 4.1: Household Debt towards Financial Institutions

Graph 4.2: Household Debt by Institutions and Type of Debt, 2017

Graph 4.3: Loans to Households by Purpose and Credit Growth

Graph 4.4: Newly Approved Loans to Households

Graph 4.5: The Currency Structure of Loans to Households

Graph 4.6: Non-performing Loans in the Household Sector by Purpose

Graph 4.7: NPL Ratio of Households, by Banks

Graph 4.8: Quarterly Default Rate

Graph 4.9: Default Rate by Banks in 2017

Graph 4.10: Newly Approved Long-term Loans and Average Weighted Interest Rates

Graph 4.11: Average Interest Rates on Long-term Loans to Households Approved in 2017, by Banks

Graph 4.12: Interest Rates on Newly Approved Long-term Loans by the Scope of Lending to Households, by Banks

Graph 4.13: Newly Approved Loans according to the Interest Rate Fixation Period

Graph 4.14: Household Deposits by Maturity

Graph 4.15: Household Term-deposits and Interest Rates on Deposits

Graph 5.1: Claims on Companies according to the Type of Debt at 2017 End

Graph 5.2: Claims on Companies according to the Type and Activity

Graph 5.3: Average Debt per Activities in 2016 and 2017

Graph 5.4: Contracted and Residual Maturities of Standard Loans per Activities in 2016 and 2017

Graph 5.5: Average Maturity of Loans

Graph 5.6: The NPL Ratio of Companies, per Activities

Graph 5.7: Default Rate by Banks in 2017

Graph 5.8: Interest Rates on Loans to Companies, by Banks

Graph 5.9: Newly Approved Loans according to the Interest Rate Fixation Period

Graph 6.1: Changes of the Most Important Items of the Banking Sector Balance Sheet

Graph 6.2: Banking Sector Assets

Graph 6.3: Foreign Assets and Liabilities of Commercial Banks

Graph 6.4: The Flows of Foreign Liabilities in Banking Sector

Graph 6.5: The Sector Structure of Deposits

Graph 6.6: The Structure of the Total Deposits by Residual Maturity

Graph 6.7: Map of Financial Soundness Indicators of Banking Sector

Graph 6.8: Change of CAR and the NPL ratio Compared to the Previous Year, by Banks

Graph 6.9: Quality of the Loan Portfolio

Graph 6.10: The NPL Ratio, by Banks, Q4 2017

Graph 6.11: Profitability Indicators

Graph 6.12: Liquidity Indicators

Graph 6.13: NPLs and the NPL Ratio

Graph 6.14: The Share of Government Securities in the Total Market Capitalization

Graph 7.1: Banks' Share in Interbank Payment Transactions in 2017

### **Text Boxes:**

Text Box 1: Framework for Solving the Issue of Non-performing Loans in the EU and the Euro Area

Text Box 2: Macrofinancial Risk Dashboard

Text Box 3: Network Analyses of Systemic Risks' Spillover

### **Statistical Appendix:**

Table A1: Changes of the Sovereign Rating

Table A2: Real Estate Price Index

Table A3: Survey of Largest Debtors by Standard Loans according to BH CA 2010, 31 December 2017

Table A4: Main Positions in Foreign Trade of Goods

Table A5: Survey of Claims on Companies by Type and Activity

Table A6 : Loans to Companies, the Currency Structure of Debt by Activities, end of 2017

Table A7: Status Changes in Banks in the Period 2001-2017

Table A8: Positions of the Non-government Foreign Debt according to NACE Rev 2 Classification of Debtors' Activities



**Abbreviations:**

|        |   |           |   |
|--------|---|-----------|---|
| AQR    | asset quality review  | EDIS      | European Deposit Insurance System   |
| BAM    | convertible mark  | EFTA      | European Free Trade Association   |
| BARS   | Banking Agency of RS  | EFF       | Extended Fund Facility  |
| BH     | Bosnia and Herzegovina  | ERS       | Index of Elektroprivreda Republike Srpske                                 |
| BHAS   | BH Agency for Statistics  | EU        | European Union  |
| BIFX   | FBiH Investment Funds Index   | EUR       | euro  |
| BIRS   | Stock Exchange Index of RS  | FATF      | Financial Action Task Force   |
| BLSE   | Banja Luka Stock Exchange   | FBA       | Banking Agency of FBH   |
| CAC 40 | French Stock Exchange Index<br>(Cotation Assistee en Continue)              | FBH       | Federation of BH  |
| CAR    | capital adequacy ratio  | FED       | Federal Reserve System  |
| CBBH   | Central Bank of Bosnia and Herzegovina                                      | FTSE      | London Stock Exchange Index<br>(the Financial Times Stock Exchange Index) |
| CEFTA  | Central European Free Trade Agreement                                       | GBP       | Great Britain pound   |
| CET 1  | common equity tier 1  | GDP       | gross domestic product  |
| CHF    | Swiss franc   | GRECO     | Group of States against Corruption  |
| CMIF   | closed-end mixed investment fund  | HHI       | Herfindahl-Hirschman's Index  |
| CPI    | Consumer Price Index  | ILO       | International Labor Organization  |
| CRD IV | Capital Requirements Directive IV   | IMF       | International Monetary Fund   |
| CRC    | Central Registry of Credits   | KM        | convertible mark  |
| CRR    | Capital Requirements Regulation   | KWD       | Kuwaiti dinar   |
| DAX    | Index on Securities Stock Exchange in<br>Frankfurt (Deutscher Aktien Index) | MCC       | micro-credit company  |
| DIA    | Deposit Insurance Agency  | MCF       | micro-credit fund   |
| EBA    | European Banking Authority  | MCO       | micro-credit organizations  |
| ECAI   | External Credit Assessment Institution                                      | MFT of BH | Ministry of Finance and Treasury of<br>Bosnia and Herzegovina             |
| ECB    | European Central Bank   |           |   |

|          |   |           |  |
|----------|---|-----------|--|
| MONEYVAL | Council of Europe Committee of Experts on the Evaluation of Anti-Money Laundering Measures and the Financing of Terrorism | RTGS      | Real Time Gross Settlement               |
|          |   | SASE      | Sarajevo Stock Exchange                  |
|          |   | SASX- BBI | Sarajevo Stock Exchange Index - BBI      |
| IAS 39   | International Accounting Standard 39  | SASX 10   | Sarajevo Stock Exchange Index 10         |
| IFRS 9   | International Financial Reporting Standard 9  | SASX 30   | Sarajevo Stock Exchange Index 30         |
| NACE     | Statistical classification of economic activities in EU   | SBA       | Stand-by Arrangement                     |
|          |   | SDR       | special drawing rights                   |
| NPL      | non-performing loans  | SRTA      | Single Registry of Transactions Accounts |
| OPEC     | Organization of the Petroleum Exporting Countries   | SSM       | Single Supervisory Mechanism             |
| ORS      | Republika Srpska Bonds Index  | S&P       | Standard and Poor's                      |
| ROAA     | return on average assets  | USA       | United States of America                 |
| ROAE     | return on average equity  | USD       | the United States dollar                 |
| RS       | Republika Srpska  | WEO       | World Economic Outlook                   |

### Countries:

---

|    |          |    |          |
|----|----------|----|----------|
| AT | Austria  | IE | Ireland  |
| BG | Bulgaria | IT | Italy    |
| CY | Cyprus   | PT | Portugal |
| DE | Germany  | RS | Serbia   |
| ES | Spain    | SI | Slovenia |
| FR | France   | SK | Slovakia |
| GR | Greece   | TR | Turkey   |
| HR | Croatia  |    |          |

## Introduction

The CBBH understands the financial stability as a situation in which the financial system can absorb shocks without any significant disturbances in its current and future functioning and the functioning of which does not have any negative effects on economy.

The CBBH authority for monitoring the financial system stability results indirectly from the CBBH Law. The CBBH has an active role in the development and implementation of the policy of stability and sustainable economic growth of BH, by ensuring the stability of the domestic currency and the overall financial and economic stability in the country. One of the basic tasks of the CBBH is the establishment and maintenance of appropriate payment and settlements systems as a part of financial infrastructure. The CBBH contributes to the maintenance of financial stability through its authority to coordinate the activities of the Entity Banking Agencies, as defined by law. According to the Governing Board decision, the CBBH participates in the work of international organizations working on the strengthening of financial and economic stability through international monetary cooperation. The CBBH activities in the field of monitoring the financial system stability include also a specialized communication with relevant international and local institutions ensuring the continuity of the processes of systemic risk monitoring. The CBBH contributes to preserving the financial stability within its membership in the Standing Committee for Financial Stability of BH.

By publishing the Financial Stability Report, the CBBH invests efforts to contribute to financial stability in BH through:

- Improving understanding and stimulating dialogue on risks for financial mediators in macroeconomic environment;
- Warning the financial institutions and other participants in the market of the possible overall impact of their individual actions;
- Reaching consensus on financial stability and improving financial infrastructure.

Although the Report is focused on the events from 2017, its coverage is expanded to include the most important developments from the first half of 2018, according to the data available at the time of its preparation. The 2017 Financial Stability Report is organized in Chapters as it follows. The Executive Summary stresses the most important risks for the financial system stability. In the first Chapter, the main trends and risks from international environment are presented. Within this Chapter, the main risks from the EU and the euro area are particularly stressed, and their effects on the banking sector and real economy of this geographic area are described focusing on the risks which might have effects on the banking sector and the real economy of BH. In the Second Chapter, the trends and potential risks from domestic environment which are reflected in the functioning of the financial system in BH are summarized. The Third Chapter provides a survey of the main trends and risks coming from the fiscal sector. The Fourth Chapter illustrates the risk effects on household claims as identified in previous Chapters. The focus of the Fifth Chapter is on the effects of identified risks on the sector of legal persons. In the Sixth Chapter, the risk effects on the financial sector stability are assessed, focusing on the banking sector. The stress tests are a part of the Sixth Chapter and their purpose is to confirm the ability of the banking sector to absorb extreme but possible shocks from macroeconomic environment. The Seventh Chapter illustrates the basic trends in the financial infrastructure: the payment systems and the regulatory framework. The 2017 Financial Stability Report includes two text boxes: The Framework for Solving the Issues of Non-performing Loans in the EU and the Euro Area and the Macrofinancial Risk Dashboard.

Finally, we need to stress that this report includes only the issues which are significant for systemic risk as the supervision of financial mediators' operations, according to the applicable laws in BH, is the task of the competent supervisors for the financial sector. Its basic objective is to point out the risks arising from the financial system, and also macroeconomic environment, and to assess the shock absorbing capacity of the system.

## Summary

The acceleration of the global economic growth, mainly impacted by a stronger growth of economic activities of the euro area and the US economy compared to the previous year, and also the accelerated economic growth of developing countries and the main raw material exporting countries, the inflation growth stimulated by the growth of the prices of oil and other raw materials, and the FED monetary policy normalization and the continued implementation of unconventional measures of the ECB monetary policy were the basic features of the global economy in 2017 and the first half of 2018. The uncertainty related to the effects of the US decision on the introduction of import tariffs, the escalation of the trade war between the USA and China in mid-2018 and also a possibility of the beginning of a trade war between the USA and the European Union, if the USA continues to strain the foreign trade relations, represent a risk for the continued recovery of global economy in the period ahead. The most significant risks in the EU and the euro area still include the slow implementation of fiscal and structural reforms in some countries which is a continuation of the several years-long pressure on the sustainability of public debt of these countries, political uncertainty related to the outcome of Brexit and the remaining high level of non-performing receivables in the banking sectors in some countries of the euro area, which significantly affects the level of costs of banks' operations.

Despite positive trends in BH economy in 2017, reflected in the real GDP growth, the growth of industrial production, the public debt decrease, the recorded fiscal surplus and more intensive activities in the real estate market and a slow improvement of labour market indicators, the risks from domestic environment for the financial stability have not been significantly mitigated. The budget surplus in 2017 was recorded due to a strong growth of budget income and the continued policy of current spending restrictions, and the General Government debt decreased both in the domestic and foreign markets, partly also due to the delay in the implementation of the arrangement with the IMF. Despite slightly lower risks for financial stability arising from the fiscal sector, the trade deficit deepening, continuously low living standard indicators and unfavourable business environment and a low competitiveness position remain significant threats for the stability of BH financial sector. The fiscal policy related financial stability risks decrease was mainly the result of the continued fiscal consolidation going on since 2015. However, the leading rating agencies still retained the BH sovereign

credit rating assessment in the area of speculative credit ability, including high credit risk.

A slow growth of spending in the household sector, stimulated by slightly more favourable conditions in the labour market compared to the previous periods contributed to the growth of the overall debt with domestic financial institutions. The growth of household debt was mainly the result of the growth of household debt based on loans from banks. The decrease of lending rates brought about a slightly higher demand for loans, and banks also extensively offered rescheduling loans with more favourable repayment terms. In 2017, the growth of the total household deposits was recorded, however, the household savings in the form of term deposits can be considered stagnating, which was affected by the existing low level of the available income and also the continued downward trend of deposit interest rates.

The economic growth was recorded in almost all the activities and had a positive effect on the growth of credit demand in the corporate sector. Also, the historically low interest rates additionally supported the recovery of lending in this sector. In financing the business activities, corporate sector in 2017 mainly relied on the banks' credit support, while the level of debt to foreign creditors decreased. The potential risk for the sectors of households and companies represented the growing of interest risk due to expectations regarding the growth of the benchmark interest rates in the euro area, which could result in the increase of credit risk in the banking sector.

In 2017, the risks for financial stability in the banking sector continued to decline. The implementation of the new accounting standard (IFRS 9), which says that banks, when valuating financial instruments, need to take into account also future expected losses, should contribute to higher resilience of the banking sector in the periods ahead. In the end of the year, the banking sector was well capitalized and all the banks met regulatory requirements regarding capital adequacy and also the asset quality improved, the profitability increased and a high liquidity was recorded. Considerable increase of lending was particularly stressed in the sector of non-financial private companies due to continued positive trends in macroeconomic environment. Consequently, the indicators of loan quality improved, but the level of non-performing loans remained high, particularly in the sector of non-financial

companies. Additionally, excessive credit growth in some banks could result in the accumulation and materialization of credit risk in the periods ahead. Lending rates were on a downward trend and reached the lowest level recorded in BH, but a significant number of loan contracts were concluded at floating rates, which, in case of the growth of interest rates in the future, could additionally contribute to the increase of credit risk. At the same time, deposit rates continued to decrease faster compared to lending rates, and the interest of depositors to make term deposits declined, which is a limiting factor in stable financing from domestic sources. With low interest rates, banks tried to compensate for a low increase of income from their core activities by relying on the sources of income based on fees and commissions, which brings about the risk of sustaining a stable profit level.

According to its legal obligation, in 2017, the CBBH continued to successfully maintain the payment system

functions through settlement and payment systems for performing interbank transactions. By maintaining the Central Registry of Credits with data updated on daily basis, the CBBH made it possible for financial institutions to manage credit risk in a better way through the monitoring of credit exposures and credit histories of customers. By maintaining the Single Registry of Transaction Accounts and the single data base of all blocked accounts of business entities in BH, business entities gained insight into the status of accounts of their existing or potential business partners.

In 2017 and the first half of 2018, domestic institutions continued the activities of modifying and upgrading the legal and regulatory frameworks regulating the operations of the financial sector in BH with purpose of harmonization with the best European practices and also the improvement of business environment for financial mediators.

## 1. The Trends and Risks from International Environment

The acceleration of the global economy growth, inflation growth and the FED monetary policy normalization and the continued implementation of unconventional measures of the ECB monetary policy were the basic features of the global economy in 2017 and the first half of 2018. One of the basic risks for the continued recovery of global economy in the period ahead is the uncertainty related to the effects of the USA decision on the introduction of import tariffs, the escalation of the trade war between the USA and China in mid-2018 and the straining of the USA and the European Union foreign trade relations. The most significant risks in the EU and the euro area still included the slowed down implementation of fiscal and structural reforms in some countries, which was a continuation of a several years-long pressure on the sustainability of their public debt, political uncertainty related to the Brexit outcome and the continuing high level of non-performing receivables in the banking sectors of some euro area countries, which considerably affected the amount of costs in bank operations.

### 1.1 The Trends in International Environment

A stronger economic growth compared to the previous year in all the country groups according to the economic development level was one of the basic features of the global economy in 2017. A faster recovery of the global economy was affected by a stronger growth of the economic activity of the euro area and the US economy compared to the previous year, and also acceleration of the growth of developing countries and the raw material exporting countries. In 2017, gradual normalization of the FED monetary policy was continued. While the FED continued raising the benchmark interest rates, the ECB kept the interest rates at the same level, and it gradually decreased the monthly bond purchase values. Global inflation increased due to the growth of the prices of oil and other raw materials, however, core inflation in almost all developed countries remained subdued and under the target level. The year was also marked by a rather low volatility in capital markets and considerable economic and political uncertainty which weakened in the end of the year.

The economic recovery in the world in 2017 was slightly stronger compared to the previous year, and the economic growth rate was 3.8%. In the period ahead, further increase of the global economic growth is expected due to the growth of global demand, investment and trade recovery, and according to the IMF projections, the growth of

real GDP in 2018 and 2019 would be 3.9% (Table 1.1). Yet, the uncertainty related to the effects of the US decision on the introduction of tariffs on imports of metals, and the escalation of the trade war between the USA and China in mid-2018 and also a possibility of the beginning of a trade war between the USA and the EU represents a realistic risk for the continuation of the global economy recovery in the period ahead.

**Table 1.1: Real GDP, Annual Growth Rate**

|                                    | Real GDP, annual growth rate |            |            |            | Change relative to the October 2017 projection |            |
|------------------------------------|------------------------------|------------|------------|------------|--|------------|
|                                    | 2016                         | 2017       | 2018       | 2019       | 2017   | 2018       |
| <b>World</b>                       | <b>3.2</b>                   | <b>3.8</b> | <b>3.9</b> | <b>3.9</b> | <b>0.2</b>                                     | <b>0.2</b> |
| Developed economies                | 1.7                          | 2.3        | 2.5        | 2.2        | 0.3  | 0.5        |
| USA                                | 1.5                          | 2.3        | 2.9        | 2.7        | 0.1  | 0.6        |
| EU                                 | 2.0                          | 2.7        | 2.5        | 2.1        | 0.4  | 0.4        |
| Euro area                          | 1.8                          | 2.3        | 2.4        | 2.0        | 0.2  | 0.5        |
| Great Britain                      | 1.9                          | 1.8        | 1.6        | 1.5        | 0.2  | 0.4        |
| Japan                              | 0.9                          | 1.7        | 1.2        | 0.9        | 0.2  | 0.5        |
| Developing countries               | 4.4                          | 4.8        | 4.9        | 5.1        | 0.2  | 0.0        |
| Russia                             | -0.2                         | 1.5        | 1.7        | 1.5        | -0.3   | 0.1        |
| China                              | 6.7                          | 6.9        | 6.6        | 6.4        | 0.1  | 0.1        |
| Central and Eastern Europe         | 3.2                          | 5.8        | 4.3        | 3.7        | 1.3  | 0.8        |
| <b>Main foreign trade partners</b> |                              |            |            |            |  |            |
| Germany                            | 1.9                          | 2.5        | 2.5        | 2.0        | 0.5  | 0.7        |
| Croatia                            | 3.2                          | 2.8        | 2.8        | 2.6        | -0.1   | 0.1        |
| Serbia                             | 2.8                          | 1.8        | 3.5        | 3.5        | -1.2   | 0.0        |
| Italy                              | 0.9                          | 1.5        | 1.5        | 1.1        | 0.0  | 0.4        |
| Slovenia                           | 3.1                          | 3.1        | 4.0        | 2.5        | -0.9   | 1.5        |
| Austria                            | 1.5                          | 2.9        | 2.6        | 1.9        | 0.6  | 0.7        |
| Montenegro                         | 2.9                          | 4.2        | 3.1        | 2.4        | 1.2  | 0.3        |

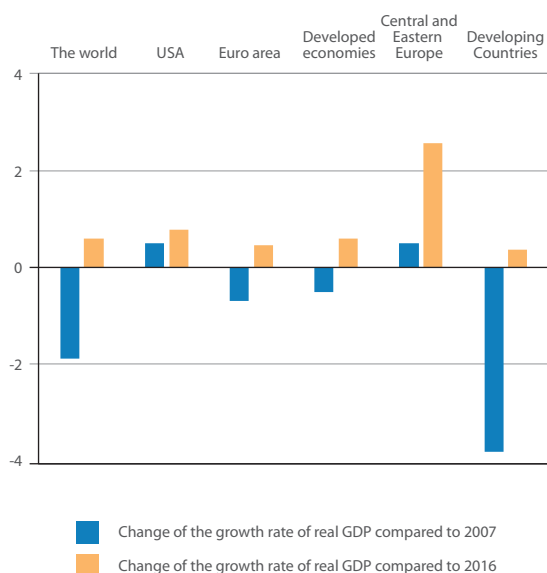
Source: World Economic Outlook, IMF, April 2018, CBBH calculation

The accelerated growth of economic activity was supported by the growth of both developed economies and developing economies. In the group of developing countries, the most favourable trends were recorded in China whose economic growth in 2017 was 6.9%, which was the highest economic growth since 2015. The economies of Russia and Turkey were also growing at an accelerated pace due to the growth of domestic and foreign demand. In 2017, Russia went out of recession, and it recorded a growth of economic activity of 1.5%, which was affected by the growth of domestic and foreign demand but also by the growth of oil prices in the global markets. In Latin America countries which



were affected by crisis, more favourable economic trends were also recorded. Brazil went out of recession and recorded an economic growth of 1% in 2017, due to the growth of exports and a slower downward trend of domestic demand.

Graph 1.1: Change of the Annual Growth Rate of Real GDP in 2017



Source: World Economic Outlook, IMF, CBBH calculation

**In the group of developed countries, a positive growth trend of economic activity was particularly stressed in the euro area.** The economic recovery of almost all the euro area countries in 2017 was faster due to stimulating economic policy measures aimed at the recovery of investment and increasing the economic growth. The economic activity growth was also under a continued influence of the favourable financing terms supported by the continued implementation of the measures of the ECB accommodative monetary policy. The growth rate in the euro area countries in 2017 amounted to 2.3%, and the strongest contribution to the increase of economic activity of the euro area came from the most developed countries of the euro area, those being Germany, France and Italy. The real growth of the largest economies of the euro area during 2017 accelerated, which was mainly due to the growth of exports and domestic spending due to the improved conditions in the labour market. The growth of economy of Spain, which exceeded the potential one in the previous year, slightly slowed down in 2017 due to the growing of political risks and amounted to 3.1%, and the Spain economy is expected to keep a similar pace of growth in 2018 as well.

After a several year long recession and the stagnation in the previous year, the economy of Greece in 2017 recorded a growth of 1.4%, which was also affected by a decreased

political uncertainty. The programme of financial assistance for Greece should be ended in August 2018. On the other hand, the decision on the exit of Great Britain from the EU started to influence a decline of investment and the slow-down of economic growth which was 1.8% in the end of the year, and the slow-down of economic growth is also expected in the periods to come, according to the IMF projections.

**After the slow-down in the first quarter of 2017, the economic growth of the USA was accelerated in the second part of the year, primarily under the impact of the recovery of private spending and investment.** The annual growth of real GDP in 2017 was 2.3%. According to the IMF projections; an accelerated economic growth is expected to continue in 2018. This assessment is based firstly on the implementation of the measures of expansionary fiscal policy and the set of tax reforms adopted in December 2017. The tax reform is related to tax reliefs on the recorded income of households and realized profits of companies, and it is aimed at stimulating the growth of private spending, investments and productivity. Yet, the economic growth in the USA and also the global economic growth will be considerably affected by the trade protectionism of the USA towards China and the EU, having in mind that the GDPs of the USA, China and the EU account for more than 55% of the global GDP.

**During 2017 and the first half of 2018, divergent trends of monetary policies of the leading global central banks continued.** During 2017, the FED continued the tightening of monetary policy and raised the benchmark interest rates for three times by 25 basis points each time to the spread from 1.25% to 1.50%. Since October 2017, the scope of reinvested assets received by the FED upon maturities of government and mortgage bonds decreased by USD 10 billion at the monthly level. Good indicators from the labour market and the forecasts that the inflation rate in medium term would reach the target rate of 2% influenced the FED decision on the additional decrease of the amount of reinvestment of due bonds by 10 billion each three months until their overall monthly amount reaches USD 50 billion. In March 2018, the FED increased the benchmark interest rates once again by 25 basis points, and additional increases of benchmark interest rates are expected by the end of the year.

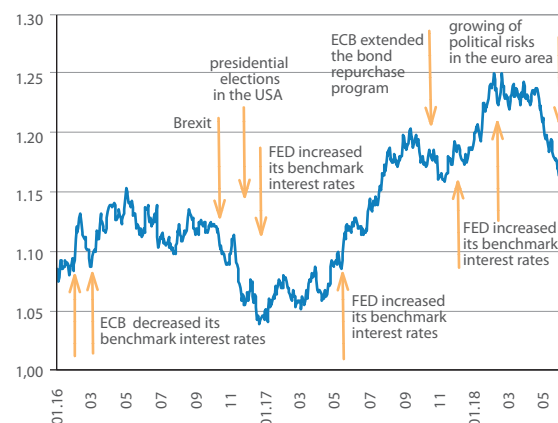
During 2017 and in the first half of 2018, the ECB kept the key interest rates at the same level. The benchmark rate was kept at the level of 0%; the interest rate on banks' deposits with the ECB was at the level of -0.40%, while the ECB lending rate was kept at 0.25%. The interest rates are expected to stay the same in the period ahead, at least until the end of the current

bond purchase programme, and possibly until mid-2019. The purchase programme of government and corporate bonds was continued until the end of 2017 in the total monthly value of EUR 60 billion. In October 2017, the ECB made a decision that the quantitative easing programme is to be continued in 2018 as well, but the total monthly value of bond purchase, starting from January 2018, was decreased from EUR 60 to 30 billion. In June 2018, the ECB made a decision on the repeated decrease of the total monthly value of bond purchase from EUR 30 to 15 billion starting from October until the end of the current year, when the programme will be finalized. According to the ECB announcements, the monetary policy will be normalized gradually and in a controlled manner, depending on the economic trends in the euro area, which is mainly related to the trend of the inflation rate which still has not reached the target level of around 2% in medium term. The annual inflation rate in the euro area in December 2017 amounted to 1.4%, while the core inflation which does not include the energy prices and food prices in December amounted to 0.9%.

The Bank of Japan continued implementing accommodative monetary policy during 2017 and in the first half of 2018. The benchmark interest rate was kept at -0.1%. On the other hand, the Bank of England, for the first time after 10 years, in November 2017, raised the benchmark interest rate by 25 basis points to 0.5%. The key reason for increasing the benchmark interest rate was the growing of inflationary pressures, which was mainly caused by the decline of the value of pound.

**Good economic indicators and the expected gradual reduction of the bond purchase programme by the ECB, and, on the other hand, the uncertainty related to the economic growth in the USA, impacted the strengthening of the exchange rate of euro to dollar in 2017.** The EUR/USD exchange rate in June 2017 amounted to 1.14, while in the end of December, it amounted to 1, 20 EUR/USD which was higher by 12% compared to the end of 2016. The trend of the growth of euro exchange rate in relation to dollar was continued in the first quarter of 2018, so, in the end of March 2018, the EUR/USD exchange rate was 1.23. After the economic indicators for the first quarter of 2018 pointed out a slow-down of the economic growth of the euro area, and also due to favourable macroeconomic conditions in the USA and the growth of yields on US bonds, dollar increased in the second quarter of 2018. Depreciation pressures on euro additionally increased under the impact of political developments in Italy, and the exchange rate EUR/USD in the end of May was 1.17 (Graph 1.2).

Graph 1.2: Trend of the USD to EUR Exchange Rate



Source: Bloomberg

More favourable outlooks for the economic growth of the euro area and a higher risk appetite of investors impacted the weakening of Swiss franc in relation to euro in the second part of 2017, so the exchange rate of franc to euro in the end of December amounted to 1.17 EUR/CHF. The exchange rate of pound to euro depreciated during 2017 due to the growth of political risks in Great Britain after the decision of the European Commission to start the negotiations on the exit of the country from the EU. The increase of the benchmark interest rates of the Bank of England affected the increase of the pound value in the second part of the year, and EUR/GBP exchange rate in the end of December 2017 amounted to 0.88, which was lower by 4% compared to the exchange rate in the end of August 2017.

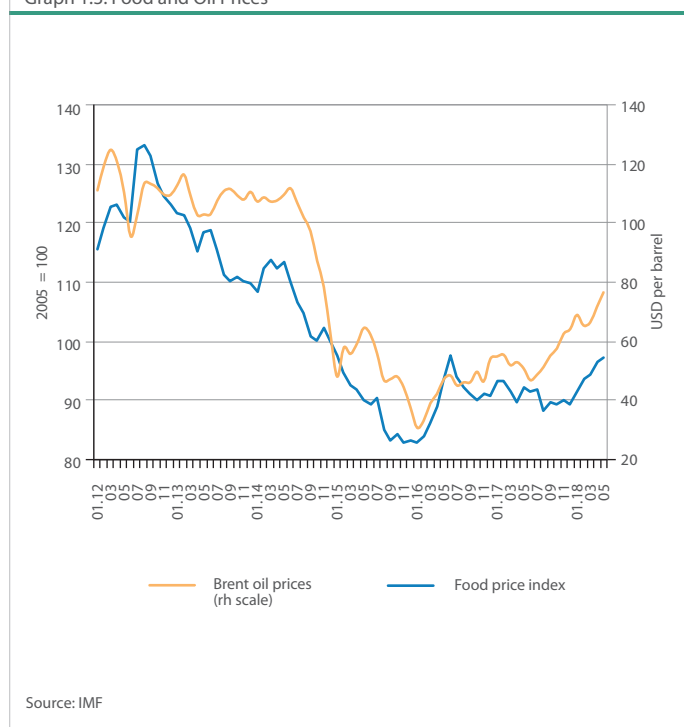
**In the first three quarters of 2017, the gold prices recorded growth so in September 2017 they reached the level of USD 1,314 per ounce due to the increased demand brought about by a decline of the dollar value since the beginning of the year and increasing of geopolitical risks.** The growth of the gold price was stopped in the last quarter due to the strengthening of dollar and expected further increases of the FED benchmark interest rates, so the year end gold price was at the level of USD 1,264 per ounce. In the first half of 2018, the gold prices were growing again, so in May 2018, they reached the level of USD 1,303 per ounce.

**After a decline in the first half of the year, the crude oil prices increased strongly in the second part of 2017, and**



**they continued their growth in the first half of 2018.** The growth of oil prices in the second half of 2017 was affected by increased demand, favourable climate in the USA, the agreement of the OPEC countries, Russia and other important producers on restrictions in the oil production and also political turmoil in the Middle East. The oil price in the end of 2017 increased to 64 dollars per barrel which is higher by around 30% compared to the average price in July. The oil prices continued to grow in the first half of 2018, so in May 2018, they reached the recorded value over the last three years in the amount of 76 dollars per barrel. Such growth of oil prices was a reflection of the disturbances in the supply of Iranian oil in the market due to the decision of the US President on the USA abandoning the nuclear agreement with Iran and imposing sanctions again on this country. In addition to energy prices, in the second half of 2017 and the first half of 2018, the prices of other raw materials increased as well, and also the prices of food due to the increased demand.

Graph 1.3: Food and Oil Prices



## 1.2 Survey of the Main Risks in the EU and the Euro Area

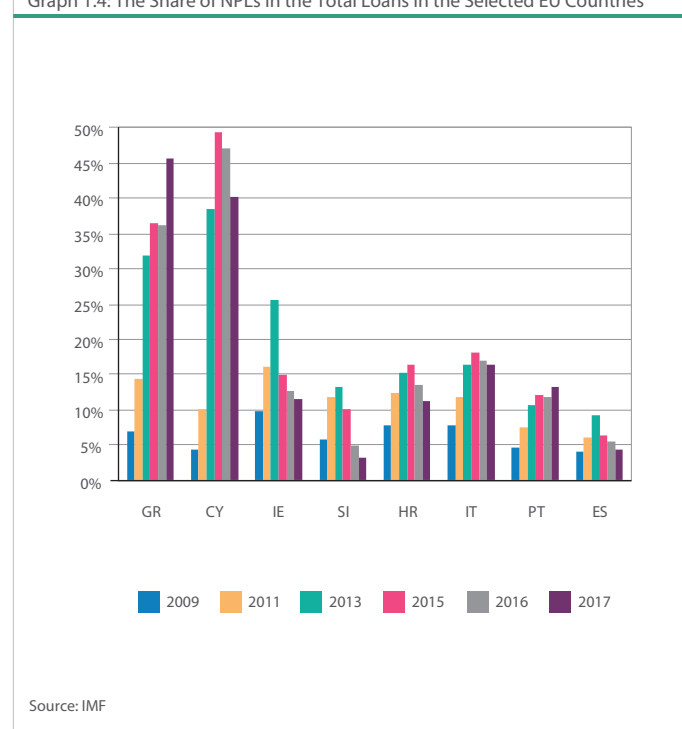
The most significant risks in the EU and the euro area remained the slow implementation of fiscal and structural reforms, which, with the potential tightening of conditions in financial markets, i.e. the ending of accommodative monetary policy and increase of the ECB benchmark interest rates, could influence the sustainability of public debt of some

EU member countries. Although the political risks within the EU and the euro area were mitigated, they are still not negligible taking into account the uncertainty related to the Brexit outcome, establishment of the governments in France, Germany, and Italy and tensions in Spain. The risks arising from banking sector are reflected in the continued very high level of non-performing receivables in some euro area countries, resulting in low profitability levels of their banking sectors. The banking union was not completed even during 2017, and the introduction of the third missing pillar related to the establishment of the deposits insurance fund represents a challenge for the EU in the period head.

### 1.2.1 Effects on Banking Sector

**The risks in banks significantly decreased compared to the previous periods as banks undertook activities to solve non-performing loans, and following regulatory requirements, they strengthened their capital positions.** The quality of the euro area bank assets continued to improve in 2017, which is reflected in a significant decrease of non-performing receivables since mid-2016. According to the ECB data, the share of non-performing in the total loans for the euro area banking sector in the end of 2017 amounted to 4.92%. The decrease of non-performing receivables at the euro area level was mainly a reflection of a lower credit risk in the banking sector of Italy. The largest shares of non-performing loans in the total loans were still recorded by Greece, Cyprus and Italy (Graph 1.4).

Graph 1.4: The Share of NPLs in the Total Loans in the Selected EU Countries



Despite the gradual improvement of asset quality, the banking systems of some euro area and EU countries stayed burdened with a very high level of non-performing receivables, so it is necessary to invest additional efforts so that the amount of non-performing receivables would come down to a sustainable level. The importance of solving the issue of non-performing loans is also confirmed by a number of taken activities and suggested measures by the ECB, EBA and the European Commission.

**The banking sector of the euro area in 2017 recorded a slow growth of profitability, which was mainly generated by the growth of income on the basis of fees and commissions and lower costs of value impairment due to the improvement of the credit portfolio quality.** Although the increase of lending was continued in 2017, low interest rates were the limiting factor for a higher growth of banks' profitability in the euro area. Despite the gradual

improvement of the asset quality, the number of banks in the EU and the euro area which were burdened by a high level of non-performing receivables remained considerable, representing an additional pressure on their profitability. The additional pressure on the profitability of banks with the high levels of non-performing receivables will arise from the costs of provisions which will increase due to the application of a new International Financial Reporting Standard (IFRS 9).

**The banking sector of Italy stabilized in 2017 which considerably decreased the systemic risks for the banking sector stability in the euro area.** The recovery was the result of the successfully implemented programme of saving several problem banks during 2016 and in the first half of 2017, and a faster economic recovery of the country. Besides, the government of Italy undertook a number of measures to support the process of solving non-performing receivables, which resulted in a significant decrease of the amount of

#### **Text Box 1 Framework for Solving the Issue of Non-performing Loans in the EU and the Euro Area**

During 2017 and 2018, the ECB, the EBA and the European Commission continued their efforts in solving problems of non-performing loans in the EU and the euro area. A comprehensive European strategy for solving the issue of non-performing receivables was set up in the three key areas: supervisory measures, legal and judicial reforms and the development of secondary markets for problem loans. Speaking of supervisory measures, the ECB in March 2017 announced the Guidelines for solving the issues of problem loans in the euro area, including the best tools, strategies and policies which systemically important banks supervised by SSM should implement in the process of solving the problem of non-performing receivables. After announcing the Guidelines, systemically important institutions with high shares of non-profit loans were asked to submit their strategies and operative plans for the decrease of such receivables to the ECB, which was followed by the establishment of joint supervisory teams which assessed plans according to supervisory expectations for each individual bank. On the basis of the previous experiences, the ECB continued its work on additional measures for solving the problems of non-performing receivables, so in March 2018, it announced the Supplement of the Guidelines for solving the issue of non-performing receivables. Basically, an effort is made to stimulate the practice of timely provisioning for new non-profit loans in order to prevent an excessive growth of such receivables in the future. The implementation of the measures from the Supplement of the existing Guidelines will not be mandatory for banks, but it

will be used as a platform for discussion with banks on possible deviations from the planned prudential expectations speaking of provisioning for non-performing loans, taking into account the specific features of each individual bank in order to determine whether supervisory measures are adequate for a certain bank.

In March 2018, the European Commission also adopted the set of measures for the continuation of solving the existing and decreasing the risk of occurrence of new non-performing receivables. The set of measures includes the draft for the establishment of national associations for the asset management, legal measures for further development of secondary markets for non-performing loans and strengthening the abilities of creditors to achieve the return of value from insured loans, and the proposal for the amendment of Directive on capital requirements in order to introduce minimum provisioning rates to cover the incurred and expected losses for new non-performing loans, and the missing provisions, according to the legal minimum, would be a an item for deduction from capital within Pillar I as a legal protective measure against insufficient allocation of provisions for new non-performing loans.

The European Banking Authority EBA with the support of the ECB also works on the issuing of general guidelines for the management of non-performing loans which will apply to all the banks in the area of the EU, and also on the detailed guidelines on approving and monitoring of bank loans which will be focused on the issues such as transparency and assessment of creditworthiness of debtors with the aim of promoting the improvement of the standards for approving new loans.

non-performing receivables over the last two years from the record 325 billion in 2015 to 252 billion in the end of 2017. The share of non-performing receivables in the total receivables decreased from 17.1% in the end of 2016 to 14.4% in the end of 2017. Monte dei Paschi di Siena S.p.A., the first bank saved by using the government funds for the support to problem banks, recorded a positive financial result in the end of 2017, and the bank's capital adequacy rate in the end of the year amounted to 15.2%.

**The prices of banks' shares were growing in 2017 due to accelerated economic recovery in the euro area countries, decreased political uncertainty, weakening of systemic risks in the banking sector and a slow growth of the profitability of banks in the euro area.** Speaking of banking groups operating in BH, the market value of Italian banking groups UniCredit S.p.A and Intesa Sanpaolo S.p.A in the end of 2017 was higher by 14% compared to the end of the previous year. The price of the Erste Group shares in the end of 2017 was higher by 30%, while the highest growth of the prices was recorded in the shares of Raiffeisen Bank International AG. Indicators of the operations of Raiffeisen Bank International AG significantly increased compared to 2016, particularly related to the recorded profit and decrease of the share of non-performing loans in the total loans, and the prices of shares in the end of 2017 were higher by 74% compared to the end of the previous year.

Graph 1.5: The Price Trend of the Local Banks' Mother Banks' Shares



**The credit ratings of the bank groups operating in BH improved during 2017.** The rating agency S&P in October

2017 increased the credit rating of Italy to BBB, which was from the end of 2014 at the bottom investment threshold, and at the same time it increased the credit ratings of two Italian banking groups operating in BH, Intesa Sanpaolo S.p.A. and Unicredit S.p.A. The credit rating of Raiffeisen Bank International AG was confirmed, and the outlook was increased from negative to positive one due to a lower bank exposure to foreign markets and the stabilization of geopolitical and economic conditions in risky countries where the bank operates. The long-term credit rating of Nova Ljubljanska banka was also increased in 2017 from BB- to BB with the positive outlook due to the improved economic conditions and the continued process of restructuring and efficient solving of problems related to non-performing receivables of the bank.

With the economic recovery, the strengthening of the EU and the euro area banks resilience was also affected by the previous activities of regulators on detailed examinations of situations in individual banks, stress testing and continuous improvements of regulatory framework, especially speaking of systemic banks under the authority of SSM. The banking groups from the EU belonging to the group of systemic banks are obliged to apply the regulatory requirements set up according to the particular group in all the countries where they operate, which, for a significant number of banks operating in BH was an additional burden in operations as the local regulatory framework is not harmonized with that of the EU. Upon establishing a new legal and regulatory framework in BH, the operations of these banks should be facilitated, however, the harmonization of the local regulatory framework with the EU Directives and the Basel principles is not complete in all the segments. So, a significant cost burden for banks, subsidiaries of EU banks operating in BH and the region, is still the implementation of the provisions of the EU Directive CRR/CRDIV Article 114, requiring that the 100% risk weight should be applied for the exposure to the countries and central banks of the countries which are not the EU members. This issue was also discussed at the forum of the Vienna Initiative in March 2017, as the risk of a possible decrease of banks' internal limits for exposures to local governments was recognized. One of the possibilities for overcoming these problems is acquiring a certificate on equivalency issued by the ECAI, requiring the local regulators to assess the harmonisation of local regulation and practices in banks' supervision with the EU regime, and to undertake the activities for removing any possible deviations.

**Completing the banking union by introducing the third missing pillar related to the establishment of the deposit insurance fund is one of the forthcoming challenges for the EU in the period ahead.** European Deposit Insurance System

(EDIS) defines the equal treatment of the member countries regardless of their development, size and sophistication of the banking system, and specific features of the national deposit insurance schemes. Taking into account differentiated premiums according to bank risks and the planned amounts of deposit insurance up to EUR 100, 000, there are numerous questions and doubts regarding the justification of such solution which is the reason why European officials have yet not agreed to start the process of introducing the single mechanism of deposit insurance. Therefore, the European Commission suggests the gradual introduction of EDIS until the end of 2018 in two stages, where the beginning of the second stage would depend on the achieved progress in decreasing the risk in the banking union. In the first stage of re-insurance, the European fund for deposit insurance would cover only the liquidity of the national insurance systems. It means that funds for the full disbursement in case of a bank in crisis would be temporarily provided from the fund, and the national insurance systems would have to repay the funds. On the other hand, losses would be gradually covered from the EDIS in the co-insurance stage. By introducing the European Deposit Insurance System, the bases of the banking union would be upgraded, those being: the single rules, the single supervisory mechanism, and the single resolution mechanism, and the full efficiency of the EU financial stability architecture would be provided.

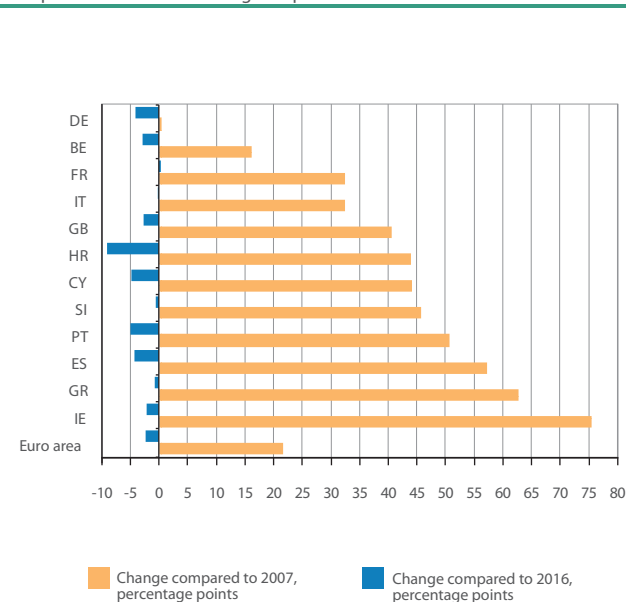
### 1.2.2 Effects on Real Sector

**The growth of domestic demand was the main generator of the economic growth in the euro area which in 2017 amounted to 2.3%.** Favourable terms of financing in markets and also the increased profitability of the corporate sector impacted the investment growth, while the further improvement of conditions in the labour market impacted the growth of private spending. The inflation rate, under the impact of the growing prices of energy and food, increased during 2017 and in December 2017 it amounted to 1.4%, while in May 2018, it amounted to 1.9%. Core inflation, which does not include volatile prices of energy, food and tobacco in December 2017 amounted to 0.9% while in May 2018 it amounted to 1.1%.

**The public debt of the euro area countries expressed in percents of GDP continued to decrease in 2017 and compared to 2016 it was lower by 2.3 percentage points at the euro area level, and by 1.7 percentage points at the EU level.** The most significant decrease of public debt in percents of GDP was recorded by Cyprus, Slovenia, Ireland and Germany. The debt level in some countries remained

very high, and the public debts of Greece, Italy, Portugal and Belgium exceeded the amounts of their GDP. In addition to the mentioned countries, eight euro area countries stood out by the amount of their public debt levels exceeding 60% of GDP. Among the observed countries, the growth of debt compared to the previous year was recorded only by France by 0.4 percentage points (Graph 1.6).

Graph 1.6: Public Debt Changes Expressed as Percents of GDP in 2017



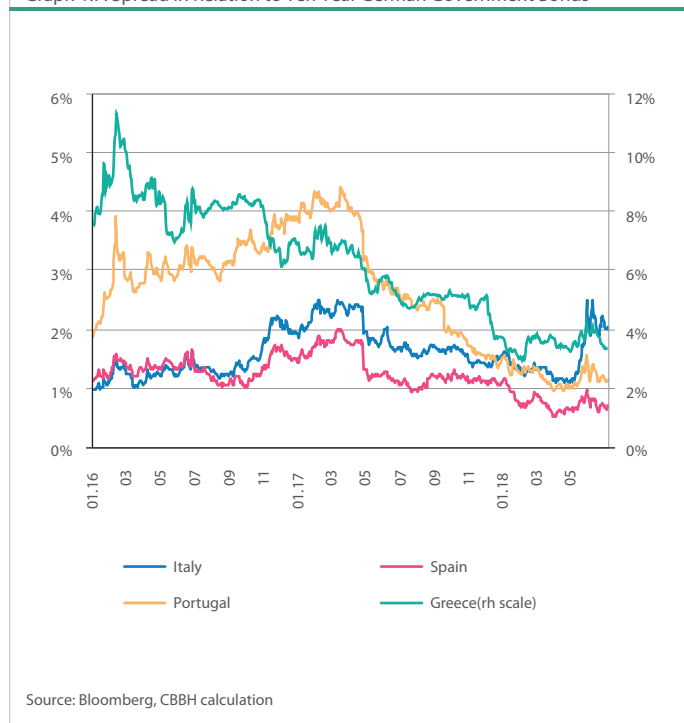
Source: Eurostat, CBBH calculation

**The budget deficit of the countries of the euro area and the EU expressed in percents of GDP was also decreased by 60 basis points compared to 2016 amounting to 0.9% and 1.0% respectively.** The decrease of the budget deficit to the level below 3% of GDP was recorded with almost all the countries of the euro area except for Spain and Portugal, which in the period ahead should continue structural reforms and fiscal consolidation.

**The accelerated economic recovery of the euro area countries, the gradual recovery of inflation and the growth of yields on the USA bonds affected the growth of yields on the long-term bonds of the euro area countries in 2017.** The yields on ten year German bonds in the end of December 2017 were at the level of 0.43%. On the other hand, due to better economic indicators and decreased risks, the yields of the countries from the EU periphery such as Italy, Greece and Portugal decreased, which reduced the spread compared to the yield on German government bonds (Graph 1.7). The yields on the bonds of the euro area countries additionally increased in the beginning of 2018 after the ECB

started gradually to decrease quantitative easing. However, the political uncertainty caused by the elections in Italy, and also a decision of the USA to introduce high trade tariffs on the imports of steel and aluminium were the main drivers of volatility in capital markets in the first half of 2018. The uncertainty related to the effects of the USA decision on the introduction of tariffs on the imports of metal and the escalation of trade war between the USA and China, together with the statements of the ECB officials on the need of keeping the current accommodative monetary policy due to the still low inflation rate impacted the decline of the yields on US and German bonds. The yields on the ten year German bonds in the end of the month of June reached the lowest level since the beginning of the year (0.30%). On the other hand, the uncertainty related to the successful establishment of Italian government and the downfall of the current government of Spain after a no confidence voting caused short political crises in these countries, which was reflected in a fast grow of the yields on Italian and Spanish government bonds. In the end of May, the yields on the ten year Italian bonds reached the level of even 3.16% while the yields on ten year Spanish bonds amounted to 1.62%, which was the highest level since the beginning of the year.

Graph 1.7: Spread in Relation to Ten Year German Government Bonds



**In the second half of 2017 and the first half of 2018, the rating agency S&P raised the credit ratings of Portugal, Italy, Cyprus, Greece and Spain due to faster economic recovery and continued fiscal consolidation processes in these countries.** Despite the improvement of the rating, the

credit ratings of Greece and Cyprus remained in speculative rating (Table A1 Statistical Appendix). The credit rating of Great Britain, AA with negative outlook, was confirmed by S&P agency due to the uncertain results of negotiations on the exit of the country from the EU, and the economic relations among countries after leaving the EU in March 2019. Observing the countries in the region, the rating agencies S&P and Fitch in December 2017 raised the credit rating of Serbia to BB with stable outlook and in the beginning of 2018 also the credit rating of Croatia to BB+ with stable outlook. S&P rating agency confirmed the credit rating of Albania B+ with stable outlook in the beginning of 2018, and raised the credit rating outlook of Montenegro from negative to stable.

Graph 1.8: The Main Market Indices Trend



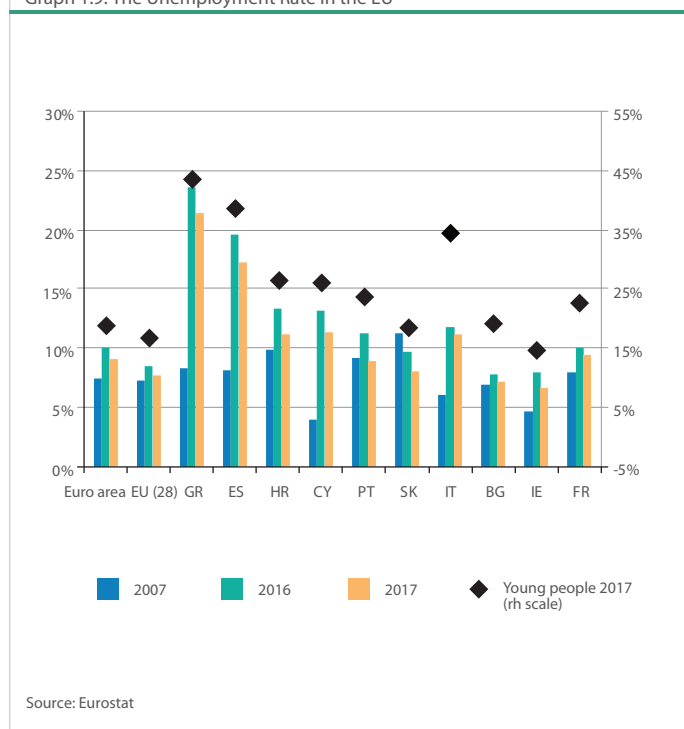
**The recovery of economic activities of the euro area countries influenced the recovery of the market of shares in 2017, which is also reflected in the growth of the main market indices.** German DAX and French CAC40 increased by 12.51%, i.e. by 9.26% at the annual level, which was the strongest annual growth since 2013. British FTSE100, due to the uncertainty caused by the negotiations on Brexit, recorded a lower annual growth rate compared to the previous year (7.63%). The deteriorated trade relations between the USA and China and the increase of political risks caused turbulences in capital markets in the first quarter of 2018. The decline of the values of the US share indices had a negative reflection on the value of the European share indices due to the concern of the investors that the escalation of trade tensions between the USA and China could jeopardise the global economic growth.



The increase of political risks within the euro area brought about by the uncertainty related to the formation of new German, Italian and Spanish governments also had negative effects on the trends of European market indices in the first half of 2018.

**The circumstances in the EU and the euro area labour markets in 2017 continued to improve, which is reflected in a moderate growth of wages and a decrease of the unemployment rate.** The unemployment rate in the euro area in December 2017 amounted to 9.1% while the unemployment rate at the EU level amounted to 7.7%, those being the lowest rates since 2008. Despite a decrease in 2017, the unemployment of the young in the EU and the euro area remained high (Graph 1.9).

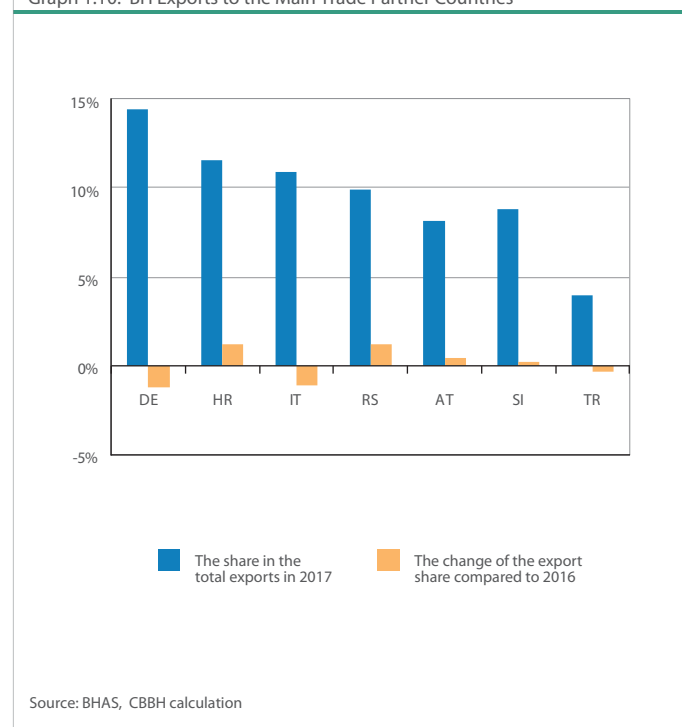
Graph 1.9: The Unemployment Rate in the EU



**Economic trends in the main foreign trade partner countries of BH in 2017 were favourable.** Germany as the

most significant trade partner of BH recorded the highest economic growth over the previous six years, this being 2.5%, due to a strong growth of domestic demand supported by very favourable conditions in the labour market, the growth of investment and exports. The economy of Italy also recorded a higher economic growth compared to the previous year by 1.5%, mainly due to the growth of private investment and employment. The economic growth of Slovenia was accelerated, and the growth rate in 2017 was 4%, which is significantly higher compared to the average level in the euro area. Both Croatia and Serbia recorded stable economic growth in 2017, by 2.9% and 3.0% respectively. During 2017, the growth of exports to all the main foreign trade partner countries was recorded. The growth of exports was supported by accelerated economic recovery and increased demand. The highest growth of exports in the observed country group was recorded with Croatia and Serbia, whose shares in the total BH exports amounted to 11.6% and 9.9% respectively.

Graph 1.10: BH Exports to the Main Trade Partner Countries



## 2. Macroeconomic Trends in BH

*Although the recovery of economic activities in BH was continued in 2017, its intensity can still be considered insufficient to significantly mitigate the existing risks from domestic environment. Although positive trends are recorded in the labour market, the low purchasing power still represents a limiting factor of domestic demand. The basic indicators of households' welfare, the actual individual spending per capita and GDP per capita are still at a low level. Structural problems of the labour market in the form of a high inactivity rate, high long-term unemployment and high rate of unemployment of the young make impossible a considerable risk reduction arising from this segment of the economy. Still, in 2017, a slow increase of activities in the real estate market was continued, and the recovery of this market resulted in the increase of the residential real estate prices. Unfavourable business environment still represents a restricting factor for the attraction of foreign capital, and BH only recorded a small improvement of its ranking in the competitiveness list.*

**In 2017, a slow recovery of the economy in BH was continued, and according to the preliminary data of BH Statistics Agency, the annual growth rate of real GDP amounted to 3%.** The real growth of gross added value in 2017 was recorded in almost all the economic activities, except for the following: Agriculture, forestry and fishing, Production and supply of electricity, gas, steam and air conditioning, Real estate business and Professional, scientific and technical activities. In 2017, the highest contribution to the growth of real GDP came from the activities: Manufacturing industry and Retail and wholesale trade, so, compared to 2016, their shares in the generation of gross added value increased. In 2017, the growth of industrial production was recorded in BH. At the annual level, the increase of industrial output of 3.1% was recorded, and a decline of industrial output was recorded only in Production and supply of electricity, gas, steam and air conditioning.

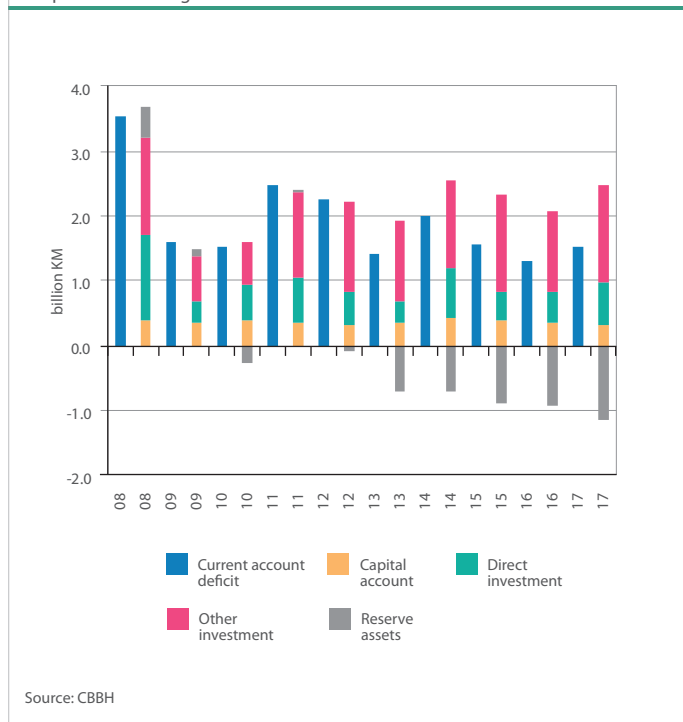
**External vulnerabilities arising from the country's balance of payments position were slightly mitigated due to a small decrease of the current account deficit share in relation to GDP.** Compared to the previous year, the current account deficit, measured by the share in GDP was lower by 5 basis points amounting to 4.8% of GDP at 2017 year end.

The deficit in the balance of payments current account amounted to KM 1.51 billion, and was determined by a negative balance in the account of goods, the same as in the previous years, which was mitigated by positive net inflows in the services and the secondary income accounts. The recovery of the country's economic activities and the domestic demand growth had a positive reflection in the increase of debit transactions within the current account, while, on the other hand, the demand growth and the recovery of the EU and the CEFTA countries, as the main exporting markets, had positive reflections in the current account credit balance. In the international exchange of services, during 2017, the surplus was recorded in the amount of KM 2.23 billion, which, compared to the previous year was higher by KM 184.4 million (9%). The decrease of the current account deficit was also affected by a positive balance in the secondary income account. The surplus in the secondary income account in 2017 amounted to KM 3.75 billion and compared to the previous year, it was higher by KM 246.9 million (7.0%). Unlike the previous years, the primary income account did not have a significant impact on changes of the current account balance, as a positive balance in this account was in the almost negligible amount of KM 3.3 million.

In the balance of payments financial account, the increase of the net inflow was registered in the amount of KM 115.8 million (12.6%) compared to the previous year, so the balance of this account at 2017 end amounted to KM 1.03 billion. Within the financial account, the inflow based on foreign direct investment increased, amounting to KM 758.4 million in 2017, out of it, KM 384.3 million was related to reinvested earnings, and KM 312.4 million was related to investments in the form of securities or other forms of equity. The portfolio investment trend did not have a significant impact on the changes in the financial account balance. The net inflows based on other investments were higher by KM 132.3 million (8.6%). The mentioned changes in the balance of payments positions resulted in the net inflow of foreign exchange funds in the country, so a dynamic growth of reserve assets was recorded in 2017, and they were higher by KM 1.14 billion compared to the previous year. Graph 2.1 shows the main items of the current account deficit financing<sup>1</sup>.

<sup>1</sup>The positive value of reserve assets in Graph 2.1 means that its decrease was recorded in that year, i.e.e that reserve assets were used to partly finance the current account deficit, while in the years when reserve assets were not used to cover the current account deficit, its change during the year was shown below x-axis.

Graph 2.1: Financing the Current Account Deficit



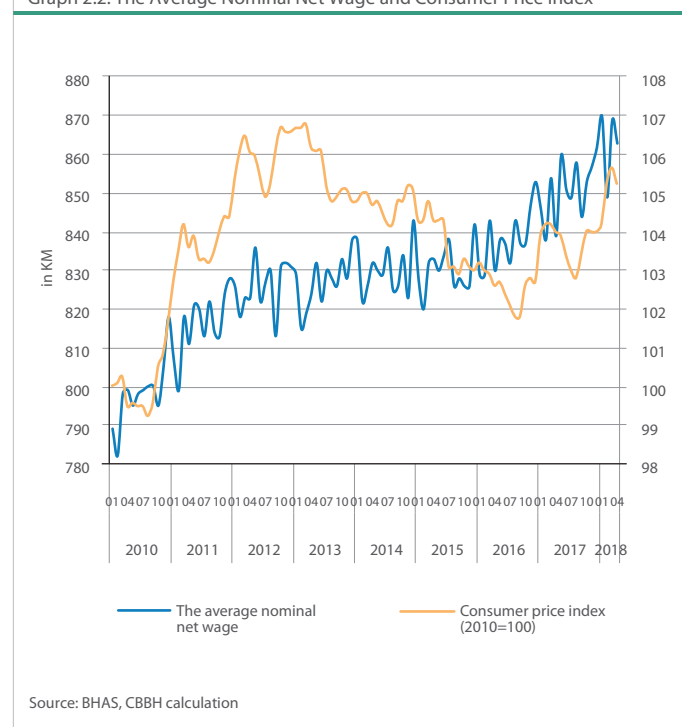
### Unfavourable business environment and the country's low competitiveness position represent a significant weakness of BH economy.

In such circumstances, the ability of attracting foreign capital is decreased as well. According to the annual report of the World Bank on the ease of doing business – Doing Business 2018, BH is in the 86 position in the world according to the ease of doing business, so its ranking deteriorated compared to the last year's report by five positions. According to this indicator, BH is lagging behind all the countries from the region. BH has a particularly low ranking in the area of starting business (175. position), while in the area related to the insolvency and loan obtaining procedures, BH ranking is 40 and 55 position in the world. The low level of the competitiveness of BH economy is indicated by the Global Competitiveness Report of the World Economic Forum for 2017 - 2018, according to which BH is in 103 position out of the total of 137 countries covered by the research. Compared to the previous Report, BH competitiveness list position improved as it made a progress by 4 positions. Yet, numerous factors stay present restricting the improvement of competitiveness and operations, and the basic ones identified in the Report are: inefficiency of the state administration, corruption, tax rates, political and government instability, inadequate approach to financing and the complexity of tax regulations. According to the Report, a slow progress was recorded in most areas, but the final evaluation did not change a lot as other countries recorded a faster progress than BH. Compared to other European countries, BH is still the country with the lowest competitiveness. Indicators of business environment and

competitiveness position indicate that there is a strong need for implementing structural reforms which would ensure the increase of the BH economy growth rate.

**Although positive steps were observed in the labour market, we cannot speak about a significant recovery in respect of the growth of the average monthly income and employment of citizens.** The average nominal net wage in 2017 amounted to KM 851 and compared to the previous year it increased by 1.5%. The growth of the average nominal net wage was recorded in all the activities, except for Education and Other service activities. The highest growth of the average monthly income was recorded in the activities: Scientific, professional and technical activities (12.6%) and Administrative and auxiliary service activities (7.5%), employing only 4.5% of the total employed persons. Although the growth of the average net wage was continued in 2018, it stayed slow and insufficient to improve significantly the purchasing power of employees, particularly taking into account the increase of inflationary pressures in the second half of 2017 and the beginning of 2018 (Graph 2.2).

Graph 2.2: The Average Nominal Net Wage and Consumer Price Index

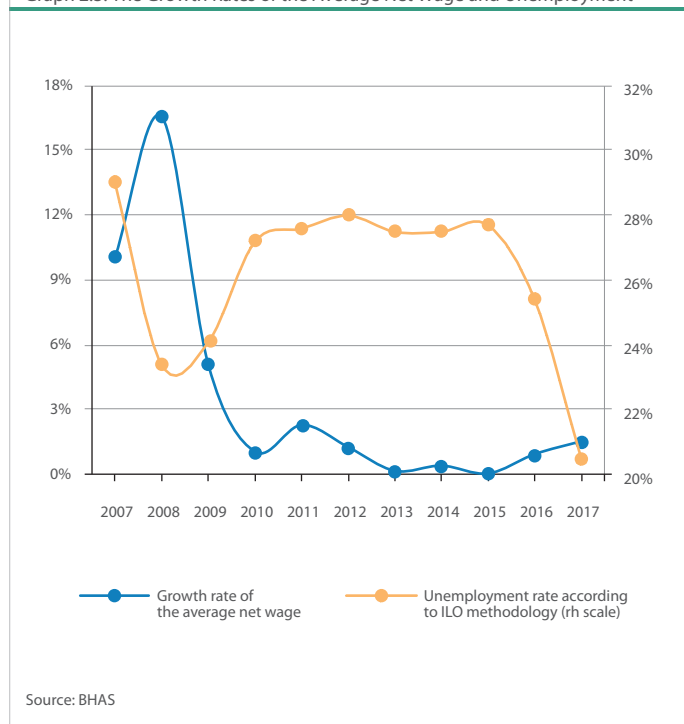


According to the data from the Labour Survey which was conducted in April 2017, according to the Internal Labour Organization (ILO) methodology, and according to the administrative data of the employment institute, the unemployment in BH in 2017 continued to decrease. According to the Labour Survey, the unemployment rate in BH was 20.5% and it decreased by 4.9 percentage points compared to



the previous year. The number of employees according to the data from the survey increased by 1.8%, while the number of the unemployed compared to the previous year decreased by 22.8%. Although the data on the number of persons who left BH over the observed period are not available, the data on a lower number of persons included in labour force compared to the data from the last year's survey (-4.4%) point out that a decrease of unemployment was partly affected by the citizens leaving BH.

Graph 2.3: The Growth Rates of the Average Net Wage and Unemployment

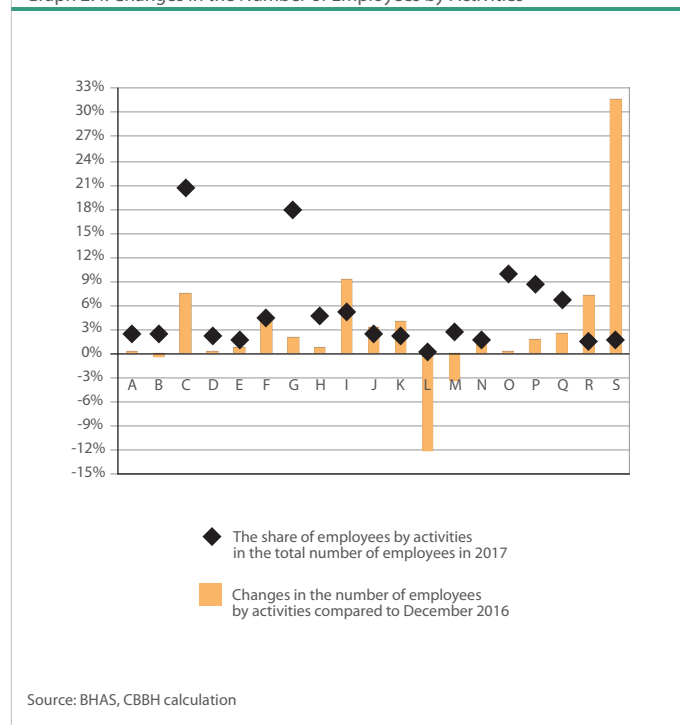


The unemployment rate according to the administrative data of the employment institute in 2017 was lower by 2.2 percentage points. According to this data source in 2017, the growth of the number of employees by 2.1% was recorded, while the number of the unemployed decreased by 6.9% compared to 2016. The differences in the administrative data and data from the survey on the employed and unemployed persons arise from the differences in the applied methodology of the calculation and determination of the status of the unemployed. Taking into account that both the data from the survey and administrative data indicate improvements in the labour market in 2017, a continuation of positive trends in the labour market is expected on the basis of the first data from the 2018 survey.

Administrative data on the number of employees by economic activities show that the growth of employment was registered in most activities (Graph 2.4). The exceptions are three activities, out of which the highest relative decline of the number of employees was registered in the Real estate

business (-12.2%), where the highest employment rate had been recorded in the previous two years, due to a stronger activity in the real estate market. In addition to this activity, the numbers of employees also decreased in Professional, scientific and technical activities (-3.3%) and Extraction of ore and stone (-0.5%). The highest contribution to the growth of the total number of employees was the growth of the number of employees in Manufacturing industry, Accommodation and food service activities and Wholesale and retail trade, repair of motor vehicles and motorcycles.

Graph 2.4: Changes in the Number of Employees by Activities



#### Legend:

- A - Agriculture, Forestry, Fishing
- B - Mining and Quarrying
- C - Manufacturing Industry
- D - Electricity, Gas, Steam Production and Supply and Air Conditioning
- E - Water Supply; Sewerage, Waste Management and Environment Remediation Activities
- F - Construction
- G - Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles
- H - Transportation and Warehousing
- I - Accommodation and Food Service Activities
- J - Information and Communication
- K - Financial and Insurance Activities
- L - Real Estate Activities
- M - Professional, Scientific and Technical Activities
- N - Administrative and Support Service Activities
- O - Public Administration and Defence; Compulsory Social Insurance

*P - Education*

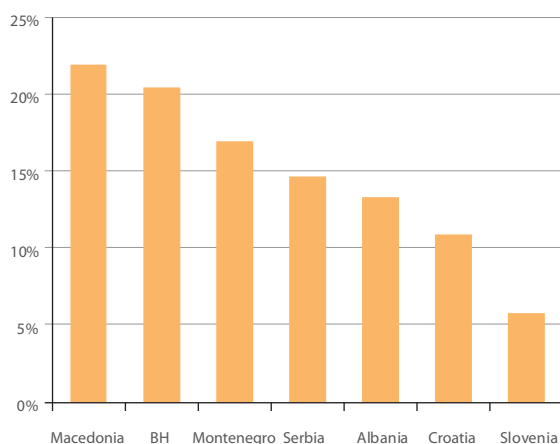
*Q - Health Care and Social Care Activities*

*R - Arts, Entertainment and Recreation*

*S - Other Service Activities*

Regardless of the positive trends which are present in the labour market, the situation in respect of the unemployment in BH can be still assessed as concerning, and the existing improvements are insufficient to significantly decrease the vulnerabilities coming from the labour market. BH is still one of the European countries with the highest unemployment rate, and comparing the data with the surrounding countries, BH and Macedonia have the highest unemployment rates (Graph 2.5).

Graph 2.5: The Unemployment Rate in the Region Countries, Q4 2017

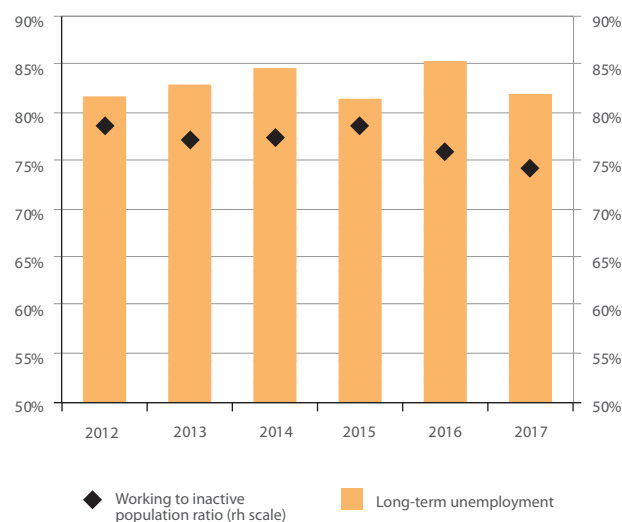


Source: ILO, BHAS  
Note: BH Labour Survey, April 2017

A particular problem in the BH labour market is long-term unemployment, i.e. the unemployment longer than 12 months. According to the data from the Survey, the share of long-term unemployed persons in the total number of the unemployed in 2017 was 82.1% and it is far above the average level of the EU 28<sup>2</sup>. In addition, a quite unfavourable feature of the BH labour market is the inactivity problem which is shown by the fact that inactive population exceeds labour force. In 2017, the labour force to inactive population ratio amounted to 74.3% and compared to the previous year it was lower by 1.6 percentage points (Graph 2.6).

Also, a very concerning data are related to the youth unemployment rate, which in 2017 amounted to 45.8%. The data that the youth unemployment rate decreased by 8.5 percentage points compared to the previous year cannot be explained only by the improvement of conditions in the labour market, as partly, the lower unemployment rate is a consequence of the decrease of the number of young persons in labour force due to the increasingly strong trend of young people going abroad. All those indicators lead to the conclusion that there are serious structural problems in BH labour market, requiring its reform in order to increase employment and decrease poverty, which would decrease potential sources of risk coming from this segment of the economy.

Graph 2.6: Long-term Unemployment and Working to Inactive Population Ratio



Source: BHAS, CBBH calculation

The actual individual spending per capita and GDP per capita in 2017 also do not show that a considerable progress in the welfare level was achieved. Both indicators in 2017 remained at a very low level this being the reason for BH significantly lagging behind not only the European average level but also the surrounding countries. According to the data of Eurostat in 2017, BH GDP per capita expressed in the purchasing power standard amounted to 32% of the average level of the EU 28 countries. Although the value of this indicator was higher by 1 percentage point compared to 2016, BH is at the last but one position out of 37 countries covered by the research<sup>3</sup>. The actual individual spending per capita

<sup>2</sup>According to the data of Eurostat, the share of long-term unemployed persons in the total number of the unemployed in the EU countries was 44.5% in the fourth quarter of 2017.

<sup>3</sup>The EU 28 countries, the EFTA member countries (Norway, Switzerland, Iceland), the EU candidate countries (Turkey, Serbia, Montenegro, Macedonia and

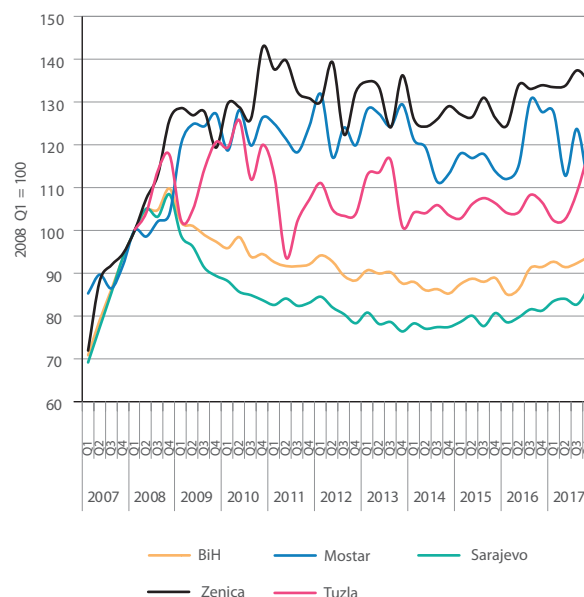
expressed in the purchasing power standard also increased by one percentage point compared to the previous year, so it amounted to 42% of the average of the EU-28 countries. This indicator was lower only for two countries covered by the mentioned research.

**A slow increase of the activities in the BH real estate market in the previous two years was caused by a slightly higher demand for dwelling units, which resulted in the increase of the real estate prices in the categories of both the existing and newly constructed dwelling units.** Unlike the previous two years, when a significantly higher trading in old construction real estate was recorded in BH compared to the previous years, in 2017, the level of purchase and sale of real estate measured by the sold dwelling surface was not negligible, but it did not reach the level recorded in the previous two years. Unlike the old construction real estate, the trade in newly constructed apartments continued to increase and by surface it was higher by 2.8%, and the number of apartments sold was higher by 7.5% compared to 2016. The growth of demand for newly constructed residential real estate was partly stimulated by higher offer in the market of newly constructed apartments, and cheaper apartments in less attractive city locations.

The average price per square metre of newly constructed dwelling units in 2017 was higher by 1.5% compared to the previous year, and a slow growth of the real estate prices is also indicated by the old construction real estate price index. According to the BH real estate price index<sup>4</sup> (Graph 2.7), the residential real estate prices increased in all the cities included in the calculation of the real estate price index, except for Mostar, where higher oscillations of real estate prices by quarters were recorded, with a quite lower level of trading compared to the previous year. The highest growth of the old construction real estate prices was recorded in Tuzla, where the highest volume of purchase and sale was recorded since 2008 when the real estate data compilation in this city started.

It should also be pointed out that the highest growth of old construction real estate prices was recorded in Sarajevo since the period of economic crisis, while the real estate purchase and sale level was lower compared to the previous two years, resulting from a lower level of purchase and sale in the Centar Municipality.

Graph 2.7: Real Estate Price Index



Source: CBBiH

According to the data on newly constructed real estate for the first quarter of 2018, a slow increase of the activities in the BH real estate market continued. The number of the sold new apartments was higher by 27.9% compared to the first quarter of the previous year, while the surface of the sold new apartments was higher by 33.1%. Compared to the average surface of the sold new apartments in 2017, the surface of the sold newly constructed residential real estate was higher by 3.5% in the first quarter of 2018. The average price of the sold new apartments in the first quarter of 2018 was higher by 1.8% than the average price from 2017.

Albania) and BH, as the EU potential candidate country.

<sup>4</sup>The Methodology for calculating the real estate price index was explained in the 2007 Financial Stability Report. The real estate price index for the City of Sarajevo does not include Municipality Stari Grad which did not respond to the data submission calls since 2008. Since 2010, the Municipality of Tuzla has been included which submitted the data for the period from 2008. The RS Tax Authority was not able to submit data for the cities of Banja Luka and Bijeljina in the form required for the index calculation. When determining the real estate price index, the data on the real estate prices for newly constructed dwelling units are not used.

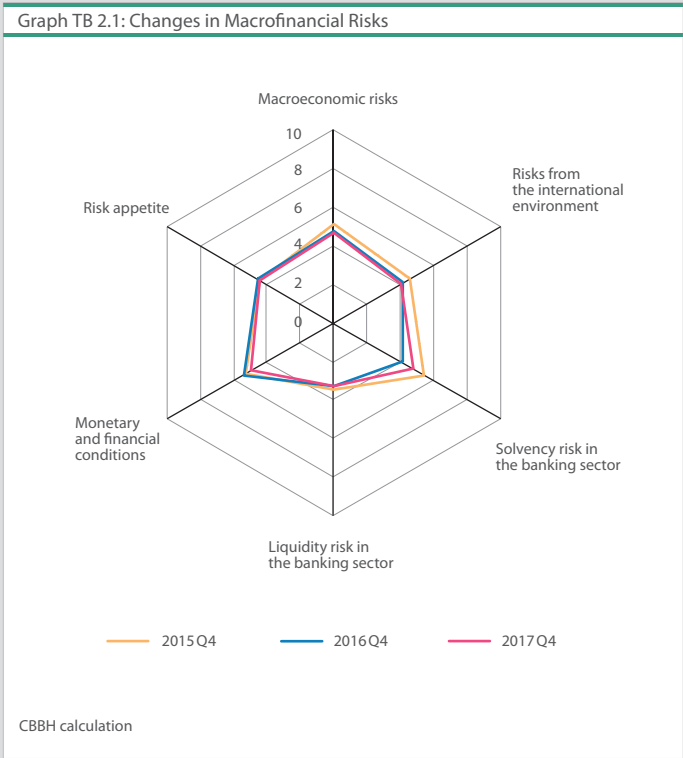
### **Text Box 2: Macrofinancial Risk Dashboard**

The risks arising from the financial system structure and complex relations among financial institutions and markets, and the risks related to domestic and foreign macroeconomic trends could disturb the financial stability and represent a potential source of systemic risk. With purpose of preserving financial stability, it is necessary to identify in due time the potential sources of risk, i.e. develop a wide range of the available tools which make possible the timely observation of the system vulnerabilities, and also potential channels of systemic risk expansion. The CBBH expanded the existing analytic framework for the identification and assessment of systemic risks by the macrofinancial risks dashboard as an additional quantitative tool which makes possible the monitoring of the development, i.e. the evolution of cyclic and structural risks in the system. The dashboard is a tool used for the assessment of the key macrofinancial risks which might appear in real, fiscal, external or financial sector or as a result of their mutual connection in a certain time period, and also the assessment of monetary and financial conditions and risk appetite. Risk assessment is based on a simplified standardization and ranking of positions of numerous indicators representing the base for the quantification of synthetic assessment of risk degrees coming from various system segments. To make the indicators comparable, they first need to be transformed, i.e. standardized by calculating the z-score. After that, depending on the obtained z-score value, the tool identifies the position of each individual indicator compared to its empiric distribution. The appropriate decile is used to assess the cyclic position of each indicator and implicitly its risk. In that way, the risk assessment is defined for each of the indicators used in the dashboard according to its relative position in empiric distribution, which makes possible a consistent presentation of vulnerabilities and trends which might represent a potential source of risk for the financial stability and also an easier process of identification and monitoring of such risks. For each of the indicators, the longest possible available data series was used, and attention was paid that data coverage insures the coverage through one economic cycle for each indicator. Macrofinancial risks in the dashboard, taking into account the area where they come from, are divided into macroeconomic risks in the country, risks from international environment, solvency risk of the banking sector, liquidity risk of the banking sector, the risks related to monetary and financial conditions and investors' risk appetite. In order to obtain the assessment of macroeconomic risks, structural vulnerabilities of the economy are observed. The indicators used as the base of the quantification of the synthetic assessment of the macroeconomic risks degrees are: output gap, the growth rate of real GDP, unemployment rate, inflation rate, current account balance

expressed in percents of GDP, external debt in percents of GDP, debt of the general Government sector in percents of GDP, current balance of the general Government in percents of GDP, the projection of the real GDP growth rate for the next two years and changes in the country' credit rating. Each of these potential sources of risk is assigned a synthetic assessment in a previously described way, and the final synthetic assessment of exposure to macroeconomic risks is obtained by defining the average of the assessments obtained on the basis of several different indicators measuring the economic activity and structural vulnerabilities in the economy. The synthetic assessment of the impact of risk of shock spill over from the international environment and trends in the domestic economy is obtained on the basis of indicators measuring trade and financial relations in economy, such as the values of imports and exports expressed in percents of GDP, foreign assets and liabilities in the banking sector expressed in percents of GDP and the indicators related to the oil price trends, the six month EURIBOR rate, the average weighted growth rate of real GDP with the ten largest trade partners and indicators of exchange trends. When assessing the risk from international environment on the domestic economy, the buffers used to mitigate external shocks are taken into account, i.e. the level of foreign exchange reserves expressed in months of imports, followed by gross foreign exchange reserves, as a percentage of monetary base and changes in the country's foreign exchange reserves. Financial vulnerabilities measured by financial soundness indicators (capital adequacy ratio, financial leverage rate, return on equity and assets, the NPL to the total loan ratio, the shares of indexed and foreign currency loans in the total loans), together with the indicators of the debt levels for the corporate sector and households are synthesized in order to obtain the assessment of the banking sector solvency risk. For the assessment of the liquidity risk in the banking sector, the following indicators are used: ratio of liquid assets to short-term financial liabilities, the share of liquid assets in the banking sector assets, ratio of loans to deposits and loans to residents' deposits ratio. The real interest rate, the money supply growth, the growth of loans to private sector in banks' balance sheets, the growth of non-banking financial institutions loans, loans to private sector to GDP ratio, and the gap of private sector loans to GDP ratio are used as indicators for assessing monetary and financial conditions. For the assessment of investors' risk appetite, the changes in Sarajevo and Banja Luka stock exchanges indices are used, the changes in real estate prices and the flows of direct, portfolio and other investments expressed as percents of GDP. The assessment of macrofinancial risks and monetary and financial conditions and risk appetite are shown in Graph TB 2.1. The graph represents a visual summary of all the previously listed indicators, and the presentation of the risk evolution over the previous three years, i.e.

changes in the indicators denoting the possibility of risk emergence and changes in monetary and financial conditions and risk appetite. The increase of the distance from the centre of the graph for each variable means the increase of the degree of risk, the increase of risk appetite or the improvement of monetary and financial conditions. The graph shows that macroeconomic risks and the risks coming from external environment were slightly decreased compared to the previous year. The liquidity risk of the banking sector has remained unchanged while the risks related to the banking sector solvency slightly increased compared to 2016. Monetary and financial conditions improved compared to the previous year and investors' risk appetite was slightly decreased. The decrease of macroeconomic risks was under a favourable impact of the domestic economy recovery accompanied by a decrease of the unemployment rate, with the simultaneous decrease of risks related to the fiscal sector due to decreased public debt and higher budget surplus. Additionally, a slightly more favourable balance of payments current account position and a lower foreign debt of the country had a favourable impact on the decrease of macroeconomic risks. The risks coming from international environment were mitigated due to a gradual economic recovery of the main trade partners of BH. The banking sector solvency risk was slightly increased firstly due to a significant credit growth in the household and corporate sectors, i.e. the increase of the exposure of banks towards these two sectors after a longer period of stagnation in lending. On the other hand, all the financial soundness indicators for the banking sector pointed out

decreased risks in banks' balance sheets. A lower real interest rate and the growth of private sector loans influenced the improvement of monetary and financial conditions. The decrease of macroeconomic risks, and also the risks arising from international environment did not influence the perception of investors in respect of risk related to investment and their higher risk appetite.





### 3. Government

*The financial stability risks arising from the fiscal sector in 2017 were mitigated. The continued process of fiscal consolidation resulted in the fiscal surplus due to the growth of budget income and restrictions in the budget spending. The General Government debt decreased, both based on the external and internal debts, which was partly the result of the delay in the implementation of the arrangement with the IMF.*

**The indicators of the fiscal sustainability risk indicated a low level of the financial stability risk arising from the Government sector<sup>5</sup>.** The suggested indicators which indicate the existence of the fiscal sustainability risks in case of BH are not in the risky area and do not suggest the existence of concern in respect of fiscal sustainability, so, according to the defined benchmark levels all the indicators are in a safe area (Table 3.1). During 2017, most of indicators recorded improvements compared to the previous year. So, the indicator „Implicit real interest rate (*r*) decreased by the real growth rate of GDP (*g*)“, recorded an increase by 0.49 percentage points compared to the previous year, due to the decrease of the implicit real interest rate and more intensive economic activity

in the country, so it went down further into a safe area below the benchmark level. Also, the value of the indicator Public debt of the General Government sector expressed in percents of GDP improved in relation to the previous year due to the decrease of the public debt amount and the growth of the GDP nominal amount. The IMF projections for the indicator Cyclically adjusted primary balance expressed in percents of potential GDP for 2017 indicate that the fiscal sustainability risks were decreasing in this case as well, supported by the continued fiscal consolidation and increase of the budget surplus at the consolidated level. The average maturity of public debt was longer in 2017 by 0.02 years, and it indicates the decrease of the public debt liquidity risk, i.e. the fiscal sustainability related risks. Also, in 2017, the share of the foreign currency denominated public debt was decreased compared to the previous year which influenced the decrease of the currency risk, so, the fiscal sustainability related risk was decreased on this basis as well. A slight deterioration of the three indicators did not influence the increase of the fiscal sustainability risk, as they were also in the safe area, i.e. far below the benchmark level.

Table 3.1: Indicators of the Fiscal Sustainability

| Indicator  | Safe area | Reference level | Level in BH | Changes compared to the previous year |
|--|-----------|-----------------|-------------|---------------------------------------|
| $r - g^1$  | <         | 1.1             | -2.4        | -0.49                                 |
| Public debt of General Government sector (GDP %)                                   | <         | 42.8%           | 35.6%       | -3.4%                                 |
| Cyclically Adjusted Primary Balance (potential GDP %) <sup>2</sup>                 | >         | -0.5%           | 2.5%        | 1.5%                                  |
| Financing needs (GDP %)  | <         | 20.6%           | 7.5%        | 3.8%                                  |
| Share of short term debt in total debt, remaining maturity                         | <         | 44.0%           | 16.9%       | 5.0%                                  |
| Debt denominated in foreign currency (non EUR currency) <sup>3</sup>               | <         | 40.3%           | 30.7%       | -3.8%                                 |
| Average maturity of public debt (years)  | >         | 2.3             | 5.99        | 0.02                                  |
| Short term foreign public debt (% of foreign currency reserves) remaining maturity | <         | 61.8%           | 8.3%        | 1.6%                                  |

Source: CBBH, MFT BiH, BHAS, BiH Fiscal Council, IMF, Ministries of Finance of FBiH and RS, CBBH calculation

Notes:

<sup>1</sup> $r - g$  - Implicit interest rate on Government sector debt decreased by GDP deflator (moving average for five years)  $g$  - growth rate of real GDP (moving average for five years)

<sup>2</sup>The IMF projection was used for 2017 year

<sup>3</sup>Calculation of the public debt denominated in foreign currency does not include a part of the public debt denominated in euro due to the fixed rate of domicile currency and euro

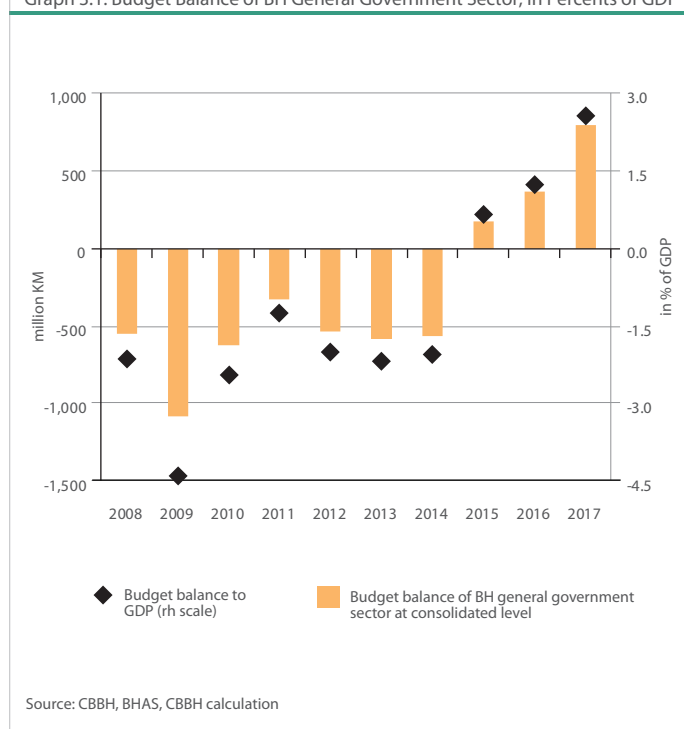
**During 2017, the fiscal consolidation process was continued which had lasted since 2015, which resulted in a decrease of the financial stability risks related to fiscal policy.** The overall budget surplus at BH level on consolidated basis was 2.6% of GDP. The fiscal surplus was recorded due to a strong growth of the budget income, but also the continued

policy of restricting current spending. According to the CBBH data, the income of the General Government sector increased by KM 711.9 million (5.6%) in 2017 compared to the previous year. The most significant impact on the increase of the budget income came from the growth of revenues from taxes, which were higher in 2017 by KM 390.7 million (5.8%),

<sup>5</sup>The IMF Working Paper, WP/11/100: E. Baldacci, I. Petrova, N. Belhocine, G. Dobrescu i S. Mazraani – Assessing Fiscal Stress was used for the calculation of the fiscal sustainability risk.

resulting from the recovery in the real sector of economy and the implementation of the activities aimed at tax evasion prevention at all the levels of authorities. The growth of the budget income was under the effect of growth in all the other categories of budget revenues, i.e. the growth of the revenues from social contributions (5.8%), grants (22.4%) and other revenues (3.6%). Regarding the budget expenses, the downward trend of interest expenses was continued. In 2017, they were lower by KM 28.9 million (11.5%), which was only the consequence of the decrease of interest expenses on the basis of internal debt. At the same time, the two largest items in budget expenses, i.e. the expenses based on social assistance and the expenses based on compensations to employees recorded negligible increases of 0.5% and 0.1% respectively, compared to the previous year.

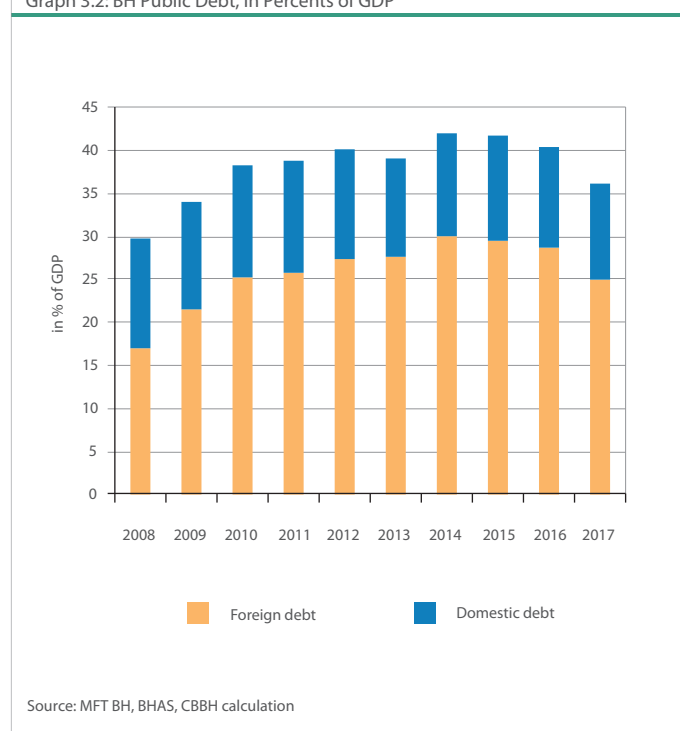
Graph 3.1: Budget Balance of BH General Government Sector, in Percents of GDP



The achieved progress in fiscal consolidation, moderate economic growth and the recovery of the real sector of economy still did not result in the improvement of the sovereign credit rating. During 2017, international agency S&P carried out the sovereign credit rating assessment twice and both times it confirmed credit rating „B“ with stable outlook. Also, the international rating agency Moody's during 2017 kept „B3“ rating with stable outlook for BH. Both agencies confirmed the previously defined rating levels in the beginning of 2018. According to rating agencies estimates, some of the main obstacles for the credit rating upgrade included political risks and the slow implementation of structural reforms.

**In 2017, the General Government sector debt decreased, so the fiscal sustainability risks decreased on this basis as well.** According to the data of BH MFT, the public debt in the end of 2017 amounted to KM 11.35 billion, so, compared to the previous year, it was lower by KM 744.6 million i.e. 6.2%. The public debt share expressed in percents of GDP amounted to 35.6% and it was lower by 3.44 percentage points compared to the previous year (Graph 3.2). A lower amount of public debt at 2017 end resulted from decreased foreign debt and decreased liabilities based on domestic debt, where the decreased foreign debt had a stronger impact on a public debt decline.

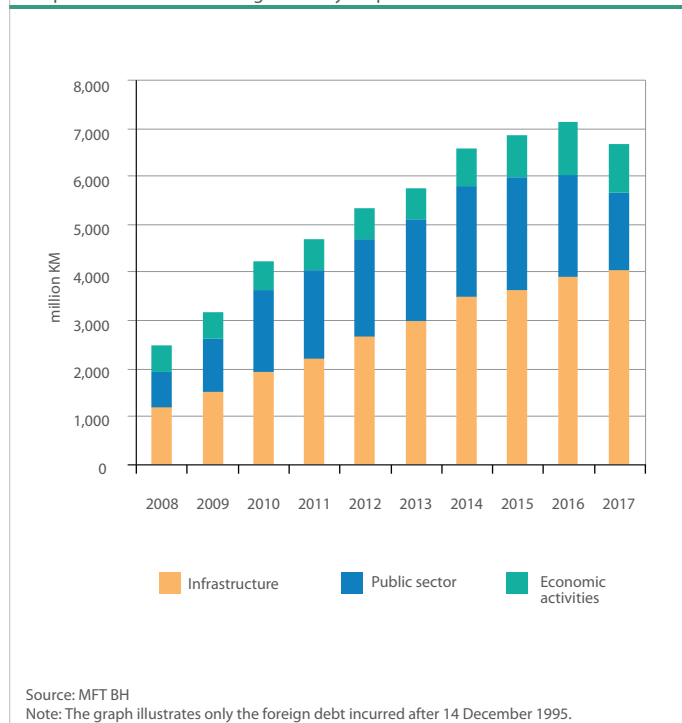
Graph 3.2: BH Public Debt, in Percents of GDP



The foreign debt kept a predominating share in the public debt structure accounting for 69.2% of BH public debt. The foreign debt balance at 2017 end amounted to KM 7.85 billion, i.e. 24.64% of GDP. Compared to the previous year, BH foreign debt was lower by KM 695.6 million (8.1%), which in percents of GDP represents a decrease of 2.95 percentage points. The decrease of foreign debt in 2017 was a consequence of the lower amount of the engaged funds during 2017, primarily due to the delay in the implementation of the arrangement with the IMF, and also a higher amount of serviced liabilities compared to the previous year. During 2017, KM 516.6 million of loan funds from foreign sources was engaged, which were mainly used for the implementation of infrastructure projects (92.7%), while a smaller part was used for the projects of the public sector strengthening and improving (5.7%) and the economic activities focused projects (1.6%). The foreign

debt structure by purposes was presented in Graph 3.3. The year was also marked by a delay in the implementation of the Extended Fund Facility (EFF) with the IMF, so no credit tranche based on the EFF was withdrawn during 2017.

Graph 3.3: Structure of Foreign Debt by Purpose

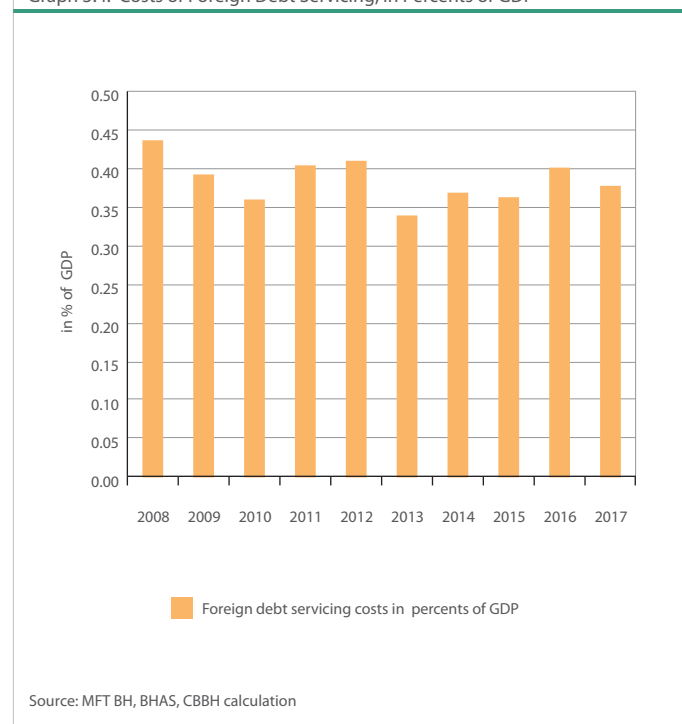


During 2017, KM 864.62 million of the foreign debt principal was repaid, while KM 118.64 million was allocated for the interest servicing. The total amount paid on the basis of the foreign debt liabilities in 2017 was higher by 35.97% compared to the previous year amounting to KM 983.3 million. The largest part was related to the servicing of the liabilities towards the IMF (Table 3.1), so KM 385.7 million was paid on that basis (39.2%) during 2017. The foreign debt servicing costs, expressed in percents of GDP in 2017 amounted to 0.38% and they were lower by 2 basis points compared to the previous year (Graph 3.4). This mainly resulted from the growth of the nominal GDP value, and also from a slight decline of the amount of paid interest in 2017.

**The average contracted interest rate on foreign debt was rather low and compared to the previous year it did not significantly change, but the exposure to interest risk remained significant.** According to the data of MFT BH, the average interest rate on foreign debt in 2017 amounted to 1.41%. As 42.99% of loan arrangements was contracted with the floating interest rates, the foreign debt exposure to interest risk stayed high. Yet, compared to the previous year, the exposure to interest risk decreased, having in mind that the share of loans with floating interest rates in 2017 was lower by

4.31 percentage points. The average interest rate on this part of the debt amounted to 0.72%. The average interest rate on the part of the foreign debt contracted with fixed interest rate was considerably higher, amounting to 1.92%. Low interest rates resulted from concessional terms of BH debt, but also the currently low benchmark rates in international markets. The interest rate growth in international financial markets would have adverse effect on the fiscal position, which would require restructuring in expenses. The exposure to interest risk was additionally decreased on the basis of the extension of the average time needed to refix the interest rate, and also a decrease of the part of the debt which is refixed within one year. The average interest rate refixing period in 2017 was 4.6 years, which was slightly longer compared to 2016 (4.4 years), while a part of the debt refixed within one year was lower by 3.8 percentage points amounting to 46.2%. The refinancing risk did not significantly change compared to the previous year as the share of the debt due for payment in the next year (9.8%) as well as the average time of debt maturity (7.2 years) remained the same. The situation related to currency risk was also more favourable compared to the previous year, as the share of foreign debt agreed in foreign currencies other than euro was decreased by 4.5 percentage points. Yet, the foreign debt currency structure stayed rather unfavourable bearing a high risk having in mind that 44.4% of foreign debt was contracted in foreign currencies other than euro and is exposed to the exchange rate risk.

Graph 3.4: Costs of Foreign Debt Servicing, in Percents of GDP





**The MFT BH projections forecast that in the period ahead, the foreign debt repayment amount would decrease, which will decrease the pressure on keeping the budget balance and decrease the fiscal sustainability risks.** According to the projections of MFT BH, in 2018 and 2019, it will be necessary to pay a slightly lower amount than that paid in 2017 on the basis of the liabilities for the existing loan arrangements. The necessary amount for the repayments of the principal and interest for the existing loans in 2018 is projected at KM 969.17 million, which, compared to the amount paid in 2017, is a decrease of KM 14.1 million. In 2019, the amount of the serviced liabilities will be additionally decreased by KM 149.1 million. Even if loans in process of contracting are included in projections, the amount of serviced liabilities in 2018 and 2019 will be lower than in 2017. A much lower amount of debt on the basis of the arrangement with the IMF will be due for payment during 2018 compared to the previous year (Table 3.2).

**Table 3.2: Repayment Schedule of the Stand-by Arrangement to the IMF**

| Year | Description           | SDR                | KM                 |
|------|-----------------------|--------------------|--------------------|
|      |                       | Repayment amount   | Repayment amount   |
| 2017 | Principal and charges | 162,864,441        | 385,720,650        |
|      | SBA principal         | 122,597,500        | 290,354,280        |
| 2018 | Charges / interest    | 5,560,090          | 13,168,261         |
|      | <b>TOTAL</b>          | <b>128,157,590</b> | <b>303,522,541</b> |
|      | SBA principal         | 68,696,875         | 162,698,519        |
| 2019 | Charges / interest    | 4,518,507          | 10,701,424         |
|      | <b>TOTAL</b>          | <b>73,215,382</b>  | <b>173,399,943</b> |
|      | SBA principal         | 0                  | 0                  |
| 2020 | Charges / interest    | 3,979,396          | 9,424,618          |
|      | <b>TOTAL</b>          | <b>3,979,396</b>   | <b>9,424,618</b>   |
|      | EFF principal         | 10,568,750         | 25,030,541         |
| 2021 | Charges / interest    | 3,893,977          | 9,222,316          |
|      | <b>TOTAL</b>          | <b>14,462,727</b>  | <b>34,252,857</b>  |

Source: IMF, CBBH calculation

Note: KM amounts are calculated according to the CBBH exchange rate as of 31 May 2018, being SDR 1 = BAM 2.368354

**In 2017, a progress was recorded in respect of decreasing the General Government sector debt in internal market.** The balance of BH internal debt<sup>6</sup> in the end of 2017, according to MFT BH data, amounted to KM 3,501.6 million<sup>7</sup>, which compared to the previous year, was a decrease of 1.4% (KM 49.0 million).

According to the projections of the Entity Ministries of Finance, the downward trend of internal debt will continue in the period to come. At all the levels of authorities in BH, except for the municipal level, a decrease of the internal debt was registered. The largest part of internal debt still belongs to the Entity Governments and the Brčko District Government, so a decrease of the total internal debt resulted from a lower debt at this level of authority. The total debt of the Entity and Brčko District Governments in the end of 2017 amounted to KM 2.79 billion and was lower by KM 40.99 million (1.45%), where all the categories of debt (old foreign exchange savings, war claims, general liabilities, treasury bills, tax reimbursements and activated guarantees), except for long-term bonds and liabilities based on loans, recorded a decrease. In 2017, the Governments of FBH and RS issued securities in the total amount of KM 653.88 million. The FBH Government in 2017 realized one issue of long-term bonds in the nominal amount of KM 30 million and maturity period of 5 years, with the interest rate of 1.2% which was significantly lower compared to the previous year. Also, the FBH Government organized eleven auctions of treasury bills in the total amount of KM 260 million and with the interest rate spread from 0.0098% to 0.27%. The RS Government issued eight issues of bonds in the nominal amount of KM 220 million and maturity periods from 3 to 10 years, with the interest rate spread from 2.76% to 4.5%. Both the top and the bottom margins of the interest rate spread were lower compared to the previous year. Also, the RS Government recorded nine issues of treasury bills in the total amount of KM 143.88 million and 6 and 12 month maturities, at the interest rates of 0.3% to 1.01%. The overall debt balance based on treasury bills at 2017 end amounted to KM 182 million and compared to the previous year it was lower by KM 26.8 million. On the basis of bonds, the debt balance in 2017 was higher by KM 34.75 million amounting to KM 1,382.77 million. According to the CBBH data, the total debt of the Government sector with commercial banks in BH was lower by 0.5%, with the government sector securities higher by 1% and the debt based on loans lower by 2.4%, in the commercial bank portfolio (Table 3.3).

<sup>6</sup>BH internal debt includes the debts of the Entities and Brčko District, debts of cantons in FBH, debts of cities and debts of municipalities, and it includes the liabilities based on old foreign exchange savings, war claims, general liabilities, the liabilities based on the issued short-term and long-term securities, liabilities based on loans in the country and the liabilities based on tax reimbursements and activated guarantees.

<sup>7</sup>BH internal debt does not include the liabilities based on restitution, as this issue has not been regulated by law yet.

Table 3.3: Commercial Banks' Claims on Government Sector

| million KM                  |       |       |       |       |         |         |         |         |         |         |
|-----------------------------|-------|-------|-------|-------|---------|---------|---------|---------|---------|---------|
| Claims                      | 2008  | 2009  | 2010  | 2011  | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    |
| Central Government          | 1.7   | 4.6   | 0.2   | 0.0   | 0.3     | 0.3     | 0.2     | 0.2     | 0.2     | 0.1     |
| Loans                       | 1.7   | 4.6   | 0.2   | 0.0   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| Securities                  | 0.0   | 0.0   | 0.0   | 0.0   | 0.3     | 0.3     | 0.2     | 0.2     | 0.1     | 0.1     |
| Governments of BH Entities  | 116.1 | 155.8 | 193.1 | 582.5 | 845.3   | 952.4   | 1,273.1 | 1,589.6 | 1,633.3 | 1,624.8 |
| Loans                       | 115.8 | 151.7 | 179.6 | 310.5 | 445.7   | 484.9   | 565.6   | 600.9   | 424.6   | 410.0   |
| Securities                  | 0.3   | 4.2   | 13.5  | 272.1 | 399.6   | 467.5   | 707.5   | 988.7   | 1,208.7 | 1,214.9 |
| Cantons' Governments        | 3.2   | 4.3   | 33.8  | 33.3  | 52.6    | 66.2    | 142.0   | 209.7   | 218.2   | 206.2   |
| Loans                       | 3.2   | 4.3   | 33.8  | 33.3  | 52.6    | 66.2    | 142.0   | 209.7   | 218.2   | 200.2   |
| Securities                  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 6.0     |
| Municipalities' Governments | 142.3 | 188.2 | 225.6 | 273.9 | 314.0   | 341.8   | 342.4   | 304.5   | 282.2   | 293.1   |
| Loans                       | 141.5 | 186.0 | 222.5 | 269.8 | 309.4   | 337.7   | 339.2   | 301.9   | 280.2   | 291.0   |
| Securities                  | 0.9   | 2.2   | 3.1   | 4.1   | 4.6     | 4.1     | 3.2     | 2.6     | 2.0     | 2.1     |
| TOTAL                       | 263.4 | 352.9 | 452.6 | 889.8 | 1,212.2 | 1,360.6 | 1,757.6 | 2,103.8 | 2,133.9 | 2,124.2 |
| Loans                       | 262.2 | 346.6 | 436.0 | 613.6 | 807.7   | 888.8   | 1,046.7 | 1,112.5 | 923.2   | 901.2   |
| Securities                  | 1.2   | 6.4   | 16.6  | 276.1 | 404.5   | 471.9   | 710.9   | 991.3   | 1,210.7 | 1,223.0 |

Source: CBBiH

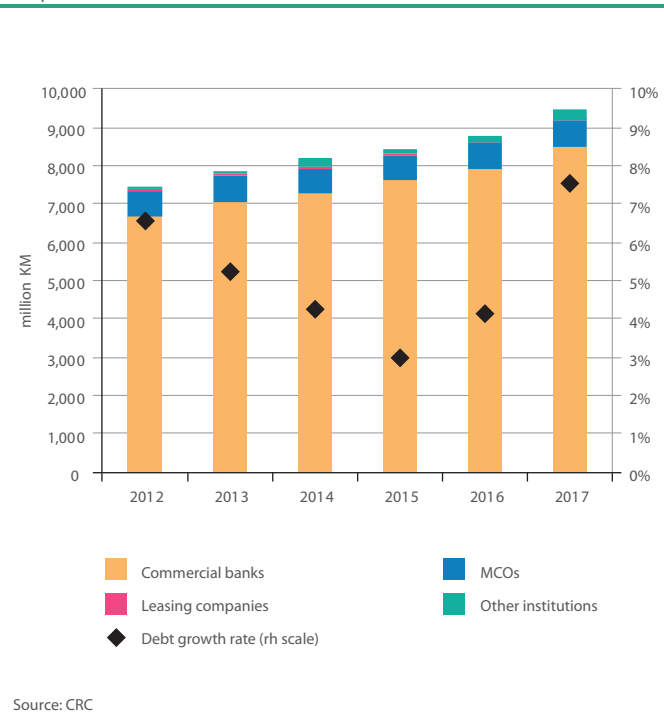
## 4. Households

Despite a slight recovery in the real sector, a gradual revival of real estate market activities and improved labor market indicators, which are specified in the previous Chapter, there has been no significant improvement in living standards. Slightly more favorable conditions in the labor market contributed to a slight increase in consumption and an increase in indebtedness of households. The growth of households indebtedness is to a large extent the consequence of the increase in household indebtedness from banks' loans. The lowering of the lending interest rates contributed to a somewhat higher demand on loans, and banks offered to a large extent replacement loans with more favorable repayment terms. The quality of the loan portfolio in the segment of the households continues to improve, mostly due to the undertaken activities of certain banks for the permanent write-off of non-performing loans and the frequent implementation of loan rescheduling, and in addition, there is somewhat lower intensity of reclassification of loans into non-performing loans compared to previous years. Although in 2017, the growth of total deposits of households was recorded, the households savings in the form of term deposits can be assessed as stagnant, which is contributed by continued lowering of deposit interest rates, along with the current low level of available income. The potential risk for the household sector is an interest rate risk that is strengthened due to the expectation of reference interest rates hike in the euro area, which would consequently lead to the strengthening of credit risk in the banking sector.

**In 2017, the growth of the household sector in indebtedness continued, driven by the increase in consumption in this sector, due to a slight recovery of economic activity and somewhat more favorable conditions on the labor market compared to the previous years.** According to CRC data, the total indebtedness of households at the end of 2017 was KM 9.45 billion and compared to the end of the previous year it increased by 7.5%. Specified in GDP percentage, the indebtedness of households in comparison with the previous year is higher by 0.6 percentage points and at the end of 2017 it was 30%. Commercial banks are the main lenders to the household sector, and the growth of indebtedness with these financial institutions mostly contributes to the growth of the total households indebtedness. The total households indebtedness with the commercial banks recorded an increase of 6.9% compared to the end of the previous year.

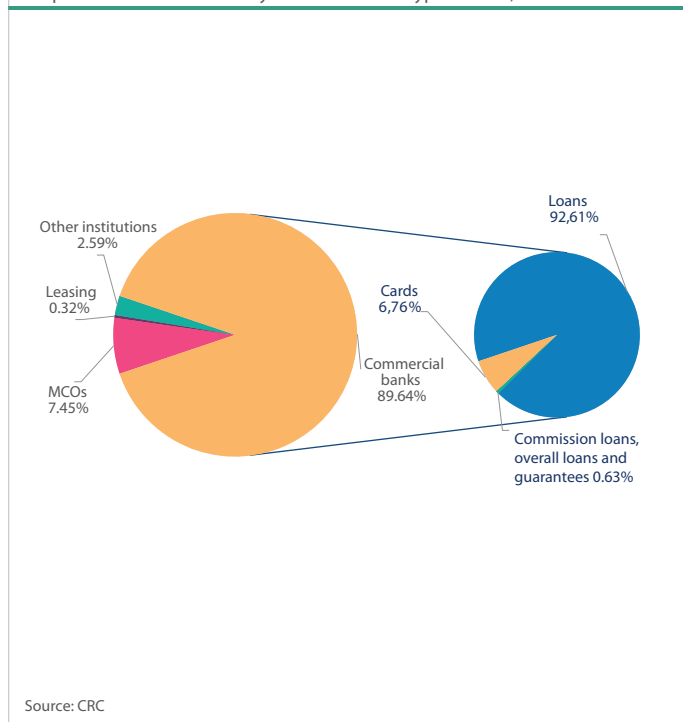
The households indebtedness with microcredit organizations increased by 6.9% compared to the end of 2016, while the trend of reducing indebtedness to leasing companies continued for five consecutive years (Graph 4.1).

Graph 4.1: Household Debt towards Financial Institutions



The structure of households indebtedness in commercial banks according to the type of indebtedness did not change significantly in the past period. The largest part of the households indebtedness in commercial banks is related to loan indebtedness, which in the year of 2017 increased by 7.4%. In the last four years, the level of credit growth in the household sector, with the lack of a significant increase in the utilization of the credit cards limit, as well as indebtedness per other types of banking products, led to a slight increase of the share of loans indebtedness in the total households indebtedness in commercial banks. At the end of 2017, the loans indebtedness was 92.6% of the total household indebtedness in banks (Graph 4.2). The indebtedness of the households by commission credits and credit cards continued to decrease. Unlike credit cards, by which the population is less indebted over the past four years, in 2017, the amount of used debit and deferred cards limits' increased, so the total payment cards indebtedness is slightly higher than at the end of 2016.

Graph 4.2: Household Debt by Institutions and Type of Debt, 2017



Source: CRC

**The debt of the population based on the use of approved limits per payment cards shows a slight**

**increase, while the average indebtedness on the payment card continues to decrease.** According to CRC data, the indebtedness of households by payment cards in 2017 recorded slight growth (0.52%), but given the increase in the number of active cards, the average indebtedness by payment card continued to decrease and at the end of 2017 it was lower by 1.5% compared to the end of the previous year. In the segment of debit and deferred payment cards, there was an increase in both the number of active cards and the amount used by these cards, while the average debit card debt slightly decreased compared to the previous year. The indebtedness of the households by credit cards continued to decline despite the fact that the number of approved cards increased, and the average credit card debt decreased by 4.7% compared to the end of 2016. As despite the large number of credit cards, the total approved limit amount for this type of cards was reduced, one can conclude that the banks more intensively lowered the allowed limits to clients, in 2017. In addition to the reduced amount of approved limits, the reduction in credit card debt was probably also affected by high costs of this type of borrowing, because of which the credit card users tried to reduce the use of the limits on these cards. (Table 4.1).

Table 4.1: Claims on Households, Cards

|                        | Number of issued cards |                  | Approved amount      |                      | Used amount        |                    | Debts per card |            |
|------------------------|------------------------|------------------|----------------------|----------------------|--------------------|--------------------|----------------|------------|
|                        | 2016                   | 2017             | 2016                 | 2017                 | 2016               | 2017               | 2016           | 2017       |
|                        |                        |                  |                      |                      |                    |                    |                |            |
| Debit cards            | 692,487                | 700,419          | 766,718,703          | 772,019,782          | 349,581,550        | 352,766,256        | 505            | 504        |
| Credit cards           | 223,410                | 231,183          | 347,262,018          | 345,710,473          | 181,189,997        | 178,635,295        | 811            | 773        |
| Deferred payment cards | 132,346                | 138,137          | 153,477,271          | 155,306,547          | 38,316,438         | 40,680,875         | 290            | 294        |
| <b>TOTAL</b>           | <b>1,048,243</b>       | <b>1,069,739</b> | <b>1,267,457,992</b> | <b>1,273,036,801</b> | <b>569,087,985</b> | <b>572,082,426</b> | <b>543</b>     | <b>535</b> |

Source: CRC

Since the debit card limit is most often determined by the amount of average monthly earnings, the used part of the limit per card can be used as an indicator of the households consumption in relation to the amount of the own income. The average debit card debt at the end of 2017 was 59.2% of the average net salary in 2017, and this ratio was lower by one percentage point relative to 2016. With the exception of the impact of growth in average monthly income, the average indebtedness on this basis has not changed significantly over the past several years.

When analysing the debit cards according to the range of approved overdrafts per card, we notice that only in the category of debit cards with higher amounts of approved limits (over KM 1,600) the used limit per card has not decreased, while the largest decrease compared to the previous year is

recorded in the category of the households with the lowest level of approved limit (Table 4.2). As the used debit card limit for this category of households has decreased for three consecutive years now, we assume that a large number of citizens with low monthly income, who in the previous periods significantly used the possibility of overdraft at debit cards, was not able to continue to borrow in this way, partly because of the reduction or abolition of the debit card limit. This is supported by the fact that at the end of 2017, there were in the CRC 8.6% more debit cards without an approved limit than at the end of the previous year. Despite the fact that the average debit card indebtedness with lower amounts of the approved limit has slightly decreased, low available income is still the reason why the low-income population significantly uses overdraft on debit cards to meet basic living needs, since this is the simplest form of funding the current

spending, which this category of citizens cannot provide from regular income. Given that in the previous period, the lowest-income population was most affected by the worsening of the economic conditions in the country, this clients' category continues to record a higher ratio of non-performing loans in total claims in relation to the categories of clients with higher monthly income.

**Table 4.2: Used Overdraft per Debit Card**

|               | KM                          |         |          |           |           |
|---------------|-----------------------------|---------|----------|-----------|-----------|
|               | Range of the approved limit |         |          |           |           |
|               | up to 400                   | 400-800 | 800-1200 | 1200-1600 | over 1600 |
| December 2016 | 157                         | 299     | 486      | 690       | 1,124     |
| December 2017 | 155                         | 296     | 485      | 688       | 1,137     |
| Change, %     | -1.3                        | -1.1    | -0.3     | -0.2      | 1.2       |

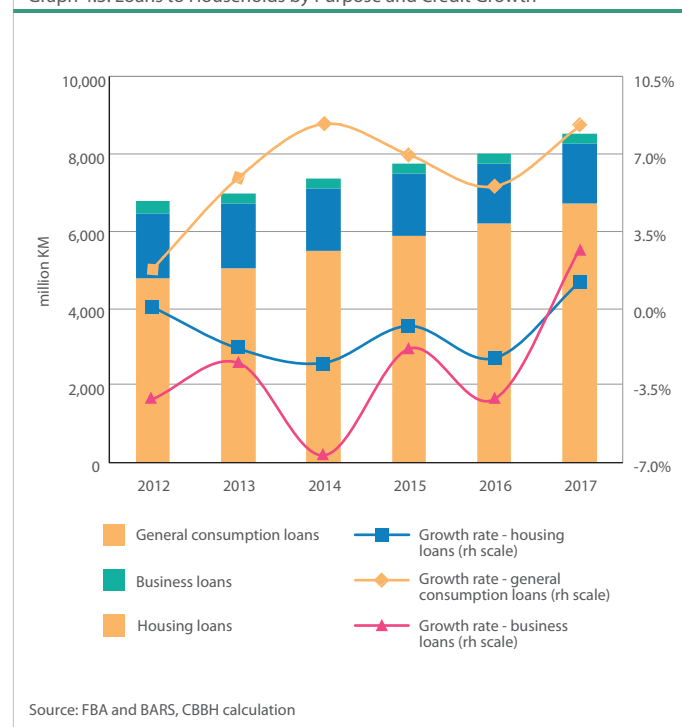
Source: CRC

**In the structure of claims on households, general consumption loans are prevailing per purpose criteria, which includes claims per all types of cards (Graph: 4.3).** Credits for general consumption recorded growth for seven consecutive years. At the end of 2017, the indebtedness of the population per this type of loans was higher by 8.5% compared to the end of 2016, and their share in total loans to the households was 78.3%, which is by 1.1 percentage point higher compared to the end of the previous year. The increase in demand on this type of loans is contributed by higher supply of non-specified purpose loans and replacement loans at more favorable terms. In 2017, the trend of reducing the household indebtedness from the housing and business loans was stopped. Thus, the indebtedness of the population on the basis of housing loans recorded a slight increase of 1.2%, for the first time after four years, while the indebtedness for business loans, at the end of 2017, increased for the first time after five years (2.7%). Despite a slight increase in household indebtedness on housing loans, the share of housing loans in total households loans decreased by one percentage point, and at the end of 2017 it was 18.8%.

The slower dynamics of housing loan lending in recent years, despite the downward trend in interest rates for this type of loan, with the simultaneous increase of citizens borrowing the general consumption loans, is an indicator of the continued low living standards of the population.

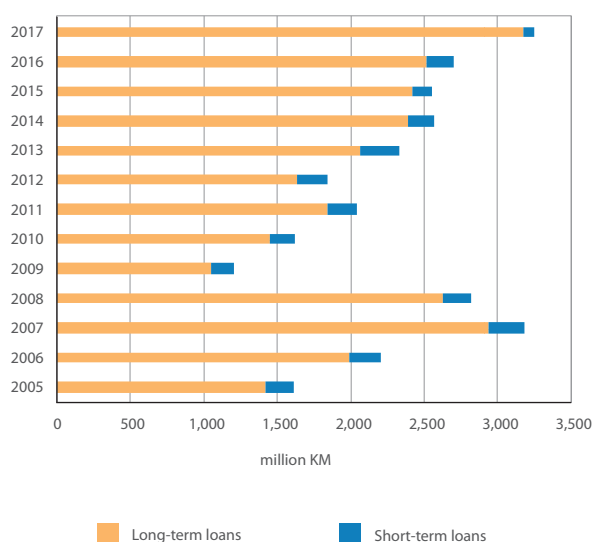
Although in the last two years, there has been a recovery in the real estate market, a large part of the citizens is unable to fulfill the required criteria for the approval of housing loans, and to a certain extent, the financing of housing needs is made by loans for general consumption or other sources of financing. However, the continued growing trend of general consumption loans primarily suggests that a large part of the citizens still finances the current living needs by the approved cards overdrafts or by non-specified purpose loans or consumer loans.

**Graph 4.3: Loans to Households by Purpose and Credit Growth**



In 2017, 3.18 billion new loans were approved to the population, which is their largest amount compared to the previous years. Since according to these records, the newly approved loans are also previously approved and rescheduled loans, the growth of these loans cannot be exclusively interpreted as a result of the increase in consumption of the households sector and of a slight improvement on the labor market conditions, but also of more intensive loans rescheduling under new conditions, i.e. approval of replacement loans. Compared to the previous year, in 2017, the population was approved or rescheduled by 20% more loans, with an increase exclusively in the case of long-term loans (Graph: 4.4).

Graph 4.4: Newly Approved Loans to Households



Source: CBBH

**In the currency structure of household loans, loans with euro currency clause are dominant. Taking into account the current regime of the Currency Board in BH and the commitment to maintain it in the upcoming**

**period, the households indebtedness in EUR currency does not make higher the exposure to currency risk.**

In addition, in recent years, there has been a noticeable downward trend of the share of foreign currency loans and indexed loans against total household loans, which further reduces this risk. According to the CRC data, at the end of 2017, foreign currencies loans to households and loans with a currency clause made up to 56.9% of the total loans to households, of which the largest portion relates to the euro indexed loans. The indebtedness of the population by CHF indexed loans decreased from 5.5% in 2013 to 1.1% of total loans to households at the end of 2017 (Graph: 4.5). Compared to the end of 2016, the KM indebtedness of households increased by 15.8%, while, after decreasing in the previous year, the indebtedness of EUR loans and the EUR currency clause loans recorded a growth of 2.9%. Analysing the maturity structure, the households are mostly indebted by the loans with the contracted maturity over ten years, then follow the loans with five to ten years maturity. In 2017, the growth of long-term loans to households was recorded for all categories of maturity, out of which the loans, approved for a period longer than ten years had the largest credit growth, while the indebtedness of the households by short-term loans decreased by 6.7%. (Table 4.3).

Table 4.3: Loans to Households, Maturity and Currency Structure

| Remaining debt and due unpaid principal, KM thousand |           |               |  |               |        |               |           |               |
|--|-----------|---------------|--|---------------|--------|---------------|-----------|---------------|
| Maturity/currency                                    | BAM       |               | Foreign currency loans and indexed loans |               |        |               | TOTAL     |               |
|  |           |               | EUR                                      |               | CHF    |               |           |               |
|  | 2017      | Annual change | 2017                                     | Annual change | 2017   | Annual change | 2017      | Annual change |
| up to 1 year   | 66,922    | -6.2%         | 4,354                                    | -13.3%        | 0      | 0.0%          | 71,276    | -6.7%         |
| 1 - 3 years  | 225,236   | 19.1%         | 120,419                                  | -15.7%        | 8,491  | -32.0%        | 354,146   | 2.8%          |
| 3 - 5 years  | 475,518   | 30.1%         | 345,987                                  | -13.5%        | 31,418 | -23.3%        | 852,923   | 5.8%          |
| 5 - 10 years   | 1,272,032 | 16.2%         | 1,676,677                                | 1.1%          | 30,558 | -31.4%        | 2,979,268 | 6.5%          |
| over 10 years  | 1,339,746 | 12.0%         | 2,226,993                                | 9.0%          | 17,225 | -49.0%        | 3,583,963 | 9.5%          |
| TOTAL  | 3,379,454 | 15.8%         | 4,374,430                                | 2.9%          | 87,692 | -33.5%        | 7,841,575 | 7.4%          |

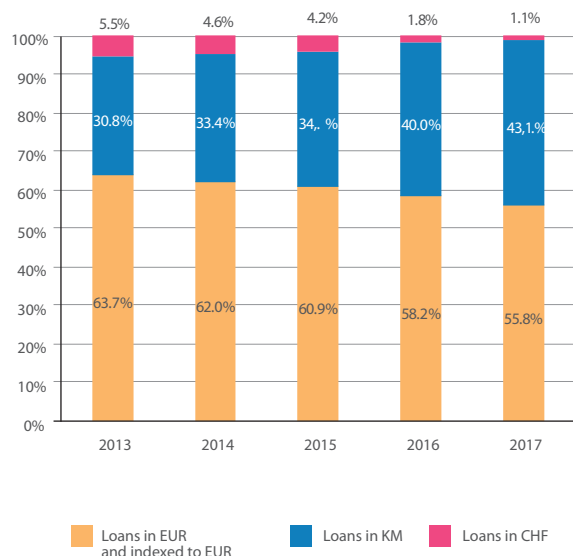
Source: CRC

**The level of non-performing loans to households continued to decrease in 2017.** Non-performing loans in absolute terms registered a decrease of 6.7%, and the share of non-performing loans in total loans to households continued to decline for five consecutive years, contributing to the growth of loans placement to households. At the end of 2017, the share of non-performing loans in total households loans amounted to 7.5%, which is 1.1 percentage points lower than in the same period last year (Graph: 4.6). Although the quality of the loan portfolio in this sector continued to improve, it is still not possible to conclude that these improvements are

caused by the improved living standards of the citizens, but they are largely the consequence of the activities carried out by banks, such as the permanent write-off of non-performing loans in individual banks. More efficient credit risk management in banks over the past several years and facilitating the loans repayment in the forms of the rescheduling and moratoriums of clients credit liabilities, who have faced difficulties in repaying their credit liabilities, have largely contributed to preventing deterioration in the quality of the loan portfolio in the households sector.

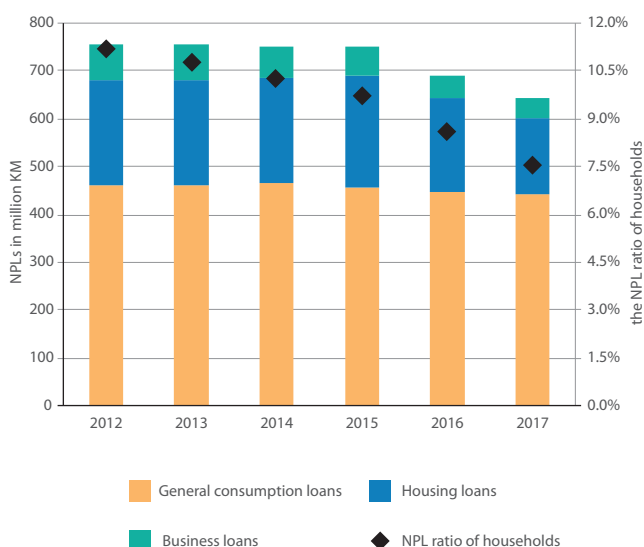


Graph 4.5: The Currency Structure of Loans to Households



Source: CRC

Graph 4.6: Non-performing Loans in the Household Sector by Purpose

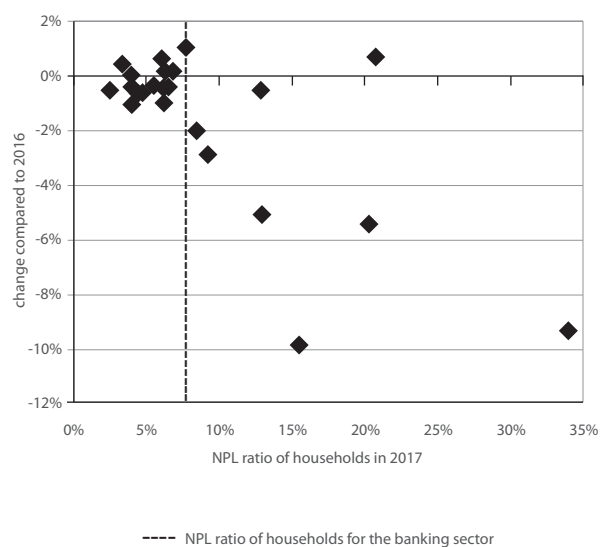


Source: FBA and BARS, CBBH calculation

Analysing per individual bank the quality of the loan portfolio in the households segment, it is evident that the share of non-performing loans in total households loans in 2017 decreased with most banks in the sector, including banks with the highest concentration of non-performing loans, with the exception of one of them. It is evident that, at the end of 2017, most of the banks in the system have the share of non-performing loans in total household loans below the

average of the banking sector (between 2.5% and 6.8%). This concentration of non-performing loans by banks indicates that the problem of non-performing loans over the years accumulated predominantly in a small number of banks that granted loans to risky groups of citizens, without an adequate assessment of their creditworthiness, and that the economic crisis is not the sole reason for the growth of credit risk in the segment of households in the past years. Among the banks with poorer quality indicators of the loan portfolio than the banking sector average, there are especially singled out three banks with more than one fifth of loans to households classified as non-performing loans, and in one of them, the quality of the portfolio continued to deteriorate in 2017, as well. The Graph: 4.7 features also several banks with significant changes in the performance of the loan portfolio compared to the previous year. The largest decrease of non-performing loans in total loans is recorded in four banks, which in the past period implemented a more detailed reorganization of the business operations, with the write-off of one part of non-performing loans. Nevertheless, these banks still have a high level of non-performing loans.

Graph 4.7: NPL Ratio of Households, by Banks



Source: FBA and BARS, CBBH calculation

Non-performing loans, as well as their share in total loans in 2017, recorded a decrease in all categories of loans by purpose. As in the previous year, non-performing loans decreased mostly in the category of housing loans, and this decrease was largely caused by the activities that two banks conducted as part of the reorganization of their

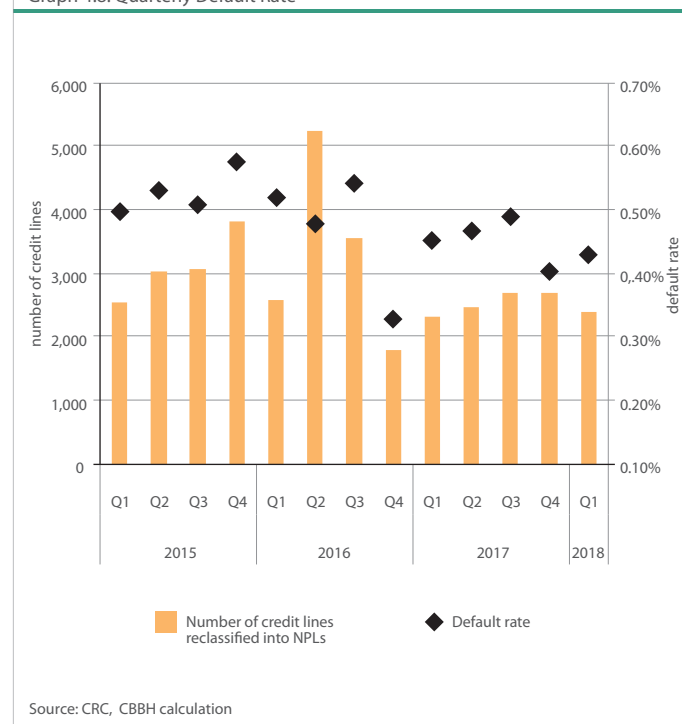
operations. The share of non-performing loans in total loans for housing purposes amounted to 9.9% at the end of 2017 and it decreased by 2.5 percentage points compared to the end of the previous year. Despite the higher reduction of this indicator in housing loans, the share of non-performing loans in total loans is 3.3 percentage points higher than in the case of loans intended for general consumption. Nevertheless, in the period of the economic crisis, the greatest consequences were felt in the regularity of repayment of loans granted to households for their business activities, which, despite the reduction of non-performing loans, their share accounted for 16.8% of total loans allocated for business activities.

In addition to the indicators of the share of non-performing loans in total loans, the deterioration intensity of the repayment regularity, i.e. the reclassification of loans from the performing category to non-performing loans, is monitored quarterly both by the number of credit sub-accounts and by the default rate, which is calculated according to the amount of outstanding debt<sup>8</sup>. According to the CRC data, the number of credit sub-accounts that were reclassified to non-performing loans, from the end of 2016 to the end of 2017, indicates a somewhat lower intensity of the deterioration in the quality of the loan portfolio in the households sector, given that it is by 13.8% less than the number of loans that became non-performing ones in the previous year. However, the default rate for household loans, which stood at 1.36% in 2017, did not change significantly compared to the previous year<sup>9</sup>, and due to the deterioration of the repayment regularity of the loans with larger amounts of outstanding debt, one cannot conclude that the risk has decreased to a greater extent.

Considering the default rate on a quarterly basis, on average, it is lower in comparison to the previous two years, and the number of credit sub-accounts that were reclassified to non-performing loans per quarters did not record higher inter-quarter deviations in 2017, which were recorded in previous years. Since the beginning of 2017, the largest number of credit sub-accounts, reclassified as non-performing ones, was recorded in the fourth quarter, although in that period, the default rate was the lowest, due to smaller amounts of outstanding debt from the loans that became non-performing. Even in the first quarter of 2018, no major changes were noted as regards the deterioration of the regular repayment of loans from a group of well performing clients. The default rate was somewhat higher than in the previous quarter, but lower than the quarterly average in 2017, while a smaller number of

credit sub-accounts was reclassified to non-performing loans compared to the previous three quarters (Graph: 4.8).

Graph 4.8: Quarterly Default Rate



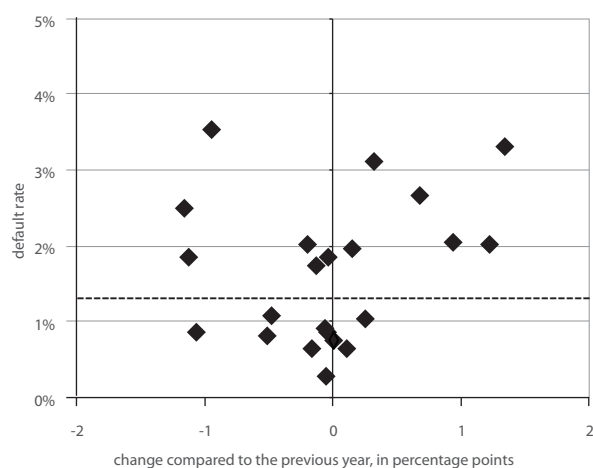
Analysing the default rate by banks, most banks have lower default rate compared to the previous year, and a slight improvement is evident because of the decrease in the number of banks in which the default rate rose, in comparison with the previous year. In 2017, the default rate in eight banks was higher than in the previous year, six of which had a higher default rate than the average rate in the banking sector. In banks that in the last year were singled out with the significant volume of the reclassification of households loans to non-performing loans, also in 2017, the default rate was higher than the average default rate in the banking sector. In banks that had the highest default rate in the previous year, the intensity of deterioration in households loans performance was also higher in 2017, compared to the average of the banking sector (Graph: 4.9).

<sup>8</sup>The default rate is calculated as the ratio of outstanding debt from households loans, reclassified to non-performing loans (categories C, D and E) over one period, and of the value of total performing loans portfolio (categories A and B) from the previous period.

<sup>9</sup>Although the default rate in 2017 is higher by only one basic point in comparison to the previous year, it should be kept in mind that in 2016 it was not possible to include in the calculation the data for banks with the status changes of merging, which caused the change of the number of contracts by which the credit sub-accounts are analysed.

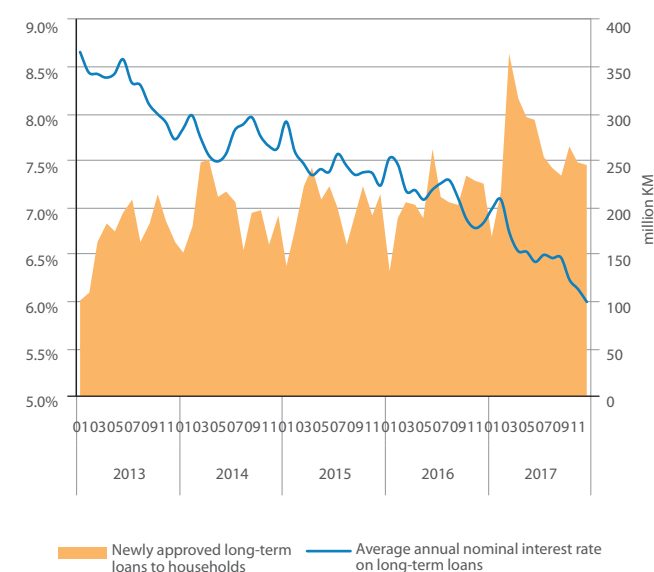


Graph 4.9: Default Rate by Banks in 2017



Source: CRC, CBBH calculation

Graph 4.10: Newly Approved Long-term Loans and Average Weighted Interest Rates

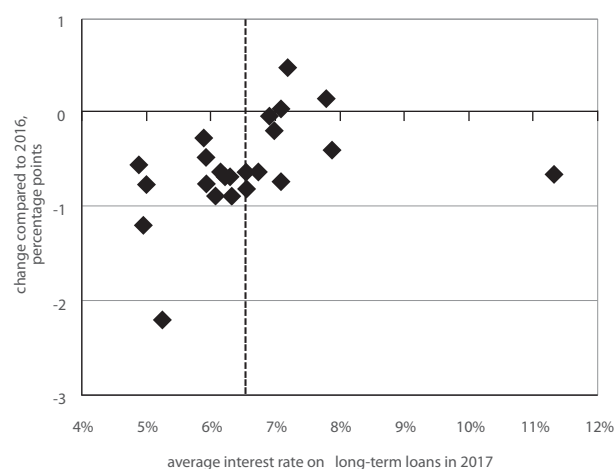


Source: CBBH, CBBH calculation

**As a result of interest rates declining on international financial markets and banks' efforts to achieve a higher market share in conditions of emphasized competition in the banking market, interest rates on household loans continued to decline in 2017, even at a faster pace than it was the case in the previous year** (Graph: 4.10). The average nominal interest rate on long-term loans amounted to 6.51% in 2017 and it was lower by 63 basis points compared to the previous year. Slightly more favorable conditions of lending to the households partly contributed to the growth of demand on loans. According to the CBBH data, in 2017, 26.3% more new long-term loans were approved to the households, but it should be emphasized that in addition to new loans, the already approved loans, with the performed rescheduling, are incorporated in these records.

The average weighted interest rate on newly approved long-term households loans in 2017 ranged from 4.9% to 7.9% with most banks and with only one bank this rate was out of the a.m. range and it amounted to 11.3%. Given that the period of low interest rates on international financial markets continued, most of the banks in BH were able to continue to conduct a policy of lower interest rates. The growth of the average interest rate on long-term loans occurred in only three banks in the system (Graph: 4.11).

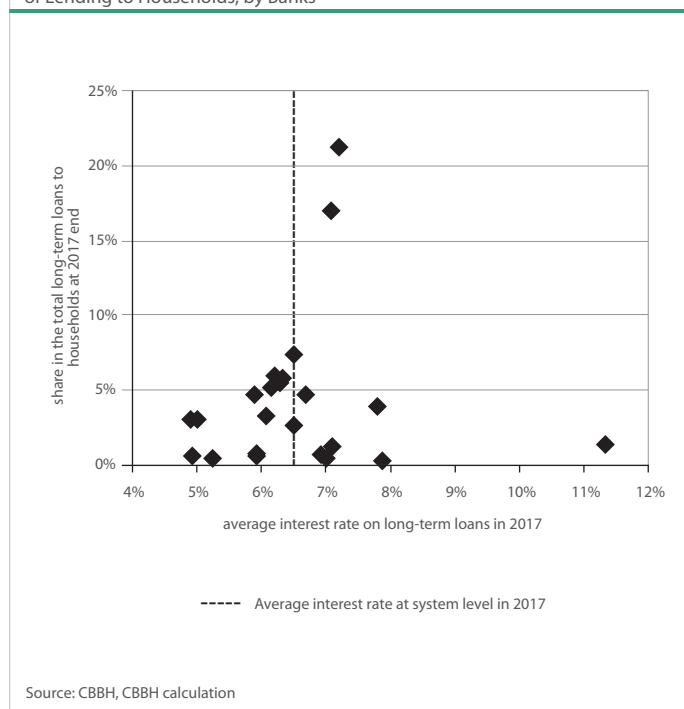
Graph 4.11: Average Interest Rates on Long-term Loans to Households Approved in 2017, by Banks



Source: CBBH, CBBH calculation

The average interest rates on long-term loans in most banks do not deviate significantly from the average interest rate at the banking sector level. A larger deviation is recorded in the case of one, but rather smaller bank (Graph: 4.12), where interest rates are higher than the interest rates of other banks in the sector, which is the consequence of a different business model compared to other banks and somehow harder access to more favorable resources of funding from abroad. Over - one - percentage point decrease of the average interest rate was recorded with two banks, one of which, in the previous period, was directed towards a change in the business strategy, while in the second bank, the reduction of interest rates was most likely a consequence of the efforts to have the growth of placements in the households sector, which significantly affected the credit growth in this bank. The banks significantly singled out by their lower interest rates level than the banking sector average interest rate continued with the policy of lower interest rates in 2017 and they further reduced them in comparison to the previous year, in an effort to improve their competitive position and increase the market share in the households lending segment.

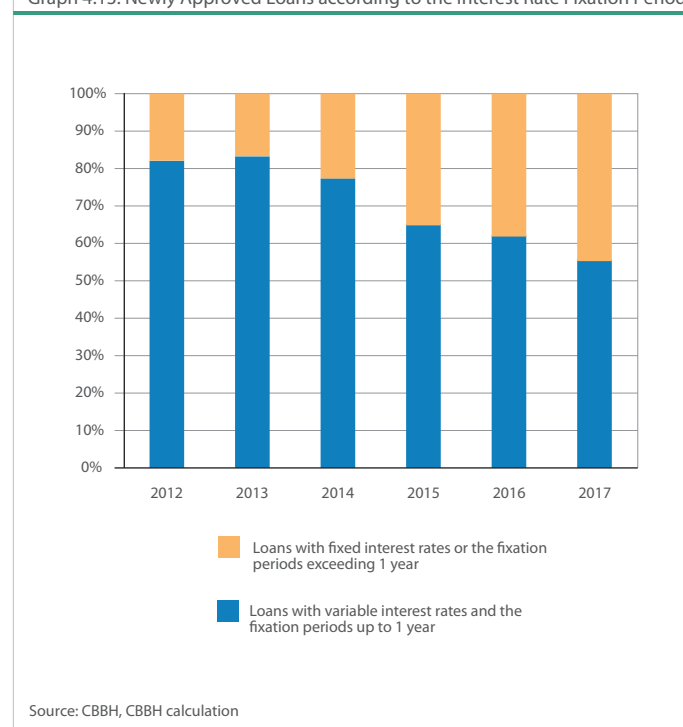
Graph 4.12: Interest Rates on Newly Approved Long-term Loans by the Scope of Lending to Households, by Banks



The trend of decreasing the lending interest rates continued in 2018, so the average interest rate on long-term loans for the first three months of 2018 was 6%. Although the interest rates had the declining trend at the beginning of 2018, and their growth is not expected to occur by the end of the year, the interest rates could increase in the coming years, under the influence of future changes of monetary policy in the euro area. If banks in BH do not reduce margins, the growth of interest rates in euro area in the coming period

could affect the costs of the households financing. Considering that household loans approved with a variable interest rate or with interest rate fixed period of up to one year are prevailing, we can conclude that the households' exposure to the risk of changing interest rates should not be neglected. Considering that the stronger increase of the households available income is uncertain, even a slight increase of interest rates would represent a significant burden for a part of households and would make the credit liabilities' repayment difficult. Although interest rate risk is becoming more important in the period when interest rate growth can be expected at international markets, it has been partially mitigated in the BH banking sector in the last years, by increasing the volume of lending at a fixed interest rate or by extending the period of interest rate fixation. Also, when rescheduling the previously approved loans, contracts with more favorable terms for the client are often concluded, including the fixing of an interest rate that was variable until that moment. The downward trend of the share of loans with a variable interest rate or with the up-to-one year fixation period in newly approved households loans has been evident since 2014, and in 2017 it accounted for 55.6% of total newly approved loans to households (Graph: 4.13).

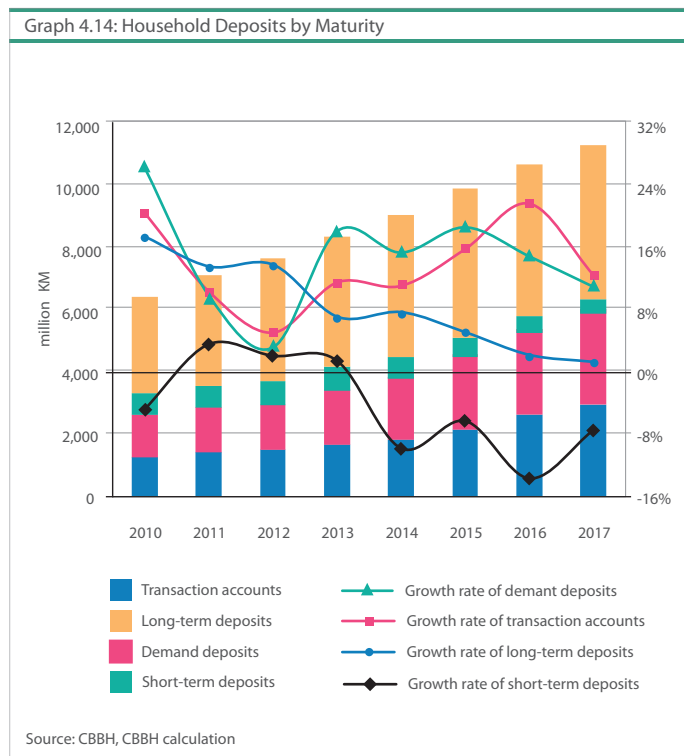
Graph 4.13: Newly Approved Loans according to the Interest Rate Fixation Period



**Although households deposits continued to grow in 2017, too, their growth was significantly slowed down compared to previous periods.** According to the CBBH data, households deposits reached the amount of KM 11.27 billion at the end of the year, which is by 5.7% more than the amount of households deposits at the end of 2016. Households deposits in absolute amount, as in previous years, made the largest

contribution to the growth of total deposits in the banking sector. Nevertheless, the growth rate of households deposits is the lowest since 2009, and due to the significant increase in government deposits and non-financial private companies deposits in 2017, the share of households deposits in total deposits in the banking sector declined by 2.8 percentage points compared to the end of the previous year (Graph: 4.14). In particular, the annual growth rate of term households deposits is low. While short-term households deposits have recorded the negative growth rate for four consecutive years, the long-term deposits grew at an annual rate of only 0.92% in 2017, being the lowest growth rate in the last 10 years.

Graph 4.14: Household Deposits by Maturity



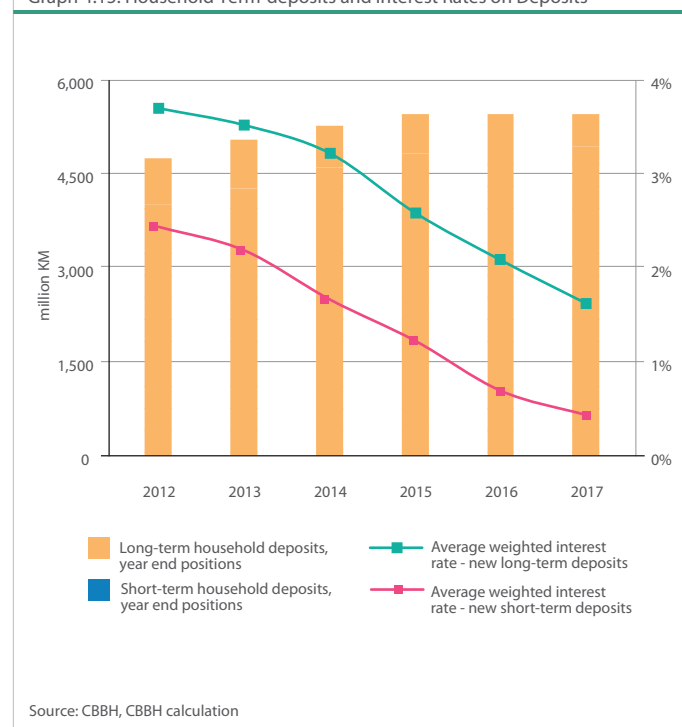
The growth of total households deposits cannot be interpreted as an indication of a better living standard, and the data on high unemployment rate and a low level of average salary in BH indicate that most of the population is not able to save. In addition, a part of the savings in banks is the result of uncertainty about future economic conditions in the country, as well as, the lack of confidence in alternative forms of savings. In support of the fact that a smaller part of the citizens has the possibility to save, and especially to save a significant amount of funds, we have available the data of the Deposit Insurance Agency (DIA), illustrating that deposits exceeding the insured saving deposit amount of KM 50 thousand, which make for almost half of the total amount of households deposits, are actually located at the small number of deposit accounts<sup>10</sup>, and also the fact that

these deposits recorded higher relative growth both in terms of the number of the deposit accounts and in terms of the deposits' amount. Also, the average amount of funds per one deposit account indicates that in the category of up-to-KM 50 thousand households deposits, the deposit accounts with smaller amounts are prevailing, because all current accounts of citizens are also included here<sup>11</sup>.

The growth of funds on transaction accounts (12.5%), as well as, the growth of demand deposits (10.8%) have contributed mostly to the growth of total household deposits. This is mainly the consequence of the fall in deposit interest rates, which leads to the loss of the citizens interest to put on fix term deposit their available funds, and thus, they keep them on transaction accounts or as demand deposits.

Under the influence of low interest rates on international financial markets, the deposit interest rates in 2017 maintained a declining trend. The average weighted interest rate on household deposits with contracted maturity (term deposits) amounted to 1.42% in 2017 and it is lower by 42 basis points than in the previous year, while the average weighted interest rates on long-term and short-term households deposits are lower by 46, or by 26 basis points (Graph: 4.15). The downward trend of deposit interest rates continued in 2018, and in the first three months of 2018, the average weighted interest rate on new deposits was 1.18%.

Graph 4.15: Household Term-deposits and Interest Rates on Deposits



<sup>10</sup>At the end of 2017, the deposits amounting to over KM 50 thousand constitute 49.2% of the total amount of households deposits, and they are located at only 1.5% of deposit accounts.

<sup>11</sup>The average amount of funds on the deposit account in the category of up - to - KM 50 thousand deposits was KM 2,126 at the end of 2017.

## 5. Corporates

*Gradual recovery of credit activity and continuation of the downward trend in credit risk are the main features of 2017 in the corporate sector. The growth in economic activity, recorded in almost all industries, has positively reflected on the strengthening of credit demand by the corporate sector. In addition, historically low interest rates have further supported the recovery of credit activity in this sector. Although there is still a relatively high share of non-performing loans in total corporate sector loans, in 2017, in all areas of economic activity, there was a decrease in non-performing loans. In the financing of its business activities, the corporate sector continued to rely heavily on credit support from banks in 2017, while indebtedness towards foreign creditors decreased.*

**The volume of foreign trade in 2017 recorded a significant increase, and in comparison with the previous year, there was an increase in the value of imports and exports, where the growth of exports was more intense.**

The growth rate of exports in 2017 was 17.4%, while imports grew at a rate of 12.2%. The value of goods exports in 2017 increased by KM 1.64 billion compared to the previous year, and the growth was mostly driven by economic recovery and demand in the EU and CEFTA countries. All main groups of export products recorded an increase in the nominal value of exports. With some product groups, the increase in the nominal value of exports was the result of an increase in the exported quantities, while with the other, the price effect had a significant impact. The most important export product is still Basic metals, i.e. iron, steel, aluminum and their products. In this category of products, the export growth rate was 26.7%, in 2017, and the growth in the value of exports was recorded in all three main groups of products (Iron and steel, Iron and steel products, Aluminum and aluminum products) within this category. In addition, in the Iron and steel group, the growth of the value of exports is solely the result of higher prices and favorable price movements in international markets. In the other two groups of products, the increase in the nominal value of exports is the result of primarily larger export volumes, and partly of the increase in export prices. The group Mineral fuels, mineral oils and products of their distillation; electricity; bituminous substances; mineral wax also recorded a strong growth in the nominal value of exports by 43.5%, mainly due to an increase in the exports price, especially in the last quarter, of mineral fuels and electricity, as the main export products in this group.

The growth of wood industry exports in BH continued in 2017, too. In the group Wood and wood products, the growth of the exports nominal value of 7.6%, was almost equally influenced by the increase in export prices and an increase in export volumes. In the case of products belonging to the group Miscellaneous products (Furniture: mattress supports, bedding and similar furnishings; lamps and lighting fittings, not elsewhere specified or included; illuminated signs, illuminated name-plates; prefabricated buildings) the increased export is exclusively a consequence of the increased volume of exported goods, while the price effect had a negative contribution to the growth of exports value. High exports growth rate (24.1%) was also recorded in the category Products of chemical and related industries (primarily influenced by the strong growth of Inorganic chemicals; organic and inorganic compounds of precious metals, of rare-earth metals, of radioactive elements and of isotopes due to the positive price effect, but also due to the increase in exported quantities. In the group of products Machines, apparatus and mechanical devices, boilers and their parts, as in the previous year, the increase in exports is primarily the result of an increase in the exported quantity, although the price developments also contributed slightly to the increase in the value of exports. Products of the group Electrical machines and equipment and their parts; sound recording or reproducing apparatus, televisions for recording or reproducing images and sound, and parts and accessories for these products had the increase in exports as the result of an increase in export prices, although the effect of the quantity also partially influenced the increase in the value of exports in this product group.

The performed value of imports in 2017 amounted to KM 18,1 billion, i.e. KM 1,97 billion higher than in the previous year. As in the case of exports, all the main groups of imported products showed an increase in the nominal import value. The increase in imports is partly due to the increased consumption and demand for imported goods, as well as due to inflationary pressures and rising prices on the import markets. In the category with the highest nominal value of imports, i.e. *Mineral Fuels, Mineral Oils and Products of Their Distillation; Electricity; Bituminous Substances; Mineral Waxes*, the growth of import value was primarily the result of the price effect, i.e. the oil price rise in the world market. In the *Base Metals* category, the growth of import value was a result of the strong growth in imports of *Aluminium and Aluminium Products*,

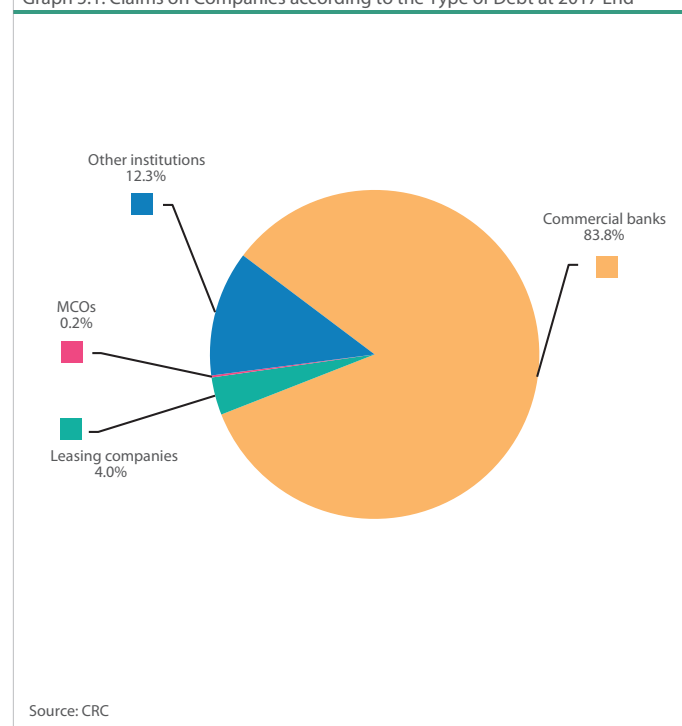
with a simultaneous drop in import prices. In the other two groups of products (*Iron and Steel, Products of Iron and Steel*) in this category, there was an increase in import volumes as well as import prices. The value of imports of *Food Products* grew at approximately the same rate as in the previous year (3.1%), with deflationary pressures still present in one group of imported products in this category (*Beverages, Alcohol and Vinegar*). In the category of *Machinery, Appliances, Mechanical and Electrical Equipment*, the growth of imports is primarily determined by the growth of imported quantities, while in the category of *Chemical Industry and Related Industries*, the rise in value of imports was to a greater extent influenced by price trends. Table A4 – Statistical Appendix shows the most significant groups of export and import products, i.e. group with the largest share in the foreign trade, and the estimated price effects and effects of changes in the volume of exported and imported goods on the value of exports and imports involving the most significant commodities, as compared to 2016.

**The recovery of economic and commercial activities during 2017, and the increase in gross value added in almost all economic sectors, reflected also on the strengthening of credit activity in the corporate sector.**

High growth rates of gross value added (over 5%) during 2017 are registered as R (*Arts, Entertainment and Recreation*), S (*Other Services*), G (*Wholesale and Retail*) and C (*Manufacturing Industry*). In addition, a significant increase in gross value added (between 3% and 5%) was recorded in activities B (*Mining and Quarrying*), K (*Finance and Insurance Activities*), Q (*Health Care and Social Care*) and H (*Transportation and Warehousing*). Negative growth rate was recorded only in the activities D (*Electricity, Gas, Steam Production and Supply and Air Conditioning*), M (*Professional, Scientific and Technical Activities*), A (*Agriculture, Forestry, Fishing*) and L (*Real Estate Activities*). The growth of economic and commercial activity in most of the economic industries was also supported by stronger credit activity of banks towards companies operating in these industries. According to CRC data, the total indebtedness of the company sector to all groups of financial intermediaries amounted to KM 12.1 billion, i.e. the increase of 2.6% over the previous year. Measured by the share in GDP, the total indebtedness of companies to all financial intermediaries made 38.3% of GDP, which is lower compared to the end of the previous year (39.4%). This reduction was solely the consequence of faster growth of the GDP nominal value relative to the increase of the total indebtedness of companies, rather than the deleveraging of the corporate sector. The corporate sector's indebtedness

can, to a large extent, be regarded as indebtedness to the banking sector, since it is the primary and practically the only source of financing of the corporate sector on the domestic financial market of domestic credit institutions or banks. The share of the banking sector in total corporate debt makes 83.8% of corporate debt to all financial intermediaries in BH (Graph 5.1). Compared to the previous year, the share of banks in total corporate debt increased by 2.2 percentage points. In the non-banking financial intermediaries group, leasing companies and other non-banking financial institutions have the largest share, with the leasing companies' participation being reduced due to the merger of a leasing company to the bank.

Graph 5.1: Claims on Companies according to the Type of Debt at 2017 End



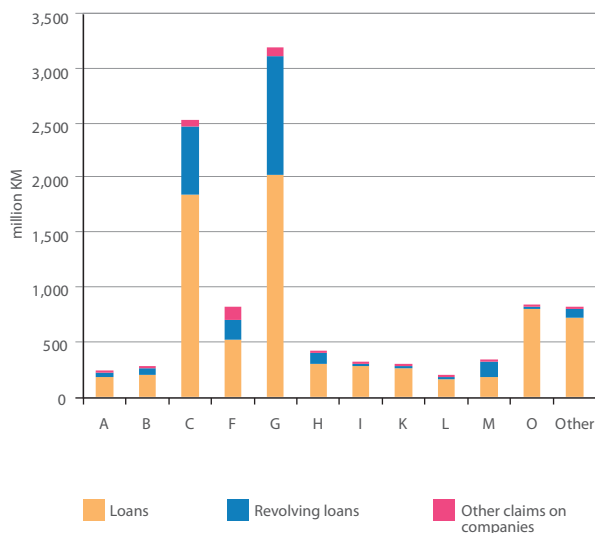
The total corporate sector debt to banks in BH amounts to KM 10.1 billion or 32.1% of GDP. In the structure of bank receivables from companies, the claims related to standard and revolving loans make the most significant part of total receivables, while claims on guarantees, letters of credit and factoring make an insignificant portion of total receivables and have no systemic importance (Graph 5.2).

Observed by economic activities, the banking sector exposure in BH is the largest for companies in the *Manufacturing Industry and Trade*, i.e. activities with the largest share in generating gross value added. The banking sector's receivables from these two activities accounted for 56.8% of total receivables. Compared to the previous year, the share of Trade in total bank receivables dropped by 1 percentage



point, while the share of *Manufacturing* increased by 0.7 percentage points. Significant increase in the share of certain activities in total bank receivables compared to the previous year was recorded in the following activities: *Electricity, Gas, Steam Production and Supply and Air Conditioning; Financial and Insurance Activities; Information and Communication; Construction*, while decrease of share was recorded in the activities: *Public Administration and Defence, Compulsory Social Insurance; Professional, Scientific and Technical Activities, and Agriculture, Forestry, Fishing*. Other activities did not show any major changes compared to the previous year. Table A5 - Statistical Appendix shows the indebtedness of all economic activities in the corporate sector, presented by types of bank receivables.

Graph 5.2: Claims on Companies according to the Type and Activity



Source: CRC

#### Legend:

A - Agriculture, Forestry, Fishing

B - Mining and Quarrying

C - Manufacturing Industry

F - Construction

G - Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles

H - Transportation and Warehousing

I - Accommodation and Food Service Activities

K - Financial and Insurance Activities

L - Real Estate Activities

M - Professional, Scientific and Technical Activities

O - Public Administration and Defence;

Compulsory Social Insurance

OTHER:

D - Electricity, Gas, Steam Production and Supply and Air Conditioning

E - Water Supply; Sewerage, Waste Management and Environment

Remediation Activities

J - Information and Communication

N - Administrative and Support Service Activities

P - Education

Q - Health Care and Social Care Activities

R - Arts, Entertainment and Recreation

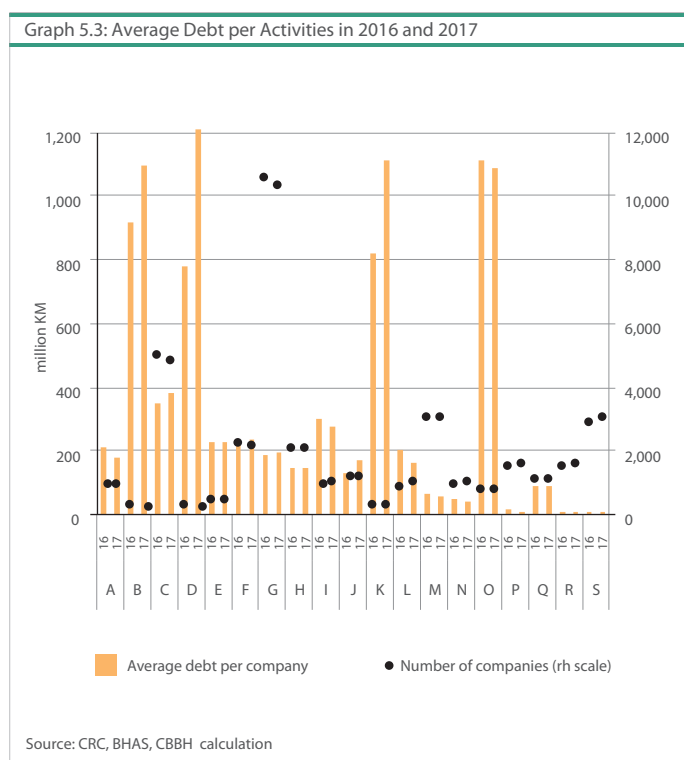
S - Other Service Activities

#### In 2017, an increase in corporate sector indebtedness was recorded on the basis of standard loans.

The remaining debt related to standard loans in the corporate sector at the end of 2017 amounted to KM 7.43 billion, i.e. an increase of KM 250.3 million (3.5%) compared to the previous year. Observed by economic activities, the largest contribution to the growth of debt related to standard loans came from the *Manufacturing Industry; Electricity, Gas, Steam Production and Supply and Air Conditioning; Financial and Insurance Activities; Information and Communication, and Mining*. Standard loans in these activities recorded a growth of 13.9% compared to the previous year. High growth rates for the remaining debts related to standard loans were recorded in the activities that had at the same time a significant increase in the gross value added. Thus, with the growth of industrial production and the intensive growth of gross value added in the *Manufacturing Industry* in 2017, the growth of remaining debt based on standard loans was 7.7%. It was similar in the *Mining industry*, where a very dynamic growth of production was followed by stronger credit support of banks, and the growth of corporate indebtedness of this industry was 7.6%. The decrease in gross value added in 2017 in *Electricity, Gas, Steam Production and Supply and Air Conditioning* did not reflect on the financial support of domestic credit institutions to the companies operating in this industry. On the contrary, the largest growth rate of the remaining debt based on standard loans was recorded in this activity. However, most of the funds granted to the companies in this area during 2017 had a long-term character and required no annuity repayments, suggesting that banks make greater emphasis on long-term trends rather than current business indicators when deciding on the amount of financial support to companies operating in this industry. In addition, significant growth rates were recorded in *Financial Intermediation* (35.8%) and *Information and Communication* (29.3%). The banking sector exposure to the activities of *Hotels and Catering and Transportation and Warehousing* in 2017 was further increased by 2.9% and 1.3%, respectively. There was no significant indebtedness growth (0.1%) in *Trade*, which has the highest share of total remaining debt from standard loans in the corporate sector, while a strong growth in the gross value added was recorded. Since the activity of *Construction* in 2017 did not achieve a significant increase in gross value added, the indebtedness of companies in this industry stagnated. In all other activities, there was a decrease in the remaining debt based on standard loans. The largest



decrease in indebtedness in the absolute amount of KM 32.5 million was recorded in the area of *Professional, Scientific and Technical Activities*, whereby the previous years' deleveraging trend continued. At the same time, this activity also recorded a negative growth rate for the gross value added. The negative growth rate of gross value added in the area of *Agriculture* is also likely to have had an impact on the reduction of banking sector exposure to companies operating in this industry as well. In relation to the average indebtedness of companies by economic activity, the *Mining industry* continued the trend of increasing average indebtedness in 2017, due to the increase in the total remaining debt as well as the lower number of registered companies in this industry. Significant increase in average indebtedness was also recorded in the area of *Financial Activities and Insurance Activities*, which was solely a consequence of higher amount of debt, as well as in the area of *Electricity, Gas, Steam Production and Supply and Air Conditioning*, where the debt increase was recorded along with a smaller number of business entities. The largest drop in average indebtedness was recorded in the *Real Estate Business, Agriculture and Hotels and Catering*. In the first two activities, the decrease in average indebtedness was a result of a decrease in total indebtedness and an increase in the number of business entities. In the *Hotels* activity, the lower average indebtedness was solely the consequence of increased number of business entities. Graph 5.3 shows the average indebtedness per company and individual activity<sup>12</sup>.



**In 2017, there was also an increased demand of the corporate sector to finance working capital through revolving loans.** According to CRC data, in 2017, the increase of both the approved and the used amount of revolving loans was recorded. The indebtedness growth rate for revolving loans made 7.5%, while the total corporate sector debt in this loan category amounted to KM 2.35 billion. The growth of indebtedness on this basis was mostly due to the companies operating in *Trade, Manufacturing, Transport and Warehousing, and Financial Activities and Insurance Activities*. In *Trade*, the growth rate of indebtedness made 7.1%. Bearing in mind that the debt on the basis of standard loans stagnated, it implies that during 2017 the companies in this area had a higher need to finance the working capital rather than the fixed assets. In most of the activities where debt growth was recorded on the basis of revolving loans, the growth of standard loans was also noted, suggesting that the demand for loans in these activities is slowly recovering. Exceptions are companies in the group of *Professional, Scientific and Technical Activities*, where the larger amount of revolving loans used was accompanied by a significant decrease in debt based on standard loans. In *Agriculture*, with the reduction of debt based on standard loans, debt reduction was also recorded on the basis of revolving loans, while the decrease in the economic activity in this area in 2017 was also accompanied by a decreased credit activity. Significant reductions of the remaining debt on the basis of revolving loans were also recorded in the following activities: *Water Supply, Sewerage, Waste Management and Environmental Remedy; Mining; and Construction*, with recorded revolving loan debt reduction of 4.5%, 2.9% and 1.3% respectively.

**The debt of BH business entities toward foreign countries during 2017 was slightly reduced.** Some business entities in BH finance their business operations also through direct borrowing from abroad, while the year of 2017, according to preliminary data, recorded the phenomenon of their deleveraging to foreign creditors. According to the CBBH data, the indebtedness of business entities abroad, including financial intermediation, amounted to KM 7.77 billion at the end of 2017, which was KM 102.1 million (1.3%) less than in the previous year. When the financial intermediation activity is excluded, the debt of business entities amounted to KM 4.67 billion and was lower by 1.3% compared to the previous year. A detailed review of the non-government external debt according to NACE 2 Classification of Debtors' Activities is given in Table A8 - Statistical Appendix<sup>13</sup>. Observed by activities, the

<sup>12</sup>Data on the number of companies are provided by the BH Statistics Agency, namely from the *Unit of Statistical Register of Companies 30/06/2017*, and are related to the number of companies on 30 June 2016 and 30 June 2017.

<sup>13</sup>The data are the result of survey on foreign investments that the CBBH undertakes regularly on quarterly and annual basis. These data include only those business entities that, according to CBBH information, have the direct foreign investments of over KM 100,000 and microcredit organizations in BH.

most significant contribution to the deleveraging of domestic business entities abroad was recorded in the activities of: *Wholesale, Manufacture of Other Non-metallic Products and Architectural and Engineering Activities*. Significant growth of foreign debt during 2017 was recorded in the following activities: *Manufacture of Base Metals, Manufacture of Coke and Refined Oil Products, and Manufacture of Motor Vehicles, Trailers and Semi-trailers*.

**Due to the recovery of economic activity, lower lending costs and the reduction of credit risk, a higher amount of newly-approved credit placements was recorded in the non-financial corporate sector.** In 2017, commercial banks in BH granted KM 4.18 billion of standard loans to the non-financial corporate sector, which shows a growth of 17.6%, or an absolute increase of KM 625.2 million, compared to the previous year. This increase in the amount of newly-approved loans was the result of almost the same increase in the value of newly-approved short-term and long-term loans in 2017. At the same time, this was also the first year since 2012, in which, along with the growth of long-term, the growth of newly-approved short-term loans was recorded. In the year 2017, KM 2.52 billion of long-term loans was approved, i.e. KM 316.4 million (14.4%) more than in the previous year. At the same time, KM 1.67 billion short-term loans were also approved, showing the growth of KM 308.8 million (22.7%) compared to the previous year. The majority of banks in the system

recorded the growth of newly-approved placements, with the exception of nine banks with a lower volume of loans in 2017 compared to the previous year. Lower levels of placements in most banks in 2017 was caused by the decrease in long-term loan placements. The highest contribution to growth, as in the previous years, was provided by newly-approved long-term loans in the category of over EUR 1 million, which is 30.2% higher than in the previous year. Observed by the currency structure, 55.3% of loans in 2017 was placed in the domestic currency, i.e. KM 2.32 billion. This is mostly a result of changes in the structure of commercial banks' liabilities, where the share of foreign resources is reduced in favour of domestic currency sources.

**In the structure of standard loans in the corporate sector according to contracted maturity, long-term loans still prevailed with a share of 90.5%.** According to CRC data, in 2017 the loans with contracted maturity of over ten years continued to decline and so did the loans with contracted maturity of up to one year. The share of loans with contracted maturity of up to 1 year was 9.5%, i.e. lower by 1.2 percentage points or KM 61.9 million compared to 2016 (Table 5.1). This is

the only loan category, in terms of contracted maturity, with a recorded decrease of the remaining nominal debt compared to the previous year. In the structure of long-term loans, the loans with contracted maturity of 5 to 10 years (41.8%) still had the largest share, and as compared to the previous year their share was higher by 0.8 percentage points. As in the previous years, the loans with contracted maturity of over 10 years continued to decline, although in 2017 there was a slight increase in the absolute amount of this loan category.

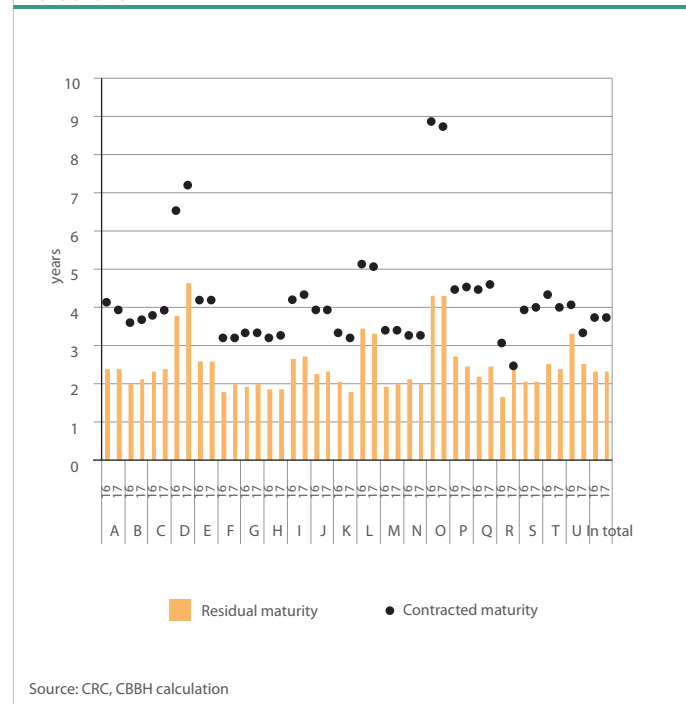
Table 5.1 : Loans to Corporates, Maturity and Currency Structure of the Remaining Debt

| Maturity      | Remaining debt and due unpaid principal |  |              |               |              |                  |
|---------------|---|--|--------------|---------------|--------------|------------------|
|               | BAM                                     | Foreign currency loans and indexed loans |              |               |              | TOTAL            |
|               |   | EUR                                      | CHF          | USD           | KWD          |                  |
| up to 1 year  | 467,299                                 | 145,727                                  | 0            | 89,570        | 0            | 702,596          |
| 1 to 3 years  | 534,586                                 | 564,223                                  | 0            | 0             | 2,199        | 1,101,007        |
| 3 to 5 years  | 521,478                                 | 842,227                                  | 622          | 0             | 507          | 1,364,834        |
| 5 to 10 years | 824,563                                 | 2,280,765                                | 264          | 0             | 1,162        | 3,106,754        |
| over 10 years | 286,838                                 | 865,077                                  | 997          | 551           | 47           | 1,153,510        |
| <b>TOTAL</b>  | <b>2,634,765</b>                        | <b>4,698,018</b>                         | <b>1,882</b> | <b>90,121</b> | <b>3,915</b> | <b>7,428,701</b> |

Source: CRC

The average contracted maturity of standard loans in 2017, according to CRC data, was 3.7 years, while the average maturity of loans at the end of 2017 was 2.3 years (Graph 5.4).

Graph 5.4: Contracted and Residual Maturities of Standard Loans per Activities in 2016 and 2017



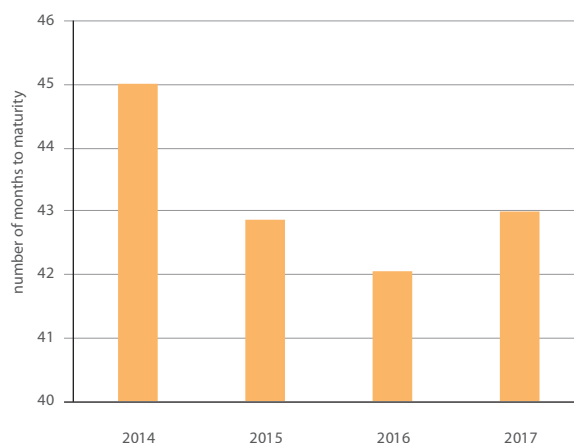
Compared to the previous year, the average maturity of standard loans in the corporate sector was extended. The contracted maturity of standard loans in 2017 was 0.04 years longer, and the residual maturity was 0.01 year longer. In terms

of the average maturity observed by economic activities, the longest contracted maturity as well as the residual maturity at the end of 2017 was recorded in the activities: *Production and Supply of Electricity, Gas, Steam and Air Conditioning and Public Administration and Defence, Compulsory Social Insurance*. The year of 2017, as compared to the previous year, recorded the largest extension of both the contracted and the average maturity in the *Production and Supply of Electricity*. In this activity, the contracted maturity was extended for 0.63 year and the residual maturity for 0.81 year. The most significant decrease in contracted and remaining maturities was recorded in the *Financial Intermediation (K)* and *Real Estate Business (L)*. In the Financial Intermediation, the contracted maturity was 0.14 year shorter and the residual maturity was 0.29 year shorter, while in the area of *Real Estate Business* both the contracted and the residual maturity were 0.12 year shorter. In *Agriculture*, the contracted maturity was reduced by 0.14 year, while the residual maturity did not change. In other activities there were no significant changes in average maturity. The average weighted maturity of loans<sup>14</sup> in the corporate sector, calculated by residual maturity at the end of 2017, amounted to 42.98 months, i.e. 9.3 months longer compared to the previous year. The weighted residual maturity is longer than the residual maturity, calculated as a simple average maturity for all loans, confirming the assumption that loans with a larger residual debt have longer residual maturities.

**In 2017, the currency structure of BH bank receivables from the corporate sector showed a higher share of domestic currency loans, and the exposure to currency risk was reduced as compared to the previous year.** Taking into account that most of the corporate sector debt was denominated in domestic currency and euro as the anchoring currency in the currency board arrangement, the currency risk in the present circumstances is not significant and could not cause major disturbances in BH business operations or significantly endanger the financial system stability. However, one should bear in mind, as already mentioned, that some companies directly borrow abroad, but as there are no data on the currency structure of this share of debt, the currency risk for this share of debt cannot be estimated. If this share of debt is to a large extent denominated in EUR currency, the exposure to currency risk should not have changed significantly. On the other hand, if a significant portion of debt is denominated in other currencies other than the EUR, then the currency risk in the corporate sector is underestimated. The largest share of corporate debt based on standard loans was still denominated in EUR, and by the end of 2017, 63.2% of

total bank receivables from the corporate sector were placed or indexed in EUR. Compared to the previous year, their share was reduced by 92 base points.

Graph 5.5: Average Maturity of Loans



Source: CRC, CBBH calculation

At the same time, the share of loans approved in domestic currency increased by 45 base points, and by the end of 2017 the remaining debt based on these loans accounted for 35.5% of the overall corporate sector indebtedness. The share of debt denominated in other currencies is almost negligible (below 1.3%) and cannot pose a serious threat to financial stability. The higher share of domestic currency loans was a consequence of a slight decrease of the remaining debt in the activities with significant exposure to the EUR currency as well as a more intensive loan placements in KM during 2017. Observed by maturity categories, maturity of up to 1 year still made the largest share of debt denominated in the domestic currency, while in all other maturity categories most of the debt was denominated in EUR. Observed by activities, the decrease of currency risk was recorded in the following sectors: *Agriculture; Water Supply, Sewerage, Waste Management and Environment Remediation activities; Hotel and Catering; and Professional, Scientific and Technical Activities*, all of which recorded an increase in the share of domestic currency loans in 2017. The increase in foreign currency exposure in relation to the previous year was recorded in the following activities: *Production and Supply of Electricity, Gas, Steam and Air Conditioning; Information and Communication; Financial*

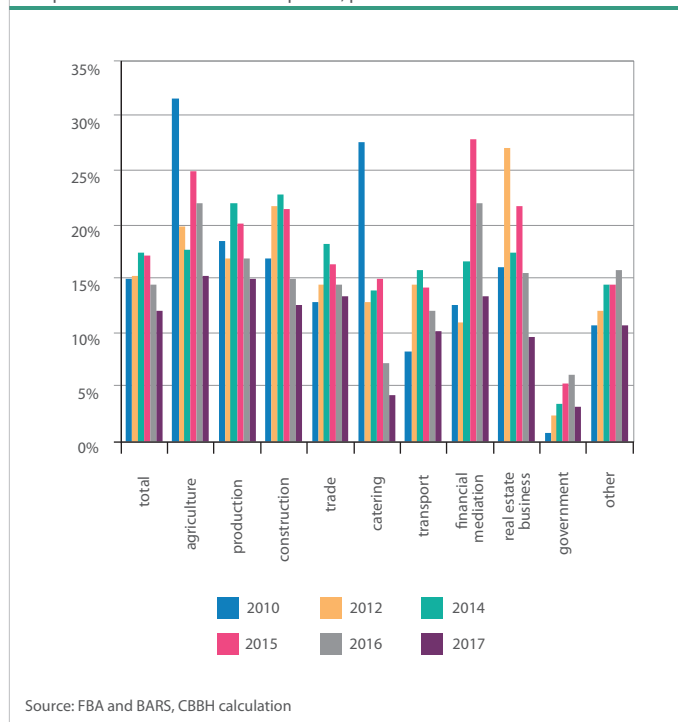
<sup>14</sup>The loan-related data submitted at the year-end by commercial banks to the Central Registry of Credits of CBBH were used in the calculation of average maturity. The average loan maturity at the end of each year is calculated as a weighted average of the residual maturity, when the remaining debt from each loan was used as a weight.

*Intermediation; Mining and Administrative and Support Services.* In other activities there were no significant changes in currency exposure. Table A.6 - Statistical Appendix shows the currency structure of debt by economic activity.

**The corporate sector credit risk was reduced in 2017, although banks' balance sheets still showed a relatively high level of non-performing loans in this sector.** The share of non-performing loans in total loans to the corporate sector at the end of 2017 was 12.3%. The last two years recorded a decreasing trend in the non-performing loans in the corporate sector, while the year of 2017 recorded a significant decrease in the share of non-performing loans by 2.3 percentage points compared to the previous year. In the nominal amount, non-performing loans decreased by KM 122.9 million. There are a number of factors that led to a reduction of non-performing loans in the corporate sector. The recovery of economic activity and favorable growth structure, i.e. the nominal increase in gross value added recorded in most economic activities, was one of the factors that caused the reduction of non-performing loans in the corporate sector. Also, the recovery of credit activity in the corporate sector as well as the lower interest rates led to a decrease in the share of non-performing loans in the corporate sector credit portfolio.

In addition, the individual activities of most banks in the market with regard to more efficient management of non-performing loans, i.e. activities aimed at more efficient collection, restructuring and partial write-offs, resulted in a lower value of non-performing loans at the end of 2017. As a consequence of the foregoing, most banks in the system recorded a lower credit risk associated with the corporate sector. Only six banks reported an increased share of non-performing loans in the total loans approved to the corporate sector; however, the strengthening of credit risk cannot be considered systemic. In terms of the credit portfolio quality by activities, all economic activity groups recorded a reduction of non-performing loans during 2017, both in nominal and percentage terms (Graph 5.6).

Graph 5.6: The NPL Ratio of Companies, per Activities

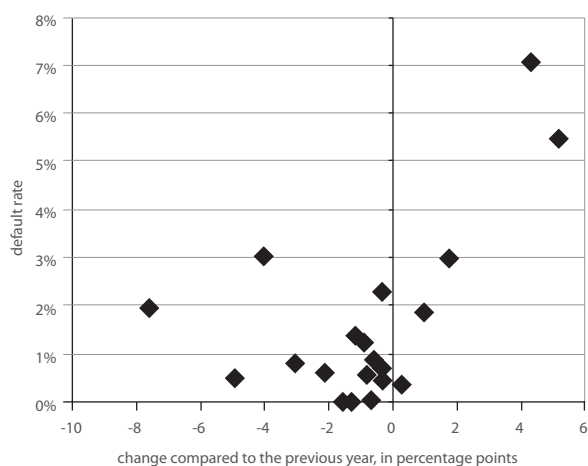


Although in 2017, the *Agriculture* recorded both nominal and real decline in gross value added, it did not reflect on the increase of credit risk in this activity, i.e. on the growth of non-performing loans. The ratio of non-performing loans to total loans decreased by 6.7 percentage points compared to the previous year, which, along with the *Financial Intermediation* (8.5%) and *Real Estate Business* (5.9%), amounted to the largest percentage decrease in the share of non-performing loans in the total corporate sector loans. Significant decrease in NPL shares (-2.7%) was also recorded in the *Construction*, although the real increase in gross value added in this activity was almost insignificant. In the sectors with largest contribution to the generation of gross value added, the *Trade and Manufacturing* also recorded a decline in the share of non-performing loans due to the growth of domestic spending and acceleration of economic activity and the growth of production. Since the high level of non-performing loans complicates the lending to the corporate sector, as it implies a reduced ability to repay debts and limits the banks' capital and operational capacity for credit placements, their further decrease creates prerequisites for further recovery of credit activity and the acceleration of commercial and economic growth.

**In addition to the lower share of non-performing loans in total loans, the corporate sector recorded a lower default rate in 2017 compared to the previous year.** At the banking system level, in the corporate sector, the default rate in 2017 was 1.28% or 1.1 percentage point less than in the previous year. The rate ranged from almost insignificant, i.e. 0.003%, to the maximum of 7.1%. The majority of banks in

the system had a lower default rate compared to the previous year, with the exception of five banks that had a higher default rate in 2017. In two banks, the higher default rate also affected the increase in the share of NPL in total loans, while in the other three banks the increased default rate did not result in the increase of non-performing loans.

Graph 5.7: Default Rate by Banks in 2017

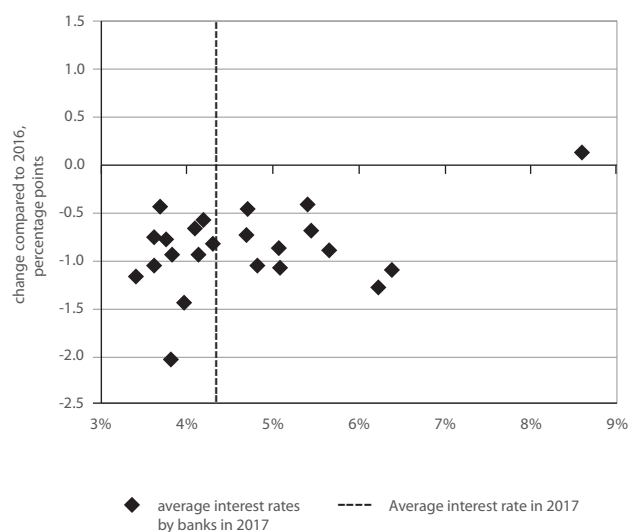


Source: CRC, CBBH calculation

**The downward interest rate trend on newly-approved loans in the non-financial corporate sector continued throughout 2017.** According to the CBBH data, the price of financing non-financial companies on the domestic banking market during 2017 was 4.39% on average. Compared with the end of 2016, the average weighted interest rate in the non-financial corporate sector during 2017 was lower by 79 base points. With the exception of one bank, all others in the system recorded a decrease in the average interest rate on the loans granted to non-financial corporations. The average interest rate ranged from 3.4% to 8.6%, with the lower limit of the range lower by 70 base points compared to 2016, while the upper limit was 13 base points higher as compared to the previous year. The most significant interest rates decrease was recorded mainly in those banks that had higher interest rates in the previous years in relation to the average rates in the system. In addition, significant interest rate cuts were also recorded in the banks claiming to be part of a group of market leaders in the corporate segment, i.e. banks seeking to maintain the market leadership positions. An increase in

average interest rates was recorded only in a smaller bank whose interest rate policy could not affect the dominant trend in the BH banking market. The interest rates decrease on the domestic banking market reflects several factors, primarily the favorable financial conditions in international markets and the lower bank financing costs, as a result of the still low interest rates on the international financial markets. The interest rates decrease may also be attributed to a stronger banks' competitiveness in the domestic banking market and their high liquidity. Also, the steady growth of domestic deposits, with continuously lower deposit interest rates, is favorably reflected on the interest rate trends. In addition to the foregoing, the continuing downward trend of non-performing loans in the corporate sector had a positive effect on the interest rates decrease. During 2017, the average weighted interest rates on newly-approved KM loans and the foreign currency indexed loans in the non-financial corporate sector were at the lowest level since 2012<sup>15</sup>. During 2017, the average interest rate on newly-approved KM loans was 4.32%, i.e. 90 base points decrease compared to the previous year. The average interest rate on newly-approved loans indexed in foreign currency (most commonly in EUR currency) also decreased compared to the previous year, namely from 5.17% to 4.48%. Most banks in the system have a slightly higher average interest rates on domestic currency loans, implying that regardless of the fixed exchange rate of KM against EUR, the banks' business policies recognize the existence of currency risk.

Graph 5.8: Interest Rates on Loans to Companies, by Banks



Source: CBBH, CBBH calculation

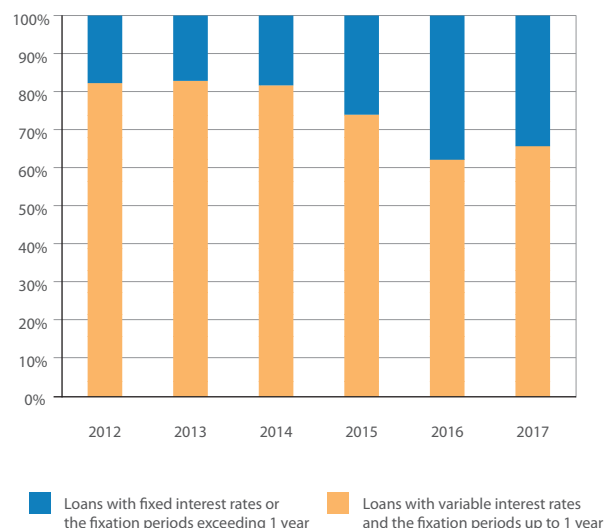
<sup>15</sup>Since 2012, the CBBH has compiled the data on active interest rates in accordance with the interest rates methodology applied by the euro area countries, based on the European Central Bank regulations. The interest rates statistics serves the CBBH as a data source for calculating the average weighted interest rate on newly-approved KM loans and loans indexed in foreign currency in the sector of non-financial companies; and for the purpose of analysis, the calculation of average weighted interest rate was done only for the period when the existing interest rates statistics was applied.



**The interest rate risk exposure of the non-financial corporate sector is still very high, and it further increased in 2017 as the share of loans with variable interest rates increased in relation to the previous year.** Bearing in mind current trends in international financial markets and changes in the monetary policies of leading central banks, the possibility of materialization of interest rate risk due to the growth of interest rates in the non-financial corporate sector is still very high. During 2017, the annual trend of declining share of newly-approved loans with floating interest rate, i.e. with the initial period of interest rate fixation up to 1 year, was stopped, and compared to the previous year, their share in total newly-approved loans was 3.9% higher. In the structure of newly-approved loans in 2017, the share of floating rate loans, i.e. with the initial period of interest rate fixation up to 1 year, amounted to 66% (Graph 5.8). At the same time, the share of newly-approved loans with the initial interest rate fixation period of 1 to 5 years was reduced from 20.6% to 18.9%, as well as the share of newly-approved loans with the initial interest rate fixation period of over 5 years, namely from 17.3% to 15.2%. In the case of newly-approved loans in domestic currency, the largest amount (70.6%) was approved with floating interest rate or initial period of interest rate fixation up to 1 year, while the share of newly-approved loans with floating interest rates in the period of 1 to 5 years was

19, 4%, and the share of loans with floating interest rates over 5 years was 9.9%. It is similar with the currency clause loans, where 60.2% of approved loans had an initial interest rate fixation period up to one year during 2017.

Graph 5.9: Newly Approved Loans according to the Interest Rate Fixation Period



Source: CBBH, CBBH calculation



## 6. Financial Intermediaries

Stronger economic recovery in the international environment and moderate growth of economic activity in the country had a positive impact on strengthening the stability and recovery of the financial system in BH. The total assets of financial intermediaries continued to grow in 2017, with the banking sector continuing its dominant influence on the asset growth (Table 6.1). As a result of the mild recovery of operations in certain segments, the non-banking financial sector also recorded an increase in assets, though the sector is still poorly developed, which is why there is a continuous decline in the share of total assets of financial intermediaries. The largest and most significant segments of the non-banking financial sector are insurance and reinsurance companies, which in 2017 continued to increase their participation in the total assets of financial intermediaries. As a result of mild risk

reduction, positive developments in the microcredit sector were recorded, and after a longer period, this sector increased its share in the total assets of financial intermediaries. Also, during the year 2017, the total value of net assets of investment funds was increased. At the same time, as a result of the decline in the number of leasing companies, there is a strong balance sheet contraction in the leasing sector, which implies that this sector is increasingly losing importance. The capital market recorded a drop in turnover for the second consecutive year. The largest volume of domestic capital market turnover is still achieved in the segment of debt instruments in the primary market. In addition to commercial banks, which are mostly oriented to the government debt market, larger institutional investors are virtually non-existent on the capital market.

Table 6.1: The Financial Intermediaries Assets

|  | 2015              |          | 2016              |          | 2017              |          |
|--|-------------------|----------|-------------------|----------|-------------------|----------|
|  | Value, million KM | Share, % | Value, million KM | Share, % | Value, million KM | Share, % |
| Banks 1)                               | 23,737            | 87.5     | 25,014            | 87.8     | 27,249            | 88.29    |
| Leasing companies 1)                   | 475               | 1.75     | 423               | 1.48     | 260               | 0.84     |
| Microcredit organizations 1)           | 637               | 2.35     | 663               | 2.33     | 789               | 2.56     |
| Investment funds 2)                    | 824               | 3.04     | 802               | 2.81     | 847               | 2.74     |
| Insurance and reinsurance companies 3) | 1,465             | 5.40     | 1,578             | 5.54     | 1,717             | 5.56     |
| <b>Total</b>                           | <b>27,138</b>     |          | <b>28,479</b>     |          | <b>30,862</b>     |          |

1 - FBA and BARS

2 - FBH and RS Commissions for Securities

3 - Entities' Agencies for Supervision of Insurance Companies

Calculation of the CBBH

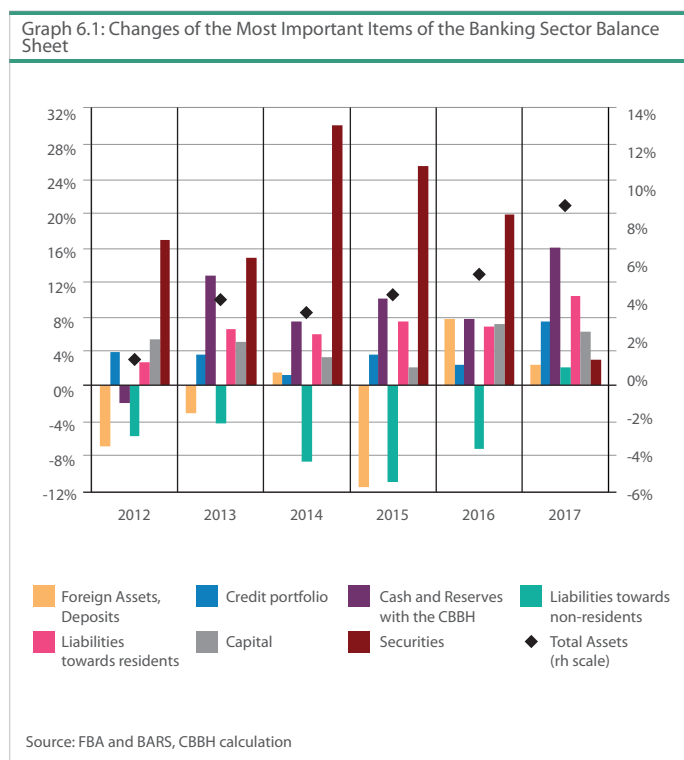
### 6.1 Banking Sector

Positive trends observed in the banking sector in the previous year continued in 2017 and in the first half of 2018. The banking sector is well capitalized and all banks meet regulatory requirements in terms of capital adequacy. At the same time, the asset quality improved and the profitability and liquidity increased. As a result of continued positive trends in the macroeconomic environment, credit activity was strengthened, especially in the sector of non-financial private companies. In 2017, a comprehensive set of bylaws was adopted in line with the new legal framework and Basel II/III criteria, thus further harmonizing the domestic banking sector regulation and supervision with the regulatory framework of the European Union. In addition, banks have implemented a new accounting standard for financial reporting (IFRS 9) since the beginning of 2018, which implies that banks should take into account future expected losses when assessing their financial instruments, which should

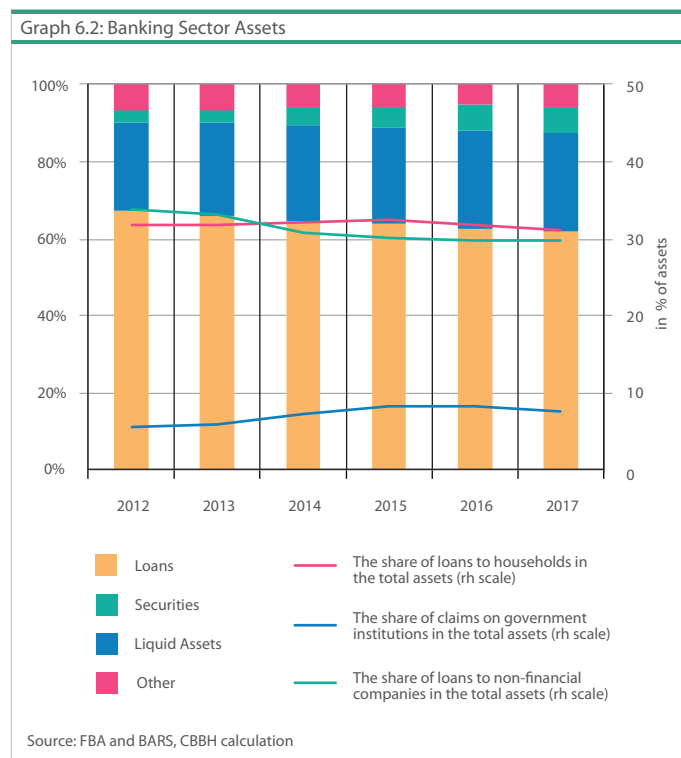
also contribute to a greater banking sector resistance. Despite the weakening of the risks arising from the real economy and the banking sector, the level of non-performing loans is still high, especially in the non-financial corporate sector, and the excessive credit growth in individual banks could result in accumulation and materialization of credit risk in the coming years. The previously identified risk to the household sector, based on the increased growth of long-term non-specified purpose loans with lower quality of insurance instruments, should be mitigated by regulatory measures that limit the amount and maturity of this type of loan. Due to the high level of interest rate risk faced by non-financial companies and households, banks are still exposed to the potential credit risk that may arise in case of materialization of the interest rate risk in these two sectors. However, the higher customers' caution with respect to the interest rate risk, which is reflected in the increasing presence of fixed interest rate loans,

to some extent mitigates the pressure on the increase of credit risk coming from the household sector. Under low interest rates, banks are still trying to offset the low interest margins by relying on income from fees and commissions, which still ensues the risk of sustainability of a stable level of profit from the core activity of banks.

**The balance sheet amount of the banking sector at the end of 2017 was KM 27.3 billion and recorded an annual growth of 8.9%.** Positive trends in the macroeconomic environment, especially in the second part of the year, affected the dynamics of the balance sheet amount growth in the banking sector. In 2017, the credit activity intensified, especially in the non-financial corporate sector. Also, the strong growth of deposits of the domestic resident sectors continued, while at the same time, after a long period of time, there is increase in liabilities towards non-residents. The balance sheet growth was also contributed by the merger of a leasing company to the parent bank at the beginning of the third quarter of 2017<sup>16</sup>. As a result of the significant growth of short-term deposits, all liquid assets, including cash and funds on the reserve account of the CBBH, continued to grow, as did the deposit placements with other banks. In 2017, there was no significant increase in the banks' securities portfolio, mainly influenced by the smaller extent of entity governments' borrowing in the domestic capital markets, which was the main generator of portfolio growth in previous years (Graph 6.1)



**Credit activity in 2017 continued to recover with even stronger intensity compared to the previous years, and credit growth was significantly higher in comparison with the previous five years.** In 2017, banks recorded a growth in the credit portfolio of KM 1.2 billion or 7.2% on an annual basis. Although the total loans recorded the highest nominal amount increase, their share in the structure of assets decreased, which was largely contributed by the growth of liquid assets and other banking sector assets. Thus, at the end of 2017, the share of total loans in the banking sector assets was 66.2% and recorded a decrease of 1 percentage point compared to the previous year (Graph 6.2). The balance of total loans at the end of the year amounted to KM 18 billion, where the amount of KM 8.5 billion or 47.3% of the total loans refers to household loans, and KM 8.1 billion or 45% refers to the loans to private non-financial companies, while the loans to government institutions amounted to KM 820.4 million or 4.5%. In 2017, credit activity in the non-financial corporate sector was intensified as compared to the previous year, and the annual credit growth rate achieved 8.5%. In the course of the year, the loans granted to private non-financial companies amounted to KM 4.2 billion, and the amount of newly-approved placements to this sector amounted to KM 625.1 million, i.e. 17.6% higher than in the previous year. The household sector recorded credit growth of 6.7% on annual basis, but the share of placements to this sector in the total assets slightly decreased compared to the previous year.



<sup>16</sup>The balance sheet of UniCredit Leasing d.o.o. Sarajevo, at the end of second quarter of 2017 amounted to KM 142.6 milion, and the merger of the leasing company with the UniCredit banka d.d. Mostar mostly reflected on the increase of loans issued to private companies for approximately KM 140 million, as well as on the increase of loans from non-residents amounting to over KM 120 million.

**Due to the continued fiscal consolidation and the reduction of public indebtedness, the risks to financial stability and the banking sector coming from the government sector have been further reduced.** The total banking sector exposure to the government sector at the end of 2017 was KM 2.04 billion and recorded a decrease of KM 9.4 million (0.5%) compared to the previous year. Credit

placements to government institutions continued to decline for the second consecutive year (-2.6%), while the banks' exposure related to the purchase of government securities increased by only 1%, wherefore the share of government sector receivables in the total assets of the banking system decreased to 7.5% at the end of 2017.

**Table 6.2: Simplified Balance Sheet of Commercial Banks**

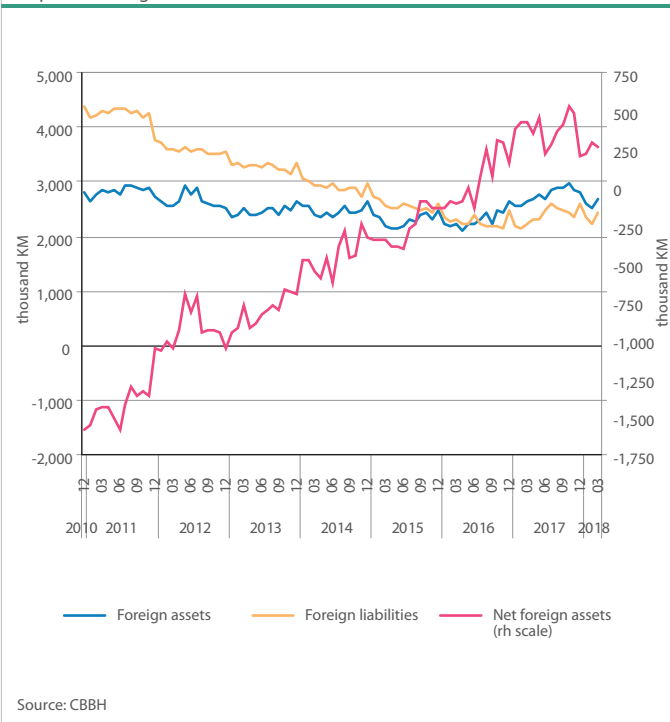
| million KM   |               |               |                           |               |
|--|---------------|---------------|---------------------------|---------------|
| Assets   |               |               | Liabilities               |               |
|  | 2016          | 2017          |                           |               |
| Monetary funds and deposits with banks               | 6,737         | 7,362         | Deposits of residents     | 17,700        |
| out of:  |               |               | Deposits of non-residents | 1,487         |
| reserve accounts with the CBBH                       | 4,193         | 4,950         | Liabilities from loans    | 1,384         |
| Securities   | 1,791         | 1,845         | out of which:             |               |
| Loans, claims from leasing operations and due claims | 16,830        | 18,049        | Loans from non-residents  | 947           |
| Other assets   | 1,376         | 1,682         | Other liabilities         | 852           |
| Correction of value                                  | -1,720        | -1,697        | Capital                   | 3,591         |
| <b>TOTAL</b>   | <b>25,014</b> | <b>27,249</b> | <b>TOTAL</b>              | <b>25,014</b> |

Source: FBA and BARS, CBBH calculation

**Liquid assets recorded growth in 2017, i.e. 9.3% on annual basis.** As a result of the continued growth of short-term deposits of domestic resident sectors, which was further strengthened in the last quarter by the growth of deposits from non-residents, all liquid assets recorded growth, including the cash in vaults, reserve assets in the CBBH and deposits with foreign banks. The balance of the reserve account recorded an increase of KM 650.3 million or 15.8% compared to the previous year<sup>17</sup>. Despite the negative fee that the CBBH calculates to commercial banks over surplus funds above the required reserve, in 2017 banks increased the surplus funds on the obligatory reserve account, and at the end of the year there was an increase of surplus funds in the CBBH account amounting to KM 445 million or 21 %. With the growth of funds on the obligatory reserve account, the cash in vaults recorded growth of KM 57.8 million or 6.3% and the funds on the accounts of international banks increased by KM 39.3 million or 2.4%. Short-term placements to other banks also increased in the amount of KM 245.8 million.

**In 2017, the BH commercial banks' deleveraging trend to foreign countries was stopped.** Foreign liabilities of the banking sector after a long period of time recorded an increase compared to the end of the previous year. According to CBBH data, liabilities to non-residents increased by KM 113.6 million or 4.6% compared to the end of the previous year (Graph 6.3).

**Graph 6.3: Foreign Assets and Liabilities of Commercial Banks**



The growth of foreign liabilities of the banking sector was largely driven by the growth of deposits from the majority foreign owners, which was recorded in several banks. This could be a signal that foreign bank owners operating in BH are willing to more actively support the financing of domestic sectors in the conditions of economic activity recovery in

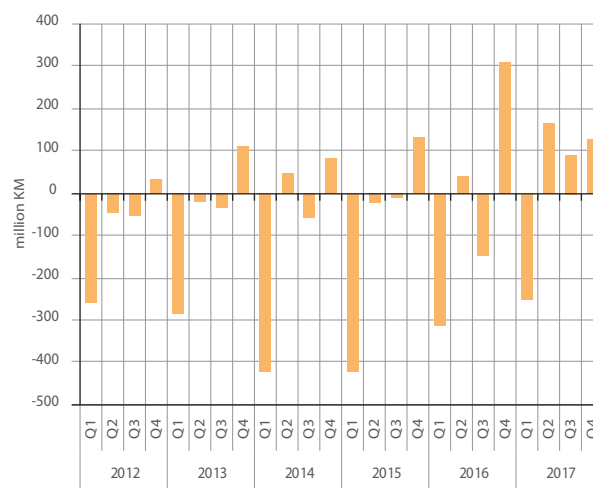
<sup>17</sup>The data do not include the Development Bank of FBH.

the country. At the same time, foreign assets of commercial banks in the course of 2017 continued a growing trend with less oscillations at the end of the second and fourth quarters. In addition to the growth of deposit placements with foreign banks, which mostly affected the growth of foreign assets, the banking sector also recorded the increase in foreign currency cash and securities from non-residents. As a result of the multi-annual trend of banks' deleveraging to majority foreign owners and affiliated companies, foreign assets of the banking sector first recorded a higher value of liabilities by mid-2016, while the net foreign assets continued to record positive values during 2017.

In 2017, the banking sector recorded net inflows in the amount of KM 121.5 million (Graph 6.4)<sup>18</sup>. As of the beginning of 2010, when the deleverage towards foreign countries started, liabilities towards non-residents decreased by KM 2.73 billion. Bearing in mind that the average balance of foreign commercial banks' liabilities in this year was higher than in the previous year and that the liabilities towards non-residents increased compared to the end of the previous year, it implies that the intense trend of BH commercial banks' deleverage to foreign countries stopped. Sources of funding from domestic resident sectors increased by KM 7.65 billion in the same period, which is almost three times higher compared to the decrease of foreign sources of financing, whereby it implies that the substitution of foreign with domestic sources is more than adequate.

Nevertheless, the structure of domestic sources in terms of their stability is not so favorable, and banks still have to seek for better sources of financing with regard to maturity, so that the domestic sources would not become a limiting factor for the future credit growth.

Graph 6.4: The Flows of Foreign Liabilities in Banking Sector



Source: CBBH

<sup>18</sup>The Graph shows foreign liabilities trends in the banking sector related to the increase and decrease of banking liabilities based on loans and deposits of direct foreign investors, sister companies and other non-residents.

**Text Box 3: Network Analysis of Systemic Risks' Spillover**

The purpose of the network structure analysis in the banking sector of BH is to estimate the intensity of potential shocks due to interlinkage, as well as the cross-border exposure of domestic commercial banks. The analysis was carried out on the basis of data as of 31 December 2017 in two directions, such as: analysis of the mutual balance sheet exposures of 23 commercial banks, simulation of failure of each of them, and the analysis of cross-border exposure of domestic commercial banks to the banking and public sector of 33 countries<sup>19</sup>.

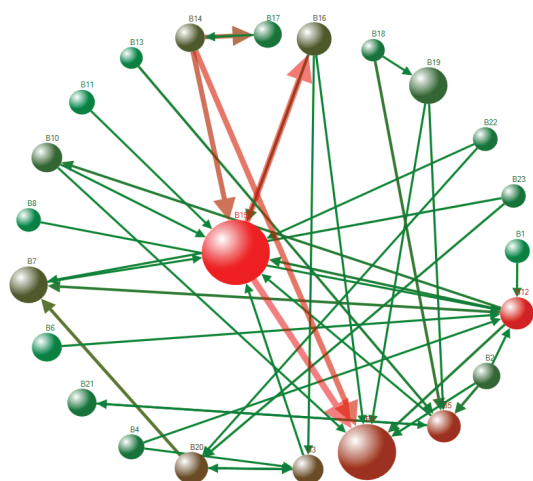
In the analysis of the network structure, the focus is on credit risk, and the main assumption in terms of credit shock is the maximum loss on the basis of default, i.e. the loss of the total amount of claims. As a condition for the existence of interbank contagion, we analyzed the situation where losses exceed a portion of regulatory capital above the amount that meets the regulatory minimum of the capital adequacy ratio. The basic finding of the analysis is the number of sub-capitalized banks due to the failure to meet the liabilities of individual banks or a particular foreign banking system. The bank is considered to be sub-capitalized in the event of a fall in the capital adequacy ratio below the minimum regulatory requirement.

Findings of an interbank exposure analysis, if the resilience is tested only for credit shock, show that system level exposures and the risks of financial contagion on the domestic inter-banks market are not large. According to the Banking Agencies, the total interbank exposure of commercial banks in BH amounted to KM 110.2 million, accounting for 3.5% of the total regulatory capital of the banking sector, or only 0.4% of total assets. The network of interbank exposure in the BH banking sector, shown in the Graph TO: 6.1, is not particularly dense, given that the Graph shows only the interbank liabilities and claims on one particular day, while the average volume of overnight transactions between individual domestic banks could not be included in the analysis.

The size of circles on Graph the TB: 6.1, which represent banks in the BH banking sector, is determined by the amount of total assets. The amount of interbank exposure is illustrated by the thickness of the links, and by their color, being in spectrum from green to red. The links that are thicker and have more intense red color indicate the bigger bilateral liabilities and claims between banks. The color of the circles indicates the number of a bank links with other banks. Banks marked with a stronger red color are linked to more banks in the domestic banking sector.

The results of the analysis showed that one bank would have losses due to the failure of one of three banks to which it has been exposed, which would cause a significant reduction in regulatory capital, and its capital adequacy ratio would fall below the regulatory minimum. Thus, considering its large exposure<sup>20</sup>, the bank has extremely high vulnerability index<sup>21</sup>. On the other hand, several banks are singled out by higher contagion index<sup>22</sup> compared to other banks in the sector, which indicates the significant exposure of other banks to these banks (Graph TB: 6.2). These findings relate to the first contagion round of shock spillover, i.e. to the direct impact that the failure of one of the banks would have on the banks that have been exposed to that bank. In the second round, which reflects the effects of indirect exposure, no bank had any losses that would cause a fall in the capital adequacy ratio below the regulatory minimum.

Graph TB 6.1: Network of the Interbank Exposure, as of 31 December 2017



Source: FBA and BARS, CBBH calculation

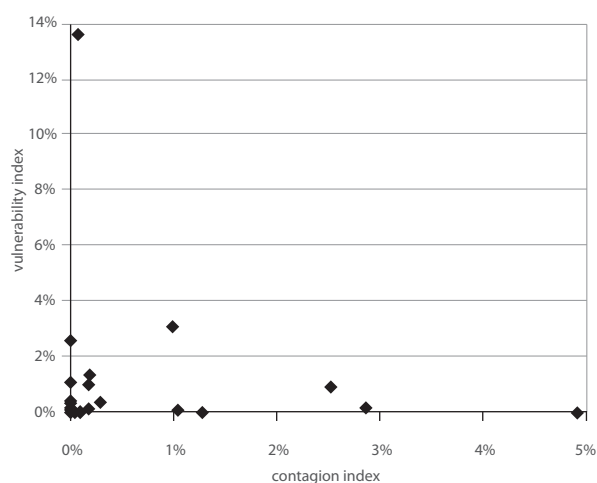
<sup>19</sup>Out of total of 89 countries to which BH commercial banks were exposed as of 31 December 2017, we incorporated in the analysis the data on the exposure to 33 countries, because the liabilities to and claims on the other countries were insignificant and small.

<sup>20</sup>According to data from the end of 2017, the total exposure of this bank to three other banks in the sector was as high as 52.6% of its regulatory capital.

<sup>21</sup>The vulnerability index shows how much the bank is vulnerable in the event of other banks failures, i.e., it is the average percentage of loss due to the failures of all other banks in the sector.

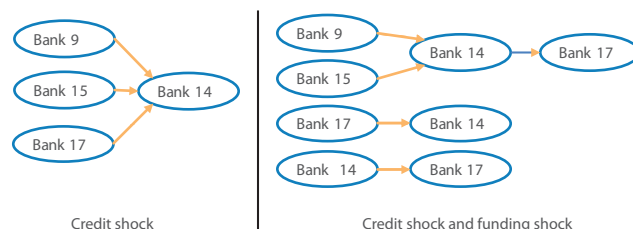
<sup>22</sup>Contagion index points out the significance of one bank for other banks in the sector, i.e. it shows the average percentage of other banks' loss in case of potential failure of this bank.

Graph TB 6.2: Contagion Index and Vulnerability Index Caused by the Credit Shock, per Banks, as of 31 December 2017



Source: FBA and BARS, CBBH calculation

Graph TB 6.3: Results of the Network Analyses Depending on the Type of Assumed Shock



Source: FBA and BARS, CBBH calculation

If, in addition to the credit shock, the funding shock is included in the network analysis, and for this shock, the basic assumption is loss due to a funding shortfall, with 50% of lost funding that is not replaceable, the findings of the analysis point out that the failure of the high vulnerability index bank, illustrated on the Graph TB: 6.2, due to credit shock, would cause already in the first round a fall in the capital adequacy ratio below the regulatory minimum for one bank exposed to it. Also, in case of two banks' failure, in the second round, the capital adequacy ratio will fall below the regulatory minimum in one bank, although there is no direct exposure to them (Graph TB: 6.3).

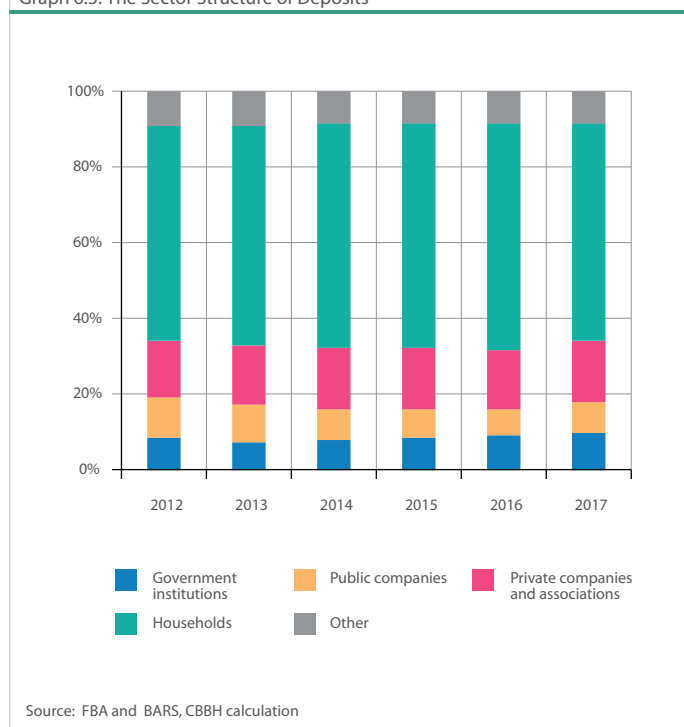
In order to identify foreign banking systems with systemic significance for banks in BH, the network analysis of cross-border linkage was conducted carried out, too. A cross-border linkage analysis has pointed out that higher contagion risk arises from cross-border exposure than from exposure to the domestic interbank market. The analysis involves two shocks: credit shock and funding shock, and assumptions are identical to those used in the analysis of interbank links<sup>23</sup>. The results of the analysis show that large shocks in several countries to which BH banks have significant exposure may have direct or indirect contagion impacts on BH banking sector. The risk spillover from Austria and Germany is a key risk of cross-border financial contagion for banks in BH, while significant exposures of individual banks also exist to Slovenia, Italy, Great Britain and Croatia.

<sup>23</sup> Loss given default of 100% and 50% of lost funding that is not replaceable.



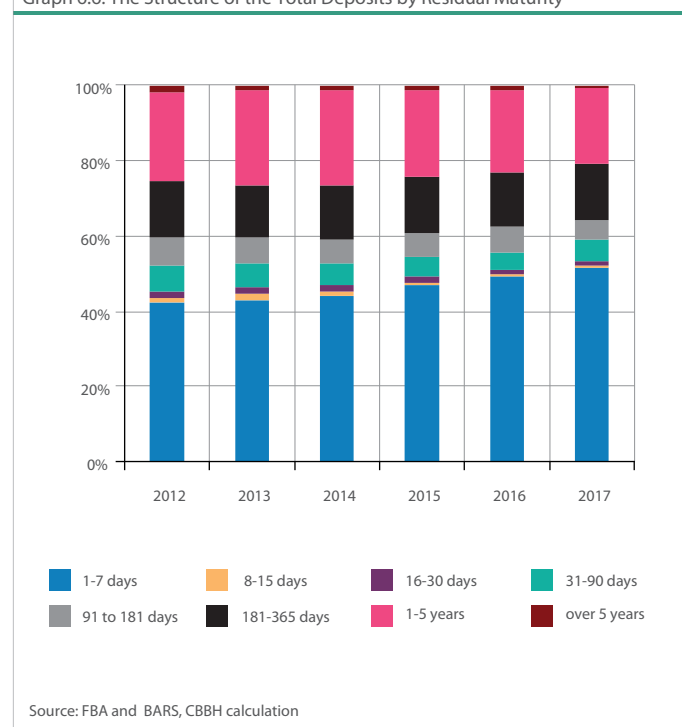
In 2017, the deposits of domestic resident sectors continued to grow, amounting to KM 19.64 billion at the end of the year, i.e. they increased by 11% compared to the end of 2016. In the structure of total deposits, the most significant were households deposits (Graph 6.5). Unlike the previous few years, when the growth of deposits of domestic resident sectors was mainly generated by the growth of household deposits, in 2017, the growth of total deposits with the household sector was significantly contributed by the deposits of government institutions and private non-financial companies. Deposits of households recorded the highest nominal growth (KM 622.7 million or 5.7%), but in relative terms there was a significant increase in deposits of government institutions (KM 382.2 million or 24%), public non-financial companies (256.8 million KM or 20.3%) and private non-financial companies (KM 492.8 million or 17.3%). According to the CBBH data at end the end of 2017 deposits at transaction accounts and demand deposits account for 25.7% and 25.9% in total deposits of households. At the same time, the share of long-term deposits in total deposits decreased, from 45.9% at the end of the previous year to 43.8% at the end of 2017. Deposits of households continued the growth trend, mainly due to the increase in deposits on transaction accounts (KM 322.1 million or 12.5%) and demand deposits (KM 282.5 million or 10.8%), while the level of household term deposits in the banking sector remained almost unchanged in the last two years. Such a deposit trend is significantly contributed by the continued decline in deposit interest rates in previous periods.

Graph 6.5: The Sector Structure of Deposits



Along with low interest rates and the lack of alternative forms for safer investment, the continued growth of deposits on transaction accounts and demand deposits significantly contributes to the reduction of the residual maturity of the banking sector's total liabilities. At the end of 2017, deposits with maturity of 1 to 7 days accounted for over half of the total deposits (51.3%). On the other hand, a small share of deposits with maturity over five years in the structure of total deposits (only 0.9%) is insignificant. According to end-2017 data, deposits with residual maturity of less than one year make 79.1% of total deposits (Graph 6.6). As a result of the continued reduction of residual maturity of liabilities, there is an increased risk of maturity transformation of short-term sources into long-term placements.

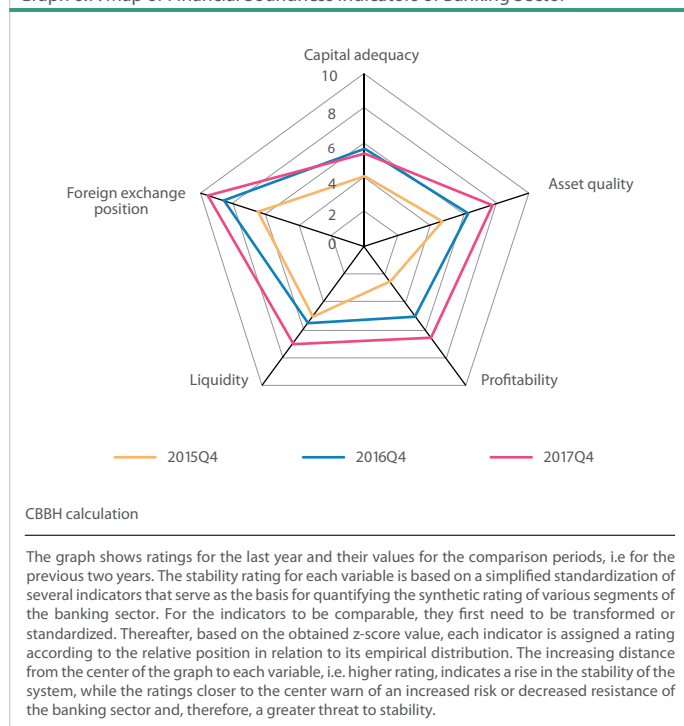
Graph 6.6: The Structure of the Total Deposits by Residual Maturity



At the end of 2017, there was an improvement of almost all major indicators of financial health, and it can be estimated that the banking sector's stability increased as compared to the previous year. The stability of the banking sector is summarized in the financial health indicators graph and shows changes in the main indicators on the basis of which capital adequacy, asset quality, profitability, liquidity and foreign exchange risk in the banking sector are assessed (Graph 6.7). Unlike 2015, when the indicators' ratings showed the increased risks arising from high levels of non-performing loans in the system, low profitability and consequently capitalization, in 2016 and 2017, ratings were increased in all segments of the banking

sector, and it can be estimated that the banking sector has increased its risk resistance over the last two years.

Graph 6.7: Map of Financial Soundness Indicators of Banking Sector



At the end of 2017, the banking sector of BH was adequately capitalized and the Capital Adequacy Ratio of the banking sector recorded a slight decline in value compared to the previous year. Although the equity and regulatory capital recorded an increase compared to the previous year (7.2% and 8.1% respectively), a significant increase in total weighted risks (9.1%) caused a slight decline in the Capital Adequacy Ratio compared to the end of previous year (Table 6.3). The largest positive impact on capital was made by an increase in reserves on the basis of current financial results, and the recapitalization in five banks carried out in 2017 in the total amount of KM 33.1 million. With the exception of the four banks that paid dividends in 2017, all other banks that were operating positively in 2016 retained their previous year's profit and increased their capital reserves in 2017. At the same time, total weighted risks recorded an increase as a result of the growth of risk assets and off-balance sheet items by KM 1.59 billion (9.4%), largely due to the growth of the credit portfolio.

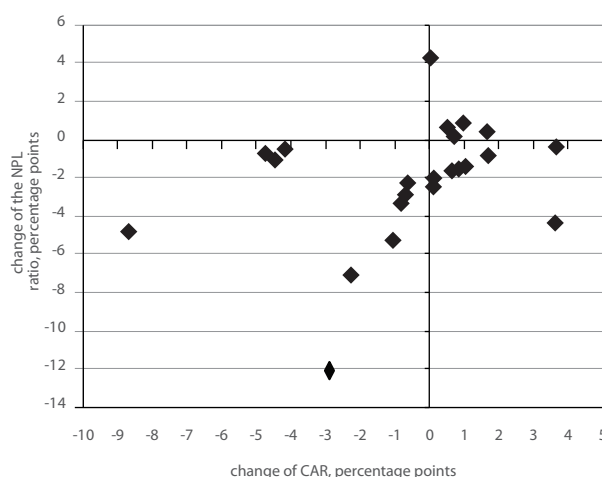
Table 6.3: Main Characteristics of the Banking Sector

|                                    |   | 2016   | 2017   |
|------------------------------------|---|--------|--------|
| Adequate capitalization            | Regulatory capital, million KM                    | 2,889  | 3,123  |
|                                    | Total weighted risk, million KM                   | 18,255 | 19,909 |
|                                    | Capital adequacy ratio                            | 15.8%  | 15.7%  |
| Better quality of credit portfolio | Non performing loans, million KM                  | 1,982  | 1,813  |
|                                    | Ratio of NPL to total loans                       | 11.8%  | 10.0%  |
|                                    | NPL, net of provisions to Tier1                   | 18.5%  | 14.4%  |
| Quite bigger business results      | Net gain/loss, million KM                         | 219    | 336    |
|                                    | Return on average equity                          | 7.3%   | 10.2%  |
| High liquidity                     | Liquid assets to total assets                     | 27.2%  | 28.4%  |
|                                    | Liquid assets to short term financial liabilities | 44.1%  | 44.3%  |

Source: CBBH

Most banks are adequately capitalized, with some of them still having a high share of non-performing loans in total loans, which will also put pressure on the capitalization of these banks over the next few years. Although a larger number of banks recorded a decline in Capital Adequacy Ratios compared to the previous year, only a few banks recorded a slight increase of non-performing loans in total loans, and the decline of indicators in most banks in the system resulted in a significant increase in total weighted risks primarily as a result of strengthening credit activity (Graph 6.8).

Graph 6.8: Change of CAR and the NPL Ratio Compared to the Previous Year, by Banks

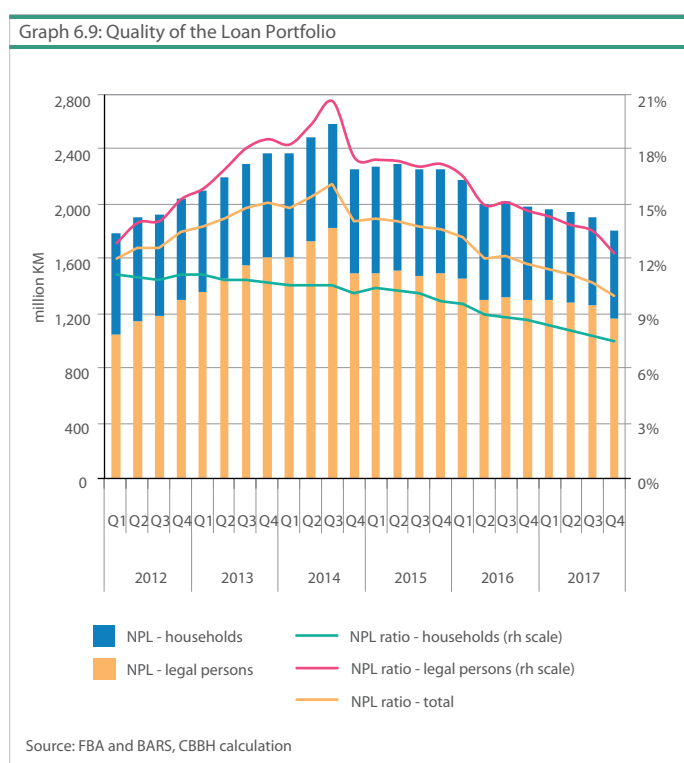


Source: FBA and BARS, CBBH calculation

All asset quality indicators continued to improve at the banking sector level in 2017. The share of non-performing assets in total assets at the end of 2017 was 7.16%, i.e. a decrease of 1.27 percentage points compared to the end of the previous year. Reduction of non-performing assets is

largely a result of the continuation of the process of cleaning the banks' balance sheets, i.e. the permanent write-off of assets estimated as loss. In 2017, banks recorded a decrease in non-performing assets of KM 157.5 million, of which KM 136.8 million were written off and KM 6.8 million were estimated as a loss. Most non-performing assets make non-performing loans, which in 2017 recorded a decrease of KM 168.9 million (8.5%). With permanent write-offs, the strengthening of credit activity in 2017 had a positive effect on the quality of loan portfolio. Total loans increased by KM 1.22 billion (7.2%). The share of non-performing loans in total loans at the end of 2017 was 10% and recorded a decrease of 1.73 percentage points over the previous year<sup>24</sup>. Banks also recorded a higher coverage of non-performing loans with provisions compared to the previous year. The indicator of Non-Performing Loans less provision for equity at the end of 2017 was 14.3% and recorded a decrease of 4.13 percentage points compared to the end of the previous year. The decrease in the value of the indicator is due to the growth of equity, but also the higher coverage of non-performing loans by the reserves, which further softened the pressure on capital that may arise from the existing inadequate portfolios in the part not covered by reserves.

Although the banking sector has continued to improve all asset quality indicators, credit risk is still a dominant risk in the BH banking sector. The share of non-performing loans in total loans is still high, especially in the segment of loans for legal entities (Graph 6.9).

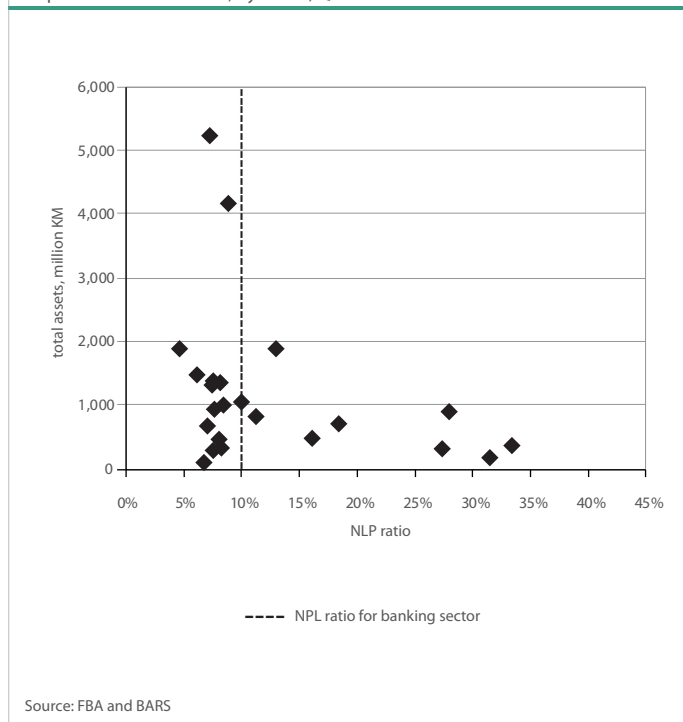


In the segment of legal entities, non-performing loans continued to decline in absolute and relative terms in 2017, while the decrease of non-performing loans was largely due to the permanent write-off of non-performing receivables as in the previous year. With the permanent write-off of non-performing receivables, the considerably lower default rate recorded in 2017 indicates a decline of the credit risk in this sector. Also, the decline in the share of non-performing loans in total non-financial corporations' loans was contributed by the growth of credit placements, which was significantly higher than in the previous year. In 2017, most banks recorded an increase in placements to non-financial companies, and 55% of the total credit growth recorded in this sector was realized by three banks. It is worth noting that two of them are large banks in terms of their asset size, and have been more stringent since the beginning of the crisis with regard to the creditworthiness assessment of debtors, which implies that the intensification of credit activity in these banks is a signal of real improvement in the operation of private non-financial companies. On the other hand, some smaller banks recorded credit growth rates of more than 20%, which could affect the faster growth of credit risk in these banks. Previous practices give rise for concern, as in the earlier periods banks that achieved significant credit growth in poor macroeconomic circumstances accumulated a high level of credit risk that could not be adequately managed. Non-performing loans in the household sector continued to decline as a result of continuing write-offs of non-performing receivables. In addition, the better quality of credit portfolio was also contributed by the frequent reprogramming of loans, and in 2017 there was also a somewhat weaker intensity of reclassification of loans into non-performing loans compared to previous years. The improved loan portfolio quality in the household sector was also contributed by a more intensive growth of credit placements than in the previous year. Given the previously identified risk on the basis of the increased growth of long-term non-specified purpose loans with lower quality of insurance instruments, recognized by the regulators, in 2017 both banking agencies issued decisions limiting the length and maturity of non-specified purpose loans<sup>25</sup>. The share of non-performing loans in total loans at the end of 2017 is particularly high in four banks in the system, in which non-performing loans make more than one quarter of the total credit portfolio (Graph 6.10).

<sup>24</sup>Average coverage of non-performing loans with reserves at the end of 2017 at the banking sector level made 76.7%, while at the end of the previous year the coverage of non-performing loans with the reserves made 74.4%.

<sup>25</sup>Decision to apply special requirements when arranging long-term non-specified purpose loans and replacement loans to natural persons in the bank's risk management system, Official Gazette of FBH 81/17 and Official Gazette of RS 101/17). Based on these decisions, the maximal term for non-specified purpose

Graph 6.10: The NPL Ratio, by Banks, Q4 2017



By adopting a set of bylaws in line with the new legislative framework, a new banking regulation was completed in 2017, which, among other things, regulates the issue of purchase of bank placements. By adopting a new bankruptcy law in RS and amending the bankruptcy law in the FBH<sup>26</sup>, it was possible to initiate bankruptcy proceedings, financial and operational restructuring of debtors, and to reduce the length and the cost of bankruptcy proceedings. Also, new laws have introduced a pre-bankruptcy proceedings aimed at reorganizing non-liquid companies. In order to establish a comprehensive framework for dealing with non-performing receivables, it is necessary to make changes to the tax law in order to establish a special tax regime for the purchase of non-performing receivables, the change of the legal framework for debt collection and execution, in order to speed up the court proceedings for debt collection and establishing a framework for resolving natural persons' debts when the debtor can no longer fulfill obligations towards the bank. By setting up a framework for dealing with non-performing loans, a systemic risk reduction can be expected.

By the end of 2017, some banks completed the third cycle of a detailed Asset Quality Review (AQR). The results of the AQR conducted in 2017 showed that the banks that participated in evaluating asset quality were adequately capitalized and that the identified individual deficiencies did not have a significant impact on the banking system.

**The level of credit risk in the banking sector in the forthcoming period will also be under the indirect impact of interest rate risk in the household and non-financial private corporate sector.** The analysis of the credit portfolio structure in terms of fixing the interest rate shows that a significant number of loans are contracted with the floating interest rate. Data on newly-approved credit placements to households and non-financial companies show that from the total newly-approved placements to these sectors in 2017, 61.5% were approved at a floating interest rate or with an initial rate fixation period of up to 1 year. The share of loans with floating interest rates in total newly-approved household loans at the end of 2017 was 55.6% and recorded a decrease of 6.72 percentage points compared to the previous year. While the share of these loans in total newly-approved loans to the household sector declined for the fourth consecutive year, banks increased their placements to non-financial companies at a floating interest rate or with an initial rate fixation period of up to 1 year by 25%, and the share of these loans in total newly-approved loans amounted to 66% at the end of 2017. Increased customer caution with regard to taking the interest rate risk, reflected in increasing exposure to fixed interest rate loans, to some extent mitigates the pressure on the increasing credit risk coming from the household sector. Although the share of floating interest rate loans in total loans of the household sector decreased, it can still be estimated that both sectors are highly exposed to interest rate risk, which may indirectly affect the transformation of interest rate risk into the credit risk in the banking sector. The expected growth of interest rates on international markets would increase the financing costs for debtors with contracted floating rate loans, which could cause delays in repayment of part of the receivables and deterioration in credit portfolio quality in the banking sector.

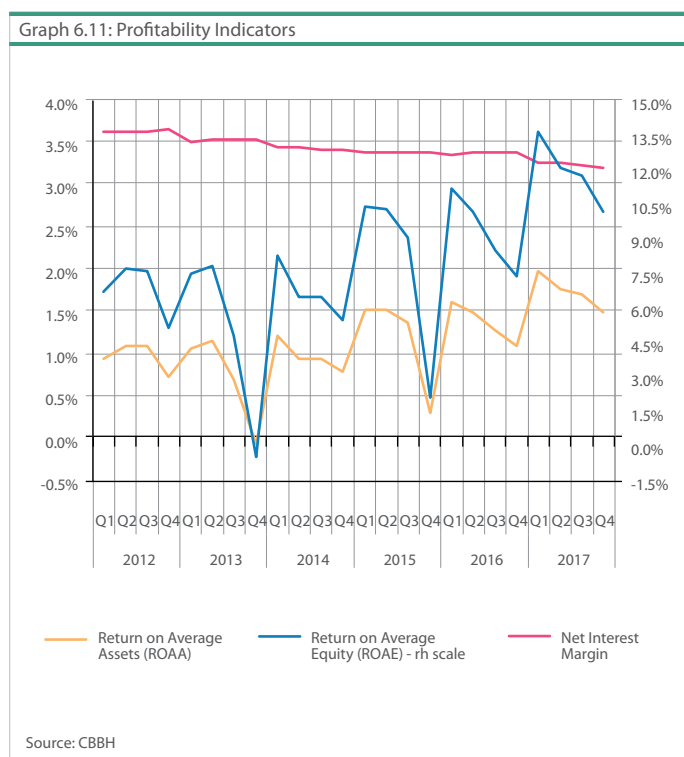
**At the end of 2017, the banking sector of BH reported a record profit of KM 336.2 million and achieved a significantly higher return on average assets and average equity compared to the previous year.** Strong growth in the profitability of the banking sector is the result of an increase in total revenue, which was largely a result of the operating income growth, a slight increase in net interest income, and a decrease in non-interest expenditures. The largest part of the banking sector's profitability is still concentrated in several largest banks. Thus, two banks accounted for 48.2% of the

loans and replacement loans is limited to 10 years, while the approved amount is limited to KM 50,000.

<sup>26</sup>The Bankruptcy Law of RS was adopted in February 2016 (Official Gazette, 16/16), and the Law on Amendments to the Law on Bankruptcy Procedure of FBH was adopted in June 2018 (Official Gazette of FBH, 52/18).

total profit in the sector, while the three most profitable banks generated 61.7% of the total net profit of the banking sector. Unlike the previous years when several banks faced greater business losses, in 2017 only two banks reported a negative financial result in the total amount of KM 7.3 million. In addition to the growth of profitability recorded by most banks in the system, the record business result was significantly contributed by the stabilization and recovery of operations in two banks of the same group that experienced high losses in the past years and represent a significant source of risk for the BH banking system.

The ROAA and ROAE indicate that the banking sector has recorded a stable return on assets and equity over the past two years, unlike earlier periods when due to high losses in individual banks these indicators were significantly more volatile (Graph G11).



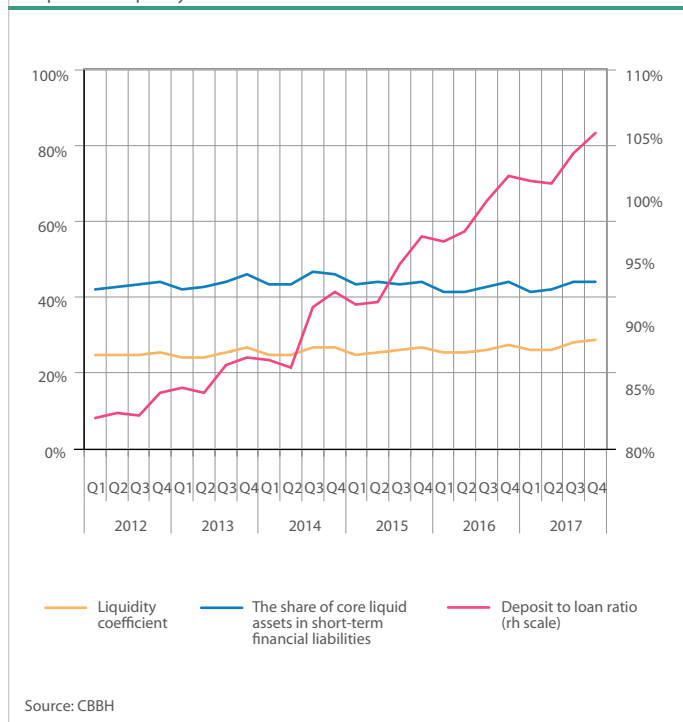
At the end of 2017, the banking sector experienced a higher return on average assets and average capital compared to the previous year, which was the result of a significantly higher net profit growth compared to the growth of average assets and average share capital. An analysis of the banking sector's structure shows that in 2017 there was a slight decrease of interest income of KM 4.6 million (0.4%), despite the recorded strengthening of credit activity. The reduction in interest income was primarily a result of continued decrease of interest rate on newly-approved loans, and the recorded decrease interest rates on loans to the household and non-financial corporate sector was even higher than in the previous year<sup>27</sup>. In order to depreciate the decrease in interest income, banks continued to reduce their deposit interest rates, thus keeping a stable interest margin. Although the sector recorded slight growth in net interest income, the trend of declining net interest income in total revenue continued as a result of a stronger growth in operating income. Thus, at the end of 2017, the share of net interest income in total income was 58.3% and recorded a decrease of 2.1 percentage points compared to the end of the previous year. The strong growth of operating income was largely generated by banks on the basis of fees for services rendered and one-off extraordinary income generated by several banks in 2017. At the sector level, a slight decrease in non-interest expenditures was recorded, i.e. KM 30.4 million (2.8%), which also contributed to better financial results. It follows from the foregoing that in 2017, the banks realized a significant part of the profit due to the increase in operating income from fees, indicating the risk of sustainability of the existing profitability level in the coming periods.

**The banking sector's liquidity remained high in 2017,** primarily due to the continuous trend of increasing deposits (Graph 6.12). At the end of 2017, liquid assets accounted for 28.4% of banking sector assets, while 44.3% of short-term liabilities were covered by liquid assets (Table 6.3). Although satisfactory liquidity was observed at the system level, some banks experiencing loan repayment problems could face a rising liquidity risk.

<sup>27</sup>The average weighted interest rate for newly-approved loans to the household sector in 2017 accounted for 6.64%, while the average weighted interest rate for newly-approved loans to the sector of companies accounted for 4.46%. For further analysis of interest rate trends see the chapters Households and Companies.



Graph 6.12: Liquidity Indicators



### Stress Test

CBBH conducts quarterly top-down stress tests for the banking sector in the country, which are one of the main tools for assessing its resistance to potential shocks from the macroeconomic environment and the banking sector. The stress test assesses the ability of the entire banking sector as well as of individual banks to bear the potential losses that would arise in case of materialization of the assumed shocks.

Testing is done through two scenarios, the baseline and the extreme scenario. In the baseline scenario, assumptions are based on macroeconomic projections and projections of developments in the banking sector, aimed at obtaining a likely position of the banking sector for the end of the next two calendar years. The extreme scenario assumes unlikely events, which, if realized, will have considerable negative effects on the banking sector.

The stress test is based on two assumed shocks: the slow-down of economic activities in the country and the growth of interest rates. As the credit risk is the most significant risk in BH banking sector, the stress tests are focused on testing the resilience of the banking sector to the deterioration of the loan portfolio quality, so both shocks are reflected through the growth of non-performing loans, which ultimately has negative effects on the profitability and capitalization of the banking sector.

The expected economic trends are based on the projections of the IMF and the estimates of the CBBH and they are used as the assumptions in the baseline stress test scenario. In the baseline scenario for 2018, a recovery of economic activity in the country is assumed which is supposed to continue in 2019. In the extreme scenario, a considerable weakening of domestic demand is assumed, resulting from a reduction in disposable income of households as well as a reduced external demand for domestic products. Thus, in both periods of the extreme scenario, a significant slowdown of economic activity is assumed compared to the projections from the baseline scenario. Table 6.4 gives an overview of the basic assumptions used in the testing of stress data for the end of 2017.

Table 6.4: Main Assumptions in Stress Tests

|                               | in %           |      |                  |      |
|-------------------------------|----------------|------|------------------|------|
|                               | Basic scenario |      | Extreme scenario |      |
|                               | 2018           | 2019 | 2018             | 2019 |
| Real GDP growth <sup>1)</sup> | 3.2            | 3.5  | -3.8             | -1.5 |
| Growth of assets              | 7.0            | 7.3  | -3.5             | -3.2 |
| Nominal credit growth         | 6.1            | 6.6  | -4.0             | -3.5 |
| Growth of securities          | 4.0            | 4.0  | -5.0             | 0.0  |
| Inflation <sup>1)</sup>       | 1.5            | 1.6  | -1.1             | -0.8 |

Source: IMF and CBBH projections

1) IMF projections are taken over from the IMF World Economic Outlook, April 2018

The basic findings of stress tests are expressed in terms of capitalization of the banking sector over the next two years. The results of the stress tests carried out on the basis of data from the end of 2017 showed that the Capital Adequacy Ratio of the BH banking sector in case of the materialization of assumed shocks remained above the regulatory minimum (Table 6.5). However, in addition to satisfactory capitalization at the banking sector level, stress tests have shown that there is a significant number of banks that, in case the assumed shocks are realized, would need additional capital. Although these are idiosyncratic risks, insufficient capitalization of a large number of banks or banks of systemic importance could pose a threat to the stability of the entire banking sector.

Table 6.5: Results of Stress Tests

|   | Basic scenario |      | Extreme scenario |       |
|---|----------------|------|------------------|-------|
|   | 2018           | 2019 | 2018             | 2019  |
| Capital adequacy ratio, %                             | 16.1           | 16.3 | 14.6             | 13.7  |
| Total additional capitalization needs, million KM     | 3.4            | 17.4 | 108.5            | 224.1 |
| Number of banks needing the additional capitalization | 2              | 3    | 7                | 11    |

Source: CBBH



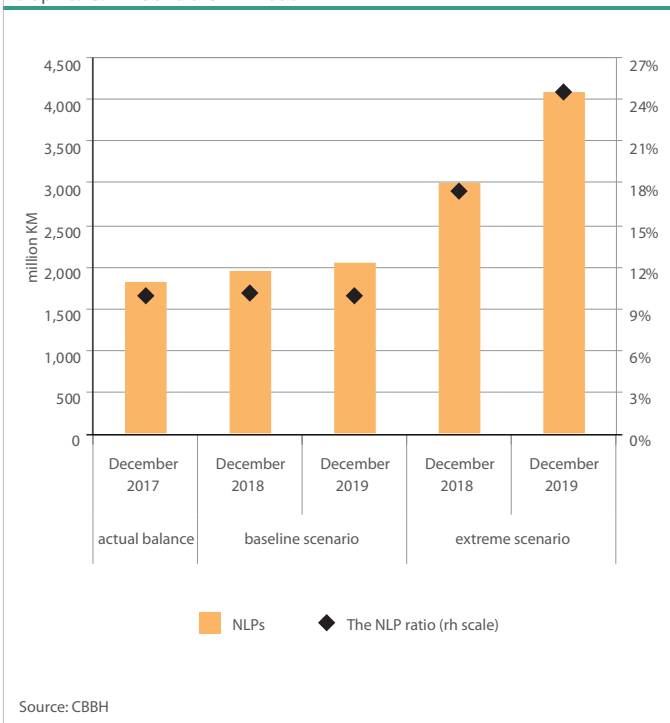
Although in the baseline scenario the banking sector appeared resilient to current risks and the existing low level of economic activities, several banks, primarily the banks facing problems in operations for a longer period of time, expressed their needs for additional capital. Thus, two banks expressed recapitalization needs in the baseline scenario for the end of 2018, and three banks at the end of 2019, two of which already expressed the need for additional capital in the first period. These are small banks that experienced operating losses in the past years or had their balances burdened with a high level of non-performing loans, wherefore in the assumed conditions of macroeconomic recovery and the increase in the balance of payments, their costs would increase significantly as compared to the increase in income. Such a scenario would result in a decline in profitability of these banks to such an extent that it would cause the reduction of Capital Adequacy Ratios below the regulatory minimum.

In case the assumed shocks from the extreme scenario were realized, the need for additional capital in 2018 would be expressed by seven and in 2019 by eleven banks. Banks where the need for additional capital only occurs in an extreme scenario mostly include the banks whose balances are burdened with a significant level of non-performing receivables or whose capital structure is unfavorable in the sense that capital adequacy is not maintained solely by the highest quality capital so that these banks are most vulnerable to strong shocks. In addition, some banks with good financial health indicators in the case of assumed growth of non-performing loans and financing costs and with a decline in credit activity, would face losses that could not be absorbed with the existing level of capital, so they would express the need for additional capital in one or both periods of the extreme scenario.

The results of the stress tests in the extreme scenario shown that the bank capitalization was primarily sensitive to the quality of the loan portfolio, which, due to the assumed shocks, considerably deteriorated. Significant increase of the cost of provisions, due to the deterioration of loan portfolio quality, as well as bank financing costs in the extreme scenario would bring negative financial result for a large number of banks in the system, which would exacerbate their capitalization. It is important to note that in stress tests it is not assumed that the banks which expressed recapitalization needs in the first period compensated for the lack of capital, but accumulated their recapitalization needs in both stress test periods. For this reason, the results for the second period of both scenarios were worse compared to the first period. Also, stress tests do

not include the assumption of write-offs of non-performing loans, i.e. a sale of this part of asset to another legal entity, with accumulation of non-performing loans in the stress test periods (Graph 6.13).

Graph 6.13: NPLs and the NPL Ratio



## 6.2 Non-banking Financial Sector

As a result of the recovery of economic activity in 2017, slight positive trends were observed in certain segments of the non-banking financial sector. Property value growth was realized in microcredit organizations, the insurance sector and investment funds. On the other hand, the leasing sector recorded a contraction in the balance sheet of leasing companies as a result of the decreased number of leasing companies (Table 6.1). Although the recovery of the non-banking financial intermediaries' business performance affected the growth of assets of the non-banking financial sector in 2017, this growth was not strong enough to result in the growth of this sector's share in the total assets of financial intermediaries. Compared to 2016, assets of the non-banking financial sector recorded an increase of KM 147.5 million, but its share in the financial sector decreased from 12.2% to 11.7%. In the capital market there was a drop in turnover for the second consecutive year.

**Positive trends recorded in the microcredit sector in 2017, which are reflected in the creation of new companies, the growth of credit activity and balance sheet amount, and higher profitability, are indicators of the recovery of this part of financial sector.** At the end of 2017, 25 MCOs operated in BH, 15 of which are microcredit foundations and

10 microcredit companies. Three new microcredit companies and one microcredit foundation were founded in 2017. The total assets of the microcredit sector at the end of 2017 increased by KM 125.9 million or 19% compared to 2016 (Table 6.6). In the structure of assets, loans have the largest share (KM 624 million or 79.1%), with an annual growth rate of 11.3%. The recovery of credit activity was recorded in most microcredit organizations, but some smaller MCOs still face a lack of funding sources, having a contraction in the balance sheet and negative business outcomes. Out of the total amount of microcredits, 97.7% was allocated to natural persons, majority of which was approved for financing the agricultural sector (37.5%). Microcredits paid to natural persons account for 17.9% of placements for service activities, followed by housing loans (14.5%).

The MCO sector experienced an increase in the risk portfolio in 2017, but due to the more significant increase in loan placements, the share of risk portfolio in the total portfolio was somewhat lower than in the previous year. Out of the total loan portfolio 2.24% or KM 14 million loans had a delay in repayment, which shows an increase in the risk portfolio for KM 695 thousand or 5.2% compared to the previous year. Also, the increase in loan loss provisions amounted to KM 4.8 million at the end of 2016, and KM 5 million at the end of 2017. The rate of the loan loss provision at the sector level was 0.8% and recorded a decrease of 5 base points compared to the previous year. Off-balance records, consisting mainly of write-offs at the end of 2017, amounted to KM 150.1 million, down by 2.5% compared to the previous year, accounting for 24% of the loan portfolio.

**Table 6.6: Simplified Balance Sheet of Micro Credit Organizations**

| million KM                                   |              |              |                                 |              |              |
|--|--------------|--------------|---------------------------------|--------------|--------------|
| Assets                                       |              |              | Liabilities                     |              |              |
|  | 2016         | 2017         |                                 | 2016         | 2017         |
| Monetary funds and placements to other banks | 35.9         | 60.0         |                                 |              |              |
| Loans  | 560.8        | 624.0        | Liabilities from borrowed loans | 334.9        | 397.8        |
| Provisions for the loan losses               | -4.8         | -5.0         | Capital                         | 293.1        | 352.8        |
| Other assets                                 | 70.8         | 109.6        | Other liabilities               | 34.7         | 38.1         |
| <b>TOTAL</b>                                 | <b>662.7</b> | <b>788.7</b> | <b>TOTAL</b>                    | <b>662.7</b> | <b>788.7</b> |

Source: FBA and BARS, CBBH calculation

In the structure of liabilities, liabilities related to borrowings accounted for the main source of MCO assets and amounted to KM 397.8 million, i.e. an increase of 18.8% compared to

the previous year. Although liabilities based on short-term and long-term loans recorded growth for the first time since 2008, domestic commercial banks and international creditors remained to some extent abstained from lending to the microcredit sector, wherefore some MCOs were deprived of more favorable financial resources to finance their own activities. The total capital of the sector at the end of 2017 amounted to KM 352.8 million and recorded an increase of KM 59.7 million (20.4%) in relation to the previous year. The increase of equity had the most significant impact on the increase of total capital of the microcredit sector, as a result of recapitalization of two microcredit companies in 2017 and the payment of founder's capital with three newly established microcredit companies. In the structure of microcredit foundations capital, the most significant is the surplus of revenue over expenditures, amounting to KM 169.8 million, while the most significant source of capital of microcredit companies is the unallocated profit, which amounted to KM 45 million at the end of 2017.

At the end of 2017, the microcredit sector achieved a positive financial result in the amount of KM 26.9 million and recorded a profit increase of KM 1.1 million over the previous year. Four microcredit companies reported business losses in the amount of KM 1.06 million, while four microcredit foundations expressed deficit of revenue over expenditure in the amount of KM 199 thousand. Total revenues at the end of 2017 amounted to KM 124 million and recorded an increase of 9.2% compared to the previous year. In the structure of total revenues, interest income has the largest share, which at the end of 2017 accounted for 92% of total revenues. The interest income amounted to KM 114 million and recorded an increase of KM 9.3 million (8.9%). Operating income amounted to KM 10 million and recorded an increase of KM 1.2 million (13%) compared to the previous year.

The average weighted effective interest rate on total FBH loans in the fourth quarter of 2017 was 24.73%, with effective interest rates on short-term and long-term microcredits in FBH slightly lower than in the previous year, while the same rate on total credits in RS amounted to 23.9%, however the RS recorded increase in interest rates on short-term and long-term microcredits during 2017.

Total expenditures of the MCO sector amounted to KM 106.8 million and recorded an increase of 8.4% compared to the previous year. The operating costs of the sector, which mostly account for salaries and contributions, were 10.4% higher than in 2016, which was the result of an increase in the

number of employees in the microcredit sector<sup>28</sup>. Provision expenses for loan-related losses and other losses amounted to KM 4.7 million and recorded an increase of 2.4% compared to the previous year. The increase in the profitability of the microcredit sector in 2017 was mainly due to the growth in revenues generated by interest rates and similar revenues. Although the indicators of the microcredit business sector indicate the growth and stabilization of the business, a few stronger and healthier MCOs should be created to further strengthen the microcredit sector, whereby the foundations with small capital and high level of write-offs would be able to save the donated funds and regain the trust of investors who still perceive this sector as risky.

**At the end of 2017, six (6) leasing companies had the license, and the number of leasing companies was reduced by two companies, resulting in a contraction of the balance sheet amount of the leasing sector.** In mid-2017, Hypo Alpe Adria Leasing d.o.o. Banja Luka had its license withdrawn, and at the beginning of the third quarter there was a merger of UniCredit Leasing d.o.o. Sarajevo with UniCredit d.d. Mostar. In addition, it should be noted that in 2017 three leasing companies were not market-active in the process of concluding new contracts. The total assets of the leasing sector amounted to KM 260.2 million and recorded a decrease of KM 162.5 million (38.4%) in relation to the previous year. Two leasing companies recorded an increase in balance sheet amount in the amount of KM 26.1 million, while four companies, three of which were not active on the market, recorded a decline in the balance sheet in the amount of KM 41.3 million in comparison with the previous year<sup>29</sup>. In the structure of total assets, financial placements are the most significant item in the leasing companies' balance sheets. The financial leasing accounts for 89.3% of the lease contract value and the operating leasing accounts for the remaining 10.7%. The value of newly concluded financial and operating lease contracts in 2017 was KM 145.8 million, i.e. 1.5% more compared to the same period last year. The total net receivables from the financial lease amounted to KM 176 million, accounting for 67.6% of total assets in 2017. Established reserves for financial leasing losses at the end of 2017 amounted to KM 2.1 million, i.e. KM 2.4 million or 53.8% less as compared to the previous year. One leasing company recorded an increase in the established loss reserves, but other leasing companies recorded a decrease in the reserves for financial leasing losses.

At the end of 2017, the leasing sector achieved a positive financial result of KM 5 million, unlike the previous year when the loss of inactive leasing companies resulted in a negative financial result at the sector level. A positive financial result was achieved by four leasing companies in the amount of KM 6 million, while two companies reported a negative financial result in the amount of KM 1 million. Although the remaining active companies recorded improved business performance, which is reflected in the increase in total volume of financing and the number of new contracts concluded, as well as the positive financial result, it is evident that this sector is increasingly losing importance.

**The insurance market continued to record the growth of premium income and balance sheet in 2017.** In the insurance market in BH in 2017 there were 27 insurance companies and one reinsurance company. The total accrued premium in 2017 amounted to KM 683.2 million, and as compared to the same period last year it recorded an increase of 7.8%. Although the premium growth was recorded in 2017, the share of premiums in total GDP remains at a very low level as in the previous year (2.17% of GDP). Of the total accrued premiums, non-life insurance covers 79.6%, or KM 544 million. The most significant share in the total insurance premium continues to be covered by automobile liability insurance (over 50%), which is a sign of the huge underdevelopment of the insurance market in BH. Life insurance premium amounted to KM 139.2 million, whereby the share in the total premium in 2017 remained the same as in the previous year, i.e. 20.4%. Despite the growth in life insurance premiums (7.7%) in 2017, there was still a low level of voluntary insurance, which is one of the indicators of weak development of the insurance market in BH. Total gross claims amounted to KM 265.7 million and accounted for 38.9% of total accrued premiums.

According to the CBBH data, at the end of 2017, insurance companies held 33.9% of total assets in various forms of deposits in commercial banks. While deposits with commercial banks recorded a slight decrease in terms of their share in the assets of insurance companies, there is a notable increase in the share of government securities in the structure of the assets of this sector. Investments of the insurance sector in the government securities at the end of 2017 amounted to KM 301 million and recorded a growth of 37.8% over the previous year, and the share of government securities in total assets of insurance companies at the end of the year was 16.6%.

<sup>28</sup>Total number of employees in 2017 was 12,3% higher compared to the previous year, however the increased number of employees in the FBH was the result of the fact that 114 employees of a MCF work part-time and are included in the reports on qualifications of MCF and MCC employees.

<sup>29</sup>The largest decrease of the balance sheet amount is related to one inactive leasing company.

The growth in premiums and balance sheets of insurance companies indicates a continuation of positive trends in the insurance sector. However, further development of the insurance market in BH is largely limited to general economic conditions such as low wage levels and continued high unemployment rates, as well as insufficient knowledge of the population about the role and importance of insurance. All of these results in the still low representation of voluntary types of insurance, which is ultimately a limiting factor for strengthening the investment potential of the insurance sector.

**In 2017, there were 36 licenced investment funds**, 17 of which in FBH and 19 in RS. Out of the total of 36 investment funds, 25 are closed-end investment funds, while 11 funds are open-end investment funds. In the course of 2017, the work permit was granted to three open investment funds<sup>30</sup>. Part of the assets of the closed-end mixed investment fund (CMIF), in transformation of the "Kristal invest fond" Banja Luka, was transferred to the open investment fund "Oportunity Fund", while part of CMIF's assets in the reshaping of "Zepter Fund" Banja Luka was transferred to the open mixed investment fund "Future Fund" and Open Joint Investment Fund "Maximus Fund". Net asset value of investment funds at the end of 2017 amounted to KM 846.9 million and recorded an increase of KM 45.3 million (5.6%) compared to the end of the previous year. The increase in the total value of net assets of investment funds in 2017 was mostly contributed by a significant increase in the net assets of a single fund. On the other hand, a larger number of funds recorded a decrease in net assets as a result of the fall in the market value of securities from the fund portfolio. The structure of the portfolio of investment funds is still dominated by proprietary instruments, i.e. shares as the most significant asset in nearly all investment funds.

**The total turnover of BH stock exchanges in 2017 continued to decrease for the second consecutive year and the value of turnover amounted to KM 1.02 billion.** Of the total turnover on the Sarajevo Stock Exchange (SASE), KM 532.6 million or 52.2% were realized, while Banja Luka Stock Exchange (BLSE) realized KM 486.9 million or 47.8%.

The value of total turnover on BH stocks markets in 2017 was lower by 26.1%, while the annual rates of decline in SASE and BLSE were 29.5% and 22.1% respectively. As in the previous few years, the largest volume of turnover was realized on the primary market in the segment of debt instruments, and given that the entity governments decreased the volume of borrowing intensity on the domestic capital market compared to the previous years, there was a decrease in turnover on both BH stock markets. In the quotes of companies, funds and bonds, there was a decrease in turnover of KM 51.4 million, while a slight increase in turnover was recorded on the free market in the amount of KM 10 million, mainly due to the increase of turnover in the bankruptcy market. With the reduction of public offer on the primary market, the BLSE also recorded a drop in the regular turnover of shares, funds, bonds and treasury bills in the amount of KM 68.4 million.

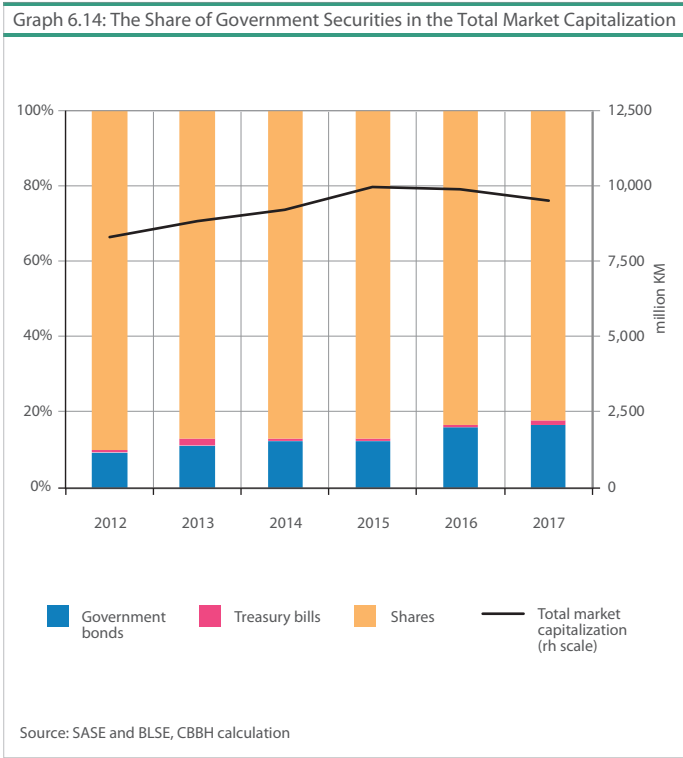
The total market capitalization in BH at the end of 2017 was lower than in the previous year, which was the result of a decrease of market capitalization on SASE in the amount of KM 383.8 million (7%). At the same time, market capitalization at BLSE increased by KM 61.7 million (1.6%) compared to the end of 2016. The reduction in market capitalization that was recorded on SASE in 2017 resulted in a significant decrease in the value of shares traded on this stock exchange. At the annual level only the SASX 30 index was slightly up (0.53%), while the BIFX, SASX 10 and SASX-BBI values were down 25.1%, 18.5% and 8.7%, respectively. The value of the BIRS stock exchange on the Banja Luka Stock Exchange decreased by 0.6%, the value of the Elektroprivreda Republike Srpske (ERS) index was lower by 14.7%, while the value of the RS bonds index increased by 13.4% compared to the end of the previous year.

Although entity governments reduced the debt intensity of the domestic capital market in 2017, the share of government securities in total market capitalization continued to increase, largely as a result of the decline in overall market capitalization<sup>31</sup>. Thus, at the end of 2017, the share of government securities in total market capitalization reached 17.6% (Graph 6.14)<sup>32</sup>.

<sup>30</sup>According to the Law on Investment Funds in RS ("Official Gazette of Republika Srpska", number 92/06) a management company which manages closed-end investment fund and is organized as a closed-end investment fund is obliged to transform the closed-end investment fund into the open-end investment fund within three years as of 14 October 2015.

<sup>31</sup>For the purpose of analysis, the value of total market capitalization in SASE is increased by the value of traded bonds during the reporting period. Out of the total traded bills in SASE in 2017, 98.82% was related to the entity governments bonds.

<sup>32</sup>The Graph does not present corporate bonds, as their share in the total market capitalisation was only 0.1%, and the treasury bills of FBH Government, as they are not traded in the secondary market.



The drop in turnover on the capital market, the relatively small role of microcredit organizations and leasing companies in financial intermediation and the inadequate growth of insurance companies point to the dissatisfaction of domestic investors with alternative forms of investment. Domestic capital markets in terms of investment activity and potential are still not at the levels that could support faster development of economic activity in BH. Larger institutional investors are still not present on the capital market.

Along with the development of institutional investors, one of the necessary prerequisites for capital market development is to strengthen the private sector and create the conditions for the development of powerful private companies that could use the BH stock exchange as an additional source of funding and to some extent as an alternative to the banking sector.



## 7. Financial Infrastructure

### 7.1 Payment Systems

The legal obligation to maintain the appropriate payment and settlement systems of the CBBH was also fulfilled in 2017: Payment transactions in the country were unobstructed through giro clearing and Real-time Gross Settlement (RTGS); the Central Registry of Credits (CRC) and the Single Registry of Transaction Accounts (SRTA) have been maintained; and international clearing payments were made abroad.

During 2017, CBBH payment systems recorded an increase in the number of transactions as well as their value through the giro clearing and RTGS systems. In March 2017, the CBBH introduced four settlements in the giro-clearing system instead of the previous three, thus allowing legal and natural persons to more frequently process their payment orders during the day. The total number of transactions in the interbank payment system increased by 2.8%, while the total value of transactions increased by 8.9% compared to the previous year.

The increase in the value of transactions in 2017 resulted in a faster circulation of money in the economy, thus reducing the number of days needed to make transactions in the value of the annual nominal GDP (Table 7.1). Despite the continuing increase in the number of interbank transactions, the majority of payment transactions continue within the banks themselves. In 2017, 62% of the total number of transactions were related to intrabank transactions, while the remaining 38% were related to interbank transactions.

Concentration of the total number and value of interbank transactions in payment transactions is illustrated by the Herfindahl-Hirschman Index (HHI)<sup>33</sup>. Table 7.2. shows the index values calculated on the basis of data on the total number and the amount of interbank transactions for all banks participating in payment transaction in both payment systems (RTGS and giro-clearing). The concentration of transactions measured by the HHI index, when all banks in the system are included in the calculation, is higher than in the previous year, but the values do not indicate the existence of systemic risk in the payment systems. The HHI index values point to a moderate concentration of interbank payment

transactions, i.e. to the fact that most of the interbank payment transactions occur between a small number of large banks.

**Table 7.1: Interbank Payment Transactions**

| Year | Total number of transactions, million KM | Total turnover, million KM | Average daily turnover, million KM | GDP/ average daily turnover |
|------|--|----------------------------|------------------------------------|-----------------------------|
| 2005 | 22.9                                     | 36,195                     | 140.3                              | 122                         |
| 2006 | 24.9                                     | 47,728                     | 185.0                              | 104                         |
| 2007 | 28.4                                     | 60,193                     | 234.2                              | 93                          |
| 2008 | 29.6                                     | 70,345                     | 272.7                              | 91                          |
| 2009 | 29.0                                     | 64,458                     | 251.8                              | 95                          |
| 2010 | 31.8                                     | 67,779                     | 263.7                              | 94                          |
| 2011 | 32.5                                     | 76,653                     | 298.3                              | 87                          |
| 2012 | 33.8                                     | 81,533                     | 318.5                              | 81                          |
| 2013 | 35.8                                     | 76,605                     | 298.1                              | 88                          |
| 2014 | 37.9                                     | 87,859                     | 341.9                              | 79                          |
| 2015 | 39.1                                     | 85,106                     | 326.1                              | 87                          |
| 2016 | 40.0                                     | 88,380                     | 338.6                              | 86                          |
| 2017 | 41.1                                     | 96,243                     | 370.2                              | 85                          |

Source: CBBH, BHAS, CBBH calculation

**Table 7.2. Concentration of the Transactions in Interbank Payment System (HHI)**

| Period        | All banks              |                       | 10 banks with the biggest share |                       |
|---------------|------------------------|-----------------------|---------------------------------|-----------------------|
|               | Number of transactions | Value of transactions | Number of transactions          | Value of transactions |
| December 2008 | 693                    | 908                   | 1,271                           | 1,381                 |
| December 2009 | 651                    | 989                   | 1,233                           | 1,413                 |
| December 2010 | 651                    | 903                   | 1,256                           | 1,346                 |
| December 2011 | 626                    | 836                   | 1,230                           | 1,287                 |
| December 2012 | 638                    | 844                   | 1,278                           | 1,295                 |
| December 2013 | 654                    | 810                   | 1,337                           | 1,378                 |
| December 2014 | 660                    | 778                   | 1,350                           | 1,310                 |
| December 2015 | 689                    | 810                   | 1,314                           | 1,305                 |
| December 2016 | 690                    | 822                   | 1,307                           | 1,322                 |
| December 2017 | 723                    | 852                   | 1,320                           | 1,349                 |

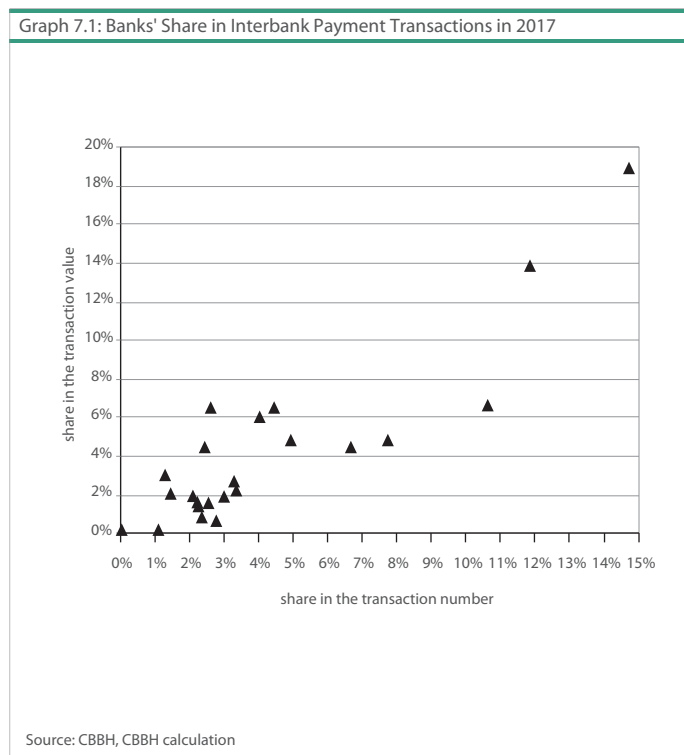
Source: CBBH, CBBH calculation

Graph 7.1 shows the share of banks in the total number and value of interbank transactions for 2017. The bank with the largest share of interbank payment transactions in 2017 accounted for 18.98% of the total value of transactions, while

<sup>33</sup>HHI is a measure of concentration and is calculated as a sum of the squares of individual shares in the observed segment. The index below 1,000 points indicates low concentration, 1,000 to 1,800 points moderate concentration and over 1,800 points high concentration.



the top five banks with the highest share accounted for 52.53% of total transaction value.



In 2017, the CBBH continued to maintain the Central Registry of Credits (CRC). CRC data are updated on a daily basis by business banks, microcredit organizations, leasing companies and other institutions reporting in the CRC, wherefore the financial institutions-beneficiaries of this database are provided with the data on credit history and the current indebtedness of their existing or potential clients, thus allowing for a better assessment of risks when deciding on the approval of placements. The use of CRC in the course of 2017 was somewhat intense as compared to the previous year, indicating that financial intermediaries considered the data from this registry relevant in assessing the creditworthiness of clients.

In 2017, the CBBH continued to maintain the Single Registry of Transaction Accounts as well as a single database of all blocked accounts of BH business entities. The list of blocked accounts of business entities is updated monthly and published on the CBBH website. By publishing a list of blocked accounts, the CBBH enables all business entities to inspect the status of accounts of the existing or potential business partners.

In 2017, the CBBH continued to perform international clearing of payments between banks from BH and the Republic of Serbia, and realized 10,602 orders totaling EUR 172.1 million. Although the value of transactions slightly decreased compared to the previous year, the number of transactions increased, indicating that banks continued to actively use this payment settlement platform.

## 7.2 Regulatory Framework

In 2017, reforms in the financial sector were implemented by adopting a set of laws regulating banking operations in BH. After the RS National Assembly adopted the Law on Banks of Republika Srpska<sup>34</sup> in December 2016, the FBH Parliament adopted the Law on Banks<sup>35</sup> in March 2017. The provisions of the new banking laws are, to the best possible extent, consistent with EU directives and Basel Principles and are related to the extension of banking agencies' authority to supervise banks, strengthening of prudential requirements and requirements related to bank management, risk management system, obligation to make recovery plans and restructuring of banks. In October 2017, the FBH Parliament passed the Law on Amendments to the Law on the Banking Agency of FBH<sup>36</sup>, while the RS National Assembly adopted this Law<sup>37</sup> in January 2017. Amendments to these laws have extended the powers and competences of the banking agencies in bank supervision and gives them the authority for bank restructuring, which is a completely new function of Banking Agencies.

In order to further harmonize the legal framework for banking operations, it is especially important to adopt the new Law on Deposit Insurance in BH Banks. The bill has been drafted and is currently in the parliamentary adoption procedure. The new Law on Deposit Insurance in BH should provide for better protection of depositors and bind the bank membership in the secured deposits system with obtaining a work permit.

In order to ensure timely and consistent application of new banking laws, the Banking Agencies adopted a set of by-laws in the field of permits issuance, bank supervision, risk management, liquidity, capital, recovery plans, bank management and the like.

<sup>34</sup>Law on Banks of RS (Official Gazette of RS, 3/17)

<sup>35</sup>Law on Banks of FBH (Official Gazette of FBH, 27/17)

<sup>36</sup>Law on the Banking Agency of FBH (Official Gazette of FBH, 75/17)

<sup>37</sup>Law on the Banking Agency of RS (Official Gazette of RS, 4/17)

The International Financial Reporting Standard 9 (IFRS 9), which replaced the IAS 39, became effective at the beginning of 2018; under this standard banks and other legal entities would be required to prepare financial statements for the business year ending on 31 December 2018.

The FBH Parliament adopted the Draft Law on Bankruptcy in November 2016, but two Articles of this Law were considered controversial, so the FBH Parliament adopted the Law on Amendments to the Law on Bankruptcy Procedure<sup>38</sup> in June 2018. The Law on Bankruptcy<sup>39</sup> has been applied in Republika Srpska since March 2016.

In April 2018, the RS National Assembly adopted the Law on Time Limits for Settlement of Liabilities in Business Transactions<sup>40</sup>. The Law defines the deadlines for settlement of financial obligations in business transactions as well as the legal consequences in the event of delays in settling those obligations, which should contribute to better liquidity of business entities. The application of the Law on Financial Operations of the FBH<sup>41</sup>, which stipulates the deadlines for the execution of monetary liabilities, started from January 2017.

Within the framework of the commitments undertaken by the Stabilization and Association Agreement, in July 2017 the Government of FBH established the Proposal of the Law on the Register of Financial Statements

regulating the establishment, content and keeping of the Registry of Financial Statements and the protection and preservation of documentation and data from the Registry, implementing reforms in the area of accounting and auditing and further alignment with EU legislation.

In February 2017, the new Law on Insurance was adopted in FBH<sup>42</sup>. The Law regulates the establishment, operation, supervision and termination of insurance companies established in FBH, as well as subsidiaries of the companies operating in FBH. By passing this Law and the Law on Amendment to the Law on Insurance Companies in RS<sup>43</sup> in April 2017, one more requirement of the MONEYVAL Committee and the FATF in the area of prevention of money laundering and financing of terrorist activities was fulfilled.

According to the GRECO Report, Bosnia and Herzegovina has made progress in meeting the recommendations of this highest European body overseeing anti-corruption measures. In February 2018, a FATF session was held in Paris, confirming that Bosnia and Herzegovina was removed from the list of high-risk countries unsafe for financial investments. Such a result has been achieved by adopting a set of laws aimed at removing obstacles in combating money laundering and harmonization of the money laundering prevention system, as well as the prevention of terrorist financing, including the standards and recommendations of FATF and MONEYVAL.

<sup>38</sup>Law on Amendments to the Law on Bankruptcy Procedure of FBH (Official Gazette of FBH, 52/18)

<sup>39</sup>Law on Bankruptcy of RS (Official Gazette of RS, 16/16)

<sup>40</sup>Law on Time Limits for Settlement of Liabilities in Business Transactions (Official Gazette of RS, 31/18)

<sup>41</sup>Law on Financial Operations of FBH (Official Gazette of FBH, 48/16)

<sup>42</sup>Insurance Law of FBH ("Official Gazette of FBH" No. 23/17)

<sup>43</sup>Law on Amendments to the Law on Insurance Companies (Official Gazette of RS, 47/17)

## Statistical appendix

Table A1: Changes of the Sovereign Rating

| Country  | Date of change | Standard & Poor's rating |                 |            |
|----------|----------------|--------------------------|-----------------|------------|
|          |                | Long-term                | Outlook         | Short-term |
| Greece   | until 2009     | A                        | Stable          | A-1        |
|          | 09.01.2009     | A                        | Negative, watch | A-1        |
|          | 14.01.2009     | A                        | Stable          | A-2        |
|          | 07.12.2009     | A                        | Negative, watch | A-2        |
|          | 16.12.2009     | BBB+                     | Negative, watch | A-2        |
|          | 16.03.2010     | BBB+                     | Negative        | A-2        |
|          | 27.04.2010     | BB+                      | Negative        | B          |
|          | 02.12.2010     | BB+                      | Negative, watch | BB+        |
|          | 29.03.2011     | BB-                      | Negative, watch | B          |
|          | 09.05.2011     | B                        | Negative, watch | C          |
|          | 13.06.2011     | CCC                      | Negative        | C          |
|          | 27.07.2011     | CC                       | Negative        | C          |
|          | 05.02.2012     | CCC                      | Stable          | C          |
|          | 27.02.2012     | SD                       | NM              | SD         |
|          | 02.05.2012     | CCC                      | Stable          | C          |
|          | 07.08.2012     | CCC                      | Negative        | C          |
|          | 05.12.2012     | SD                       | -               | SD         |
|          | 18.12.2012     | B-                       | Stable          | B          |
|          | 28.01.2015     | B-                       | Negative, watch | B          |
|          | 15.04.2015     | CCC+                     | Negative        | C          |
|          | 22.01.2016     | B-                       | Stable          | B          |
|          | 19.01.2018     | B                        | Positive        | B          |
| Ireland  | until 2009     | AAA                      | Stable          | A-1+       |
|          | 09.01.2009     | AAA                      | Negative        | A-1+       |
|          | 30.03.2009     | AA+                      | Negative        | A-1+       |
|          | 08.06.2009     | AA                       | Negative        | A-1+       |
|          | 24.08.2010     | AA-                      | Negative        | A-1+       |
|          | 23.11.2010     | A                        | Negative, watch | A-1        |
|          | 02.02.2011     | A-                       | Negative, watch | A-2        |
|          | 01.04.2011     | BBB+                     | Stable          | A-2        |
|          | 05.12.2011     | BBB+                     | Negative, watch | A-2        |
|          | 13.01.2012     | BBB+                     | Negative        | A-2        |
|          | 11.02.2013     | BBB+                     | Stable          | A-2        |
|          | 07.12.2013     | BBB+                     | Positive        | A-2        |
|          | 06.06.2014     | A-                       | Positive        | A-2        |
|          | 05.12.2014     | A                        | Stable          | A-1        |
|          | 05.06.2015     | A+                       | Stable          | A-1        |
| Portugal | until 2009     | AA-                      | Stable          | A-1+       |
|          | 13.01.2009     | AA-                      | Negative, watch | A-1+       |
|          | 21.01.2009     | A+                       | Stable          | A-1        |
|          | 07.10.2009     | A+                       | Negative        | A-1        |
|          | 27.04.2010     | A-                       | Negative        | A-2        |
|          | 30.11.2010     | A-                       | Negative, watch | A-2        |
|          | 24.03.2011     | BBB                      | Negative, watch | A-2        |
|          | 29.03.2011     | BBB-                     | Negative        | A-3        |
|          | 05.12.2011     | BBB-                     | Negative, watch | A-3        |
|          | 13.01.2012     | BB                       | Negative        | B          |
|          | 06.03.2013     | BB                       | Stable          | B          |
|          | 05.07.2013     | BB                       | Negative        | B          |
|          | 09.05.2014     | BB                       | Stable          | B          |
|          | 20.03.2015     | BB                       | Positive        | B          |
|          | 18.09.2015     | BB+                      | Stable          | B          |
|          | 15.09.2017     | BBB-                     | Stable          | A-3        |

|        |            |      |                 |      |
|--------|------------|------|-----------------|------|
| Spain  | until 2009 | AAA  | Stable          | A-1+ |
|        | 12.01.2009 | AAA  | Negative, watch | A-1+ |
|        | 19.01.2009 | AA+  | Stable          | A-1+ |
|        | 09.12.2009 | AA+  | Negative        | A-1+ |
|        | 28.04.2010 | AA   | Negative        | A-1+ |
|        | 05.12.2011 | AA-  | Negative, watch | A-1+ |
|        | 13.01.2012 | A    | Negative        | A-1  |
|        | 26.04.2012 | BBB+ | Negative        | A-2  |
|        | 10.10.2012 | BBB- | Negative        | A-3  |
|        | 23.05.2014 | BBB  | Stable          | A-2  |
|        | 02.10.2015 | BBB+ | Stable          | A-2  |
|        | 01.04.2017 | BBB+ | Positive        | A-2  |
|        | 23.03.2018 | A-   | Positive        | A-2  |
| Italy  | until 2009 | A+   | Stable          | A-1+ |
|        | 20.05.2011 | A+   | Negative        | A-1+ |
|        | 20.09.2011 | A    | Negative        | A-1  |
|        | 05.12.2011 | A    | Negative, watch | A-1  |
|        | 13.01.2012 | BBB+ | Negative        | A-2  |
|        | 09.07.2013 | BBB  | Negative        | A-2  |
|        | 05.12.2014 | BBB- | Stable          | A-3  |
|        | 27.10.2017 | BBB  | Stable          | A-2  |
| Cyprus | until 2009 | A+   | Stable          | A-1  |
|        | 21.07.2010 | A+   | Negative, watch | A-1  |
|        | 16.11.2010 | A    | Negative        | A-1  |
|        | 30.03.2011 | A-   | Negative        | A-2  |
|        | 29.07.2011 | BBB  | Negative, watch | A-2  |
|        | 12.08.2011 | BBB+ | Negative, watch | A-2  |
|        | 27.10.2011 | BBB  | Negative, watch | A-3  |
|        | 13.01.2012 | BB+  | Negative        | B    |
|        | 01.08.2012 | BB   | Negative, watch | B    |
|        | 17.10.2012 | B    | Negative, watch | B    |
|        | 20.12.2012 | CCC+ | Negative        | C    |
|        | 21.03.2013 | CCC  | Negative        | C    |
|        | 10.04.2013 | CCC  | Stable          | C    |
|        | 28.06.2013 | SD   | -               | SD   |
|        | 03.07.2013 | CCC+ | Stable          | C    |
|        | 29.11.2013 | CCC+ | Stable          | B    |
|        | 25.04.2014 | B    | Positive        | B    |
|        | 24.10.2014 | B+   | Stable          | B    |
|        | 27.03.2015 | B+   | Positive        | B    |
|        | 25.09.2015 | BB-  | Positive        | B    |
|        | 18.03.2017 | BB+  | Stable          | B    |
|        | 15.09.2017 | BB+  | Positive        | B    |

Source: Standard &amp; Poor's

Table A2: Real Estate Price Index

|      |    | Sarajevo | Mostar | Zenica | Tuzla | TOTAL |
|------|----|----------|--------|--------|-------|-------|
| 2004 | Q1 | 47       | 84     | 60     |       | 52    |
|      | Q2 | 47       | 81     | 59     |       | 51    |
|      | Q3 | 47       | 82     | 60     |       | 51    |
|      | Q4 | 48       | 80     | 59     |       | 52    |
| 2005 | Q1 | 49       | 79     | 61     |       | 53    |
|      | Q2 | 49       | 81     | 60     |       | 52    |
|      | Q3 | 50       | 79     | 60     |       | 53    |
|      | Q4 | 52       | 82     | 64     |       | 56    |
| 2006 | Q1 | 54       | 84     | 67     |       | 59    |
|      | Q2 | 59       | 84     | 63     |       | 62    |
|      | Q3 | 58       | 82     | 66     |       | 62    |
|      | Q4 | 63       | 71     | 71     |       | 65    |
| 2007 | Q1 | 69       | 85     | 72     |       | 71    |
|      | Q2 | 77       | 90     | 88     |       | 79    |
|      | Q3 | 85       | 86     | 92     |       | 86    |
|      | Q4 | 94       | 92     | 95     |       | 94    |
| 2008 | Q1 | 100      | 100    | 100    | 100   | 100   |
|      | Q2 | 105      | 99     | 107    | 104   | 105   |
|      | Q3 | 103      | 102    | 113    | 114   | 105   |
|      | Q4 | 109      | 104    | 126    | 117   | 110   |
| 2009 | Q1 | 99       | 120    | 129    | 102   | 102   |
|      | Q2 | 96       | 125    | 127    | 105   | 101   |
|      | Q3 | 91       | 124    | 128    | 114   | 99    |
|      | Q4 | 89       | 127    | 119    | 121   | 97    |
| 2010 | Q1 | 88       | 119    | 130    | 119   | 96    |
|      | Q2 | 86       | 128    | 129    | 126   | 98    |
|      | Q3 | 85       | 120    | 126    | 112   | 94    |
|      | Q4 | 84       | 126    | 143    | 120   | 94    |
| 2011 | Q1 | 83       | 125    | 138    | 113   | 93    |
|      | Q2 | 84       | 121    | 140    | 93    | 92    |
|      | Q3 | 82       | 118    | 132    | 102   | 92    |
|      | Q4 | 83       | 124    | 131    | 107   | 92    |
| 2012 | Q1 | 84       | 132    | 130    | 111   | 94    |
|      | Q2 | 82       | 117    | 139    | 105   | 93    |
|      | Q3 | 80       | 124    | 122    | 103   | 89    |
|      | Q4 | 78       | 120    | 133    | 104   | 88    |
| 2013 | Q1 | 81       | 128    | 135    | 113   | 91    |
|      | Q2 | 78       | 127    | 134    | 113   | 90    |
|      | Q3 | 79       | 124    | 124    | 116   | 90    |
|      | Q4 | 76       | 130    | 136    | 101   | 88    |
| 2014 | Q1 | 78       | 121    | 126    | 104   | 88    |
|      | Q2 | 77       | 119    | 124    | 104   | 86    |
|      | Q3 | 77       | 111    | 126    | 106   | 86    |
|      | Q4 | 77       | 113    | 129    | 103   | 85    |
| 2015 | Q1 | 79       | 118    | 127    | 103   | 87    |
|      | Q2 | 80       | 117    | 127    | 106   | 89    |
|      | Q3 | 78       | 118    | 131    | 107   | 88    |
|      | Q4 | 81       | 114    | 126    | 106   | 89    |
| 2016 | Q1 | 78       | 112    | 125    | 104   | 87    |
|      | Q2 | 80       | 115    | 134    | 104   | 88    |
|      | Q3 | 82       | 131    | 133    | 108   | 93    |
|      | Q4 | 81       | 128    | 134    | 106   | 93    |
| 2017 | Q1 | 83       | 128    | 134    | 102   | 93    |
|      | Q2 | 84       | 113    | 134    | 102   | 91    |
|      | Q3 | 83       | 124    | 138    | 109   | 92    |
|      | Q4 | 86       | 110    | 135    | 118   | 94    |

Source: CBBiH



Table A3: Survey of Largest Debtors by Standard Loans according to BH CA 2010, 31 December 2017

|  |                      |                   | thousand KM               |  |
|--|----------------------|-------------------|---------------------------|--|
| Activity   | Loans, residual debt | Share in activity | Share in the total claims |  |
| <b>A: Agriculture, forestry and fishing</b>  | <b>165,514</b>       |                   | <b>2.2%</b>               |  |
| <i>Growing of years long crops</i>   |                      |                   |                           |  |
| Growing of other years long crops  | 25,608               | 15.5%             | 0.3%                      |  |
| <i>Plant and cattle production, hunting and related service activities, of which:</i>  |                      |                   |                           |  |
| Poultry farming  | 16,061               | 9.7%              | 0.2%                      |  |
| <b>B: Mining and quarrying</b>   | <b>201,111</b>       |                   | <b>2.7%</b>               |  |
| <i>Mining of coal and lignite, of which:</i>   |                      |                   |                           |  |
| Mining of lignite  | 37,542               | 18.7%             | 0.5%                      |  |
| <b>C: Manufacturing industry</b>   | <b>1,849,237</b>     |                   | <b>24.9%</b>              |  |
| <i>Production of beverages, of which:</i>  |                      |                   |                           |  |
| Beer production  | 32,585               | 1.8%              | 0.4%                      |  |
| <i>Production of food, of which:</i>   |                      |                   |                           |  |
| Production of bread; fresh rolls and cakes   | 66,473               | 3.6%              | 0.9%                      |  |
| Meat manufacturing and preservation  | 30,451               | 1.6%              | 0.4%                      |  |
| Other manufacturing and preservation of fruits and vegetables  | 24,621               | 1.3%              | 0.3%                      |  |
| <i>Manufacture of wood and products of wood and cork, except for furniture; production of items of straw and wicker, of which:</i> |                      |                   |                           |  |
| Sawing and planing of wood (manufacture of sawn timber); wood impregnation   | 52,841               | 2.9%              | 0.7%                      |  |
| <i>Production of finished metal products, except for machines and equipment, of which:</i>   |                      |                   |                           |  |
| Production of metal structures and their parts   | 35,734               | 1.9%              | 0.5%                      |  |
| <i>Electric equipment production</i>   | <i>28,484</i>        | <i>1.5%</i>       | <i>0.4%</i>               |  |
| Production of electricity distribution and control devices   |                      |                   |                           |  |
| <i>Production of refined oil products</i>  |                      |                   |                           |  |
| Production of refined oil products   | 84,508               | 4.6%              | 1.1%                      |  |
| <b>D: Production and supply of electricity, gas, steam and air conditioning</b>  | <b>236,111</b>       |                   | <b>3.2%</b>               |  |
| <i>Production and supply of electricity, gas, steam and air conditioning, of which:</i>  |                      |                   |                           |  |
| Production of electricity  | 92,911               | 39.4%             | 1.3%                      |  |
| <b>E: Water supply, sewerage, waste management and environment remedial activities</b>   | <b>83,675</b>        |                   | <b>1.1%</b>               |  |
| <i>Water collection, treatment and supply, of which:</i>   |                      |                   |                           |  |
| Water collection, treatment and supply   | 49,380               | 59.0%             | 0.7%                      |  |
| <b>F: Construction</b>   | <b>507,418</b>       |                   | <b>6.8%</b>               |  |
| <i>Building construction, of which:</i>  |                      |                   |                           |  |
| Residential and non-residential building construction  | 126,383              | 24.9%             | 1.7%                      |  |
| <b>G: Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles</b>   | <b>2,035,454</b>     |                   | <b>27.4%</b>              |  |
| <i>Wholesale, except for Trade in Motor Vehicles and Motorcycles, of which:</i>  |                      |                   |                           |  |
| Non-specialized Wholesale  | 255,110              | 12.5%             | 3.4%                      |  |
| Wholesale of solid, liquid and gas fuels and similar products  | 67,920               | 3.3%              | 0.9%                      |  |
| Wholesale of pharmaceutical products   | 61,568               | 3.0%              | 0.8%                      |  |
| Wholesale of wood, construction materials and sanitary equipment   | 48,937               | 2.4%              | 0.7%                      |  |
| Wholesale of other household goods   | 35,199               | 1.7%              | 0.5%                      |  |
| Non-specialized wholesale trade in food, beverages and tobacco products  | 38,319               | 1.9%              | 0.5%                      |  |
| Wholesale in metal goods, installation materials, devices and equipment for water supply and heating                               | 37,414               | 1.8%              | 0.5%                      |  |
| <i>Retail trade, except for trade in motor vehicles and motorcycles, of which:</i>   |                      |                   |                           |  |
| Retail trade in non-specialized stores mainly in food, beverages and tobacco products  | 282,080              | 13.9%             | 3.8%                      |  |
| Other retail trade in non-specialized stores   | 79,400               | 3.9%              | 1.1%                      |  |
| Retail trade in motor fuels in specialized stores  | 80,670               | 4.0%              | 1.1%                      |  |
| <b>H: Transportation and warehousing</b>   | <b>301,766</b>       |                   | <b>4.1%</b>               |  |
| <i>Land transport and transport via pipelines</i>  |                      |                   |                           |  |
| Transport of goods by road   | 93,126               | 30.9%             | 1.3%                      |  |
| Railway transport of passengers and goods  | 27,126               | 9.0%              | 0.4%                      |  |
| <b>I: Accommodation and food service activities (hotels and catering)</b>  | <b>274,086</b>       |                   | <b>3.7%</b>               |  |
| <i>Accommodation, of which:</i>  |                      |                   |                           |  |
| Hotels and similar   | 104,177              | 38.0%             | 1.4%                      |  |

|   |                |       |              |
|---|----------------|-------|--------------|
| <b>J: Information and communications</b>  | <b>196,042</b> |       | <b>2.6%</b>  |
| <i>Publishing, of which:</i>  |                |       |              |
| Book publishing   | 46,413         | 23.7% | 0.6%         |
| <b>K: Financial activities and insurance activities</b>   | <b>250,400</b> |       | <b>3.4%</b>  |
| <i>Other financial service activities, except for insurance and pension funds, of which:</i>  |                |       |              |
| Other lending mediation   | 42,443         | 16.9% | 0.6%         |
| <b>L: Real estate business</b>  | <b>155,999</b> |       | <b>2.1%</b>  |
| <i>Real estate business, of which:</i>  |                |       |              |
| Renting and management of own or leased real estate   | 77,925         | 50.0% | 1.0%         |
| Agency for real estate business   | 34,494         | 22.1% | 0.5%         |
| <b>M: Professional, scientific and technical activities</b>   | <b>175,598</b> |       | <b>2.4%</b>  |
| <i>Architecture and engineering activities; technical testing and analysis, of which:</i>   |                |       |              |
| Architecture and engineering activities and the related technical consulting  | 39,834         | 22.7% | 0.5%         |
| <b>N: Administrative and support service activities</b>   | <b>43,979</b>  |       | <b>0.6%</b>  |
| <i>Travel agencies, travel organizers, tour operators and other booking services and related activities, of which:</i>                          |                |       |              |
| Activities of travel agencies   | 10,269         | 23.3% | 0.1%         |
| <i>Protection and investigation activities</i>  |                |       |              |
| Private protection activities   | 10,401         | 23.6% | 0.1%         |
| <b>O: Public administration and defence; compulsory social insurance</b>  | <b>804,493</b> |       | <b>10.8%</b> |
| <i>Public administration, and economic and social policy of community, of which:</i>  |                |       |              |
| General activities of public administration   | 632,001        | 78.6% | 8.5%         |
| <i>Activities of compulsory social insurance, of which:</i>   |                |       |              |
| Activities of compulsory social insurance   | 78,608         | 9.8%  | 1.1%         |
| <b>P: Education</b>   | <b>18,625</b>  |       | <b>0.3%</b>  |
| <i>University education</i>   |                |       |              |
| University education  | 7,038          | 37.8% | 0.1%         |
| <b>Q: Activities of health care and social care</b>   | <b>97,086</b>  |       | <b>1.3%</b>  |
| <i>Health care activities</i>   |                |       |              |
| Hospital activities   | 36,272         | 37.4% | 0.5%         |
| <b>R: Art, entertainment and recreation</b>   | <b>794</b>     |       | <b>0.0%</b>  |
| <i>Libraries, archives, museums and other culture activities</i>  |                |       |              |
| Activities at historic places and buildings and similar sights for visitors   | 400            | 50.4% | 0.0%         |
| <b>S: Other service activities</b>  | <b>9,057</b>   |       | <b>0.1%</b>  |
| <i>Other personal service activities</i>  |                |       |              |
| Funeral and similar activities  | 943            | 10.4% | 0.0%         |
| <b>T: Activities of households as employers; activities of households producing various goods and performing various services for own needs</b> | <b>644</b>     |       | <b>0.0%</b>  |
| <i>Activities of private households producing various goods for their own needs</i>   |                |       |              |
| Activities of private households producing various goods for their own needs  | 407            | 63.3% | 0.0%         |
| <b>U: Activities of extraterritorial organizations and bodies</b>   | <b>21,610</b>  |       | <b>0.3%</b>  |
| <i>Activities of extraterritorial organizations and bodies</i>  |                |       |              |
| Activities of extraterritorial organizations and bodies   | 13,224         | 61.2% | 0.2%         |

Source: CRK

Table A4: Main Positions in Foreign Trade of Goods

|                                | Name  | Value of exports,<br>million KM | Value of exports,<br>million KM | Export price<br>index | Nominal<br>export growth,<br>in % | Change of export values, (in<br>percentage points) |                            |
|--------------------------------|---|---------------------------------|---------------------------------|-----------------------|-----------------------------------|--|----------------------------|
|                                |   | 2016                            | 2017                            | I - XII 2017          |                                   | Price effect                                       | Exports vol-<br>ume effect |
|                                |   |                                 |                                 | I - XII 2016          |                                   |  |                            |
|                                |   | 1                               | 2                               | 3                     | 4 = 2/1                           | 5  | 6                          |
| main groups of export products | <b>Base metals and base metal products</b>  | <b>1,512.6</b>                  | <b>1,916.3</b>                  |                       | <b>26.7</b>                       |  |                            |
|                                | Out of it: iron and steel   | 452.8                           | 519.0                           | 114.6                 | 14.6                              | 14.6   | 0.0                        |
|                                | Iron and steel products   | 448.8                           | 584.6                           | 106.4                 | 30.2                              | 7.9  | 22.4                       |
|                                | Aluminium and aluminium products  | 490.7                           | 652.3                           | 111.9                 | 32.9                              | 14.1   | 18.8                       |
|                                | <b>Mineral origin products</b>  | <b>748.9</b>                    | <b>1,049.3</b>                  |                       | <b>40.1</b>                       |  |                            |
|                                | Of which: mineral fuels, mineral oils and products of their<br>distillation, electric energy, bituminous substances and<br>mineral waxes  | 643.6                           | 923.4                           | 140.5                 | 43.5                              | 41.3   | 2.1                        |
|                                | <b>Miscellaneous products</b>   | <b>1,125.2</b>                  | <b>1,226.7</b>                  |                       | <b>9.0</b>                        |  |                            |
|                                | Of which: furniture; mattress supports, bedding and<br>similar products; lamps and lighting fittings, not elsewhere<br>specified or included; lighting signs, lighting name-plates ;<br>prefabricated buildings | 1,065.2                         | 1,149.6                         | 96.9                  | 7.9                               | -3.3   | 11.2                       |
|                                | <b>Machinery, appliances, mechanical and electrical equipment</b>   | <b>1,046.3</b>                  | <b>1,290.1</b>                  |                       | <b>23.3</b>                       |  |                            |
|                                | Machinery, appliances, mechanical equipment, boilers and<br>parts thereof   | 618.5                           | 707.8                           | 100.7                 | 14.4                              | 0.8  | 13.6                       |
|                                | Electrical machinery, equipment and parts thereof, sound<br>recorders or reproducers, television image and sound<br>recorders or reproducers and parts and equipment for such<br>products                       | 427.7                           | 582.3                           | 123.9                 | 36.1                              | 26.3   | 9.9                        |
|                                | <b>Products of chemical industry or related industries</b>  | <b>772.3</b>                    | <b>958.3</b>                    |                       | <b>24.1</b>                       |  |                            |
|                                | Inorganic chemical products, organic and inorganic<br>compounds of precious metals, rare metals, radioactive<br>elements and isotopes   | 493.6                           | 604.0                           | 109.8                 | 22.4                              | 10.9   | 11.5                       |
|                                | <b>Wood and wood products</b>   | <b>729.1</b>                    | <b>783.8</b>                    |                       | <b>7.5</b>                        |  |                            |
|                                | Wood and wood products; charcoal  | 724.4                           | 779.5                           | 104.3                 | 7.6                               | 4.4  | 3.2                        |
|                                |   | Value of imports,<br>million KM | Value of imports,<br>million KM | Import price<br>index | Nominal<br>import growth,<br>in % | Change of import values, (in<br>percentage points) |                            |
|                                |   | 2016                            | 2017                            | I - XII 2017          |                                   | Price effect                                       | Imports vol-<br>ume effect |
|                                |   |                                 |                                 | I - XII 2016          |                                   |  |                            |
| main groups of import products | <b>Mineral origin products</b>  | <b>2,036.4</b>                  | <b>2,697.8</b>                  |                       | <b>32.5</b>                       |  |                            |
|                                | Of which: mineral fuels, mineral oils and products of their<br>distillation, electric energy, bituminous substances and<br>mineral waxes  | 1,934.6                         | 2,590.5                         | 130.2                 | 33.9                              | 31.1   | 2.8                        |
|                                | <b>Machinery, appliances, mechanical and electrical equipment</b>   | <b>2,243.9</b>                  | <b>2,526.0</b>                  |                       | <b>12.6</b>                       |  |                            |
|                                | Machinery, appliances, mechanical equipment, boilers and<br>parts thereof   | 1,284.1                         | 1,409.3                         | 101.5                 | 9.8                               | 1.6  | 8.2                        |
|                                | Electric machinery, equipment and parts thereof, sound<br>recorders or reproducers, television image and sound<br>recorders or reproducers and parts and equipment for such<br>products                         | 959.8                           | 1,116.7                         | 96.2                  | 16.3                              | -4.6   | 20.9                       |
|                                | <b>Chemical industry or related industry products</b>   | <b>1,594.0</b>                  | <b>1,680.9</b>                  |                       | <b>5.4</b>                        |  |                            |
|                                | Inorganic chemical products, organic and inorganic<br>compounds of precious metals, rare metals, radioactive<br>elements and isotopes   | 162.7                           | 210.6                           | 120.4                 | 29.5                              | 21.9   | 7.5                        |
|                                | Of which: pharmaceutical products   | 541.7                           | 544.7                           | 99.3                  | 0.6                               | -0.7   | 1.3                        |
|                                | Essential oils and resins, perfumery, cosmetic or toilet<br>products  | 216.2                           | 220.7                           | 102.0                 | 2.1                               | 2.0  | 0.1                        |
|                                | Miscellaneous chemical industry products  | 159.8                           | 162.9                           | 110.7                 | 2.0                               | 9.8  | -7.9                       |
|                                | <b>Base metals and base metal products</b>  | <b>1,416.1</b>                  | <b>1,785.3</b>                  |                       | <b>26.1</b>                       |  |                            |
|                                | Out of which: iron and steel products   | 441.9                           | 559.7                           | 118.3                 | 26.7                              | 19.6   | 7.0                        |
|                                | Iron and steel  | 459.8                           | 515.9                           | 105.3                 | 12.2                              | 5.6  | 6.6                        |
|                                | Aluminium and aluminium products  | 196.3                           | 295.0                           | 93.3                  | 50.3                              | -10.8  | 61.2                       |
|                                | <b>Food products</b>  | <b>1,489.8</b>                  | <b>1,536.7</b>                  |                       | <b>3.1</b>                        |  |                            |
|                                | Cereal, flour, starch or milk products; pastries  | 181.3                           | 196.9                           | 103.2                 | 8.6                               | 3.4  | 5.2                        |
|                                | Miscellaneous food products   | 231.4                           | 249.1                           | 102.5                 | 7.6                               | 2.6  | 5.0                        |
|                                | Beverages, alcohols and vinegar   | 322.5                           | 327.6                           | 97.4                  | 1.6                               | -2.7   | 4.3                        |
|                                | Food industry waste and scraps; prepared animal food  | 183.0                           | 179.7                           | 100.8                 | -1.8                              | 0.8  | -2.6                       |

Source: BHAS, CBBH calculation

Table A5: Survey of Claims on Companies by Type and Activity

thousands KM

| 2017                   | Loans             |                               |                  |                  |                   |              | Potential debt |                  |                 |                  |
|------------------------|-------------------|-------------------------------|------------------|------------------|-------------------|--------------|----------------|------------------|-----------------|------------------|
|                        |                   | <i>Of which overall loans</i> | Commission loans | Revolving loans  | Letters of credit | Factoring    | Guarantees     | Guarantees       | Revolving loans | Overall loans    |
| A                      | 165,514           | 55,396                        | 7,698            | 40,391           | 214               | 0            | 294            |                  |                 | 9,925            |
| B                      | 201,111           | 142,992                       | 3,809            | 51,954           | 0                 | 0            | 167            | 17,960           | 18,472          | 40,300           |
| C                      | 1,849,237         | 1,271,477                     | 36,782           | 618,077          | 16,735            | 0            | 13,132         | 232,107          | 233,831         | 425,003          |
| D                      | 236,111           | 30,136                        | 14,781           | 19,124           | 5,091             | 0            | -2             | 12,538           | 24,523          | 26,197           |
| E                      | 83,675            | 65,261                        | 101              | 18,912           | 0                 | 0            | 0              | 5,320            | 5,550           | 32,723           |
| F                      | 507,418           | 516,422                       | 23,956           | 190,721          | 275               | 1,896        | 88,230         | 284,719          | 64,399          | 279,962          |
| G                      | 2,035,454         | 2,078,189                     | 9,728            | 1,085,045        | 40,513            | 2,355        | 33,561         | 566,345          | 432,602         | 665,200          |
| H                      | 301,766           | 279,658                       | 1,119            | 86,592           | 113               | 0            | 3,431          | 216,409          | 38,751          | 77,293           |
| I                      | 274,086           | 116,876                       | 6,291            | 11,697           | 0                 | 0            | 408            | 2,474            | 4,826           | 22,397           |
| J                      | 196,042           | 63,275                        | 956              | 27,136           | 0                 | 0            | 2,350          | 34,311           | 21,131          | 37,163           |
| K                      | 250,400           | 37,488                        | 3,077            | 31,678           | 0                 | 4,153        | 4,863          | 94,190           | 21,015          | 23,665           |
| L                      | 155,999           | 27,747                        | 1,337            | 10,364           | 0                 | 0            | 0              | 1,611            | 2,357           | 10,392           |
| M                      | 175,598           | 189,157                       | 1,415            | 129,569          | 0                 | 0            | 991            | 114,034          | 20,516          | 72,210           |
| N                      | 43,979            | 24,741                        | 86               | 8,071            | 0                 | 0            | 94             | 8,138            | 3,749           | 15,140           |
| O                      | 804,493           | 434                           | 1,454            | 4,392            | 0                 | 380          | 449            | 10,854           | 31,528          | 60               |
| P                      | 18,625            | 1,773                         | 35               | 2,642            | 0                 | 0            | 0              | 881              | 1,761           | 2,248            |
| Q                      | 97,086            | 34,982                        | 310              | 11,099           | 0                 | 90           | 26             | 11,511           | 6,996           | 5,210            |
| R                      | 794               | 249                           | 14               | 88               | 0                 | 0            | 0              | 1,442            | 104             | 0                |
| S                      | 9,057             | 4,487                         | 35               | 993              | 0                 | 0            | 62             | 627              | 981             | 1,540            |
| T                      | 644               | 0                             | 0                | 38               | 0                 | 0            | 0              | 287              | 189             | 0                |
| U                      | 21,610            | 5,895                         | 718              | 600              | 0                 | 0            | 0              | 0                | 1,834           | 0                |
| <b>TOTAL</b>           | <b>7,428,701</b>  | <b>4,946,634</b>              | <b>113,699</b>   | <b>2,349,186</b> | <b>62,941</b>     | <b>8,875</b> | <b>148,055</b> | <b>1,615,758</b> | <b>935,115</b>  | <b>1,746,627</b> |
| <b>Actual debt:</b>    | <b>10,111,457</b> |                               |                  |                  |                   |              |                |                  |                 |                  |
| <b>Potential debt:</b> | <b>4,297,500</b>  |                               |                  |                  |                   |              |                |                  |                 |                  |

Source: CRC

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

Table A.6 : Loans to Companies, the Currency Structure of Debt by Activities, end of 2017

thousands KM

| Activity     | Residual debt and due uncollected principal |   |              |               |              |
|--------------|---|---|--------------|---------------|--------------|
|              | BAM   | Foreign currency loans and foreign currency indexed loans |              |               |              |
|              |   | EUR   | CHF          | USD           | KWD          |
| A            | 37,082                                      | 125,948   | 200          | 0             | 125          |
| B            | 67,270                                      | 132,875   | 0            | 0             | 0            |
| C            | 691,790                                     | 1,150,942   | 288          | 0             | 2,490        |
| D            | 47,868                                      | 184,829   | 0            | 0             | 0            |
| E            | 44,779                                      | 39,214  | 475          | 0             | 0            |
| F            | 226,500                                     | 282,193   | 0            | 0             | 416          |
| G            | 713,319                                     | 1,313,525   | 605          | 0             | 522          |
| H            | 90,751                                      | 208,409   | 264          | 0             | 119          |
| I            | 61,203                                      | 209,017   | 51           | 0             | 243          |
| J            | 39,447                                      | 153,739   | 0            | 0             | 0            |
| K            | 40,381                                      | 142,133   | 0            | 88,076        | 0            |
| L            | 27,445                                      | 125,992   | 0            | 0             | 0            |
| M            | 82,233                                      | 94,243  | 0            | 0             | 0            |
| N            | 13,783                                      | 29,917  | 0            | 0             | 0            |
| O            | 395,085                                     | 414,774   | 0            | 0             | 0            |
| P            | 8,264                                       | 10,420  | 0            | 0             | 0            |
| Q            | 37,505                                      | 59,483  | 0            | 0             | 0            |
| R            | 88  | 690   | 0            | 0             | 0            |
| S            | 3,443                                       | 5,601   | 0            | 0             | 0            |
| T            | 57  | 572   | 0            | 0             | 0            |
| U            | 6,473                                       | 13,503  | 0            | 2,045         | 0            |
| <b>TOTAL</b> | <b>2,634,765</b>                            | <b>4,698,018</b>  | <b>1,882</b> | <b>90,121</b> | <b>3,915</b> |

Source: CRC

Table A7: Status Changes in Banks in the Period 2001-2017

| Number | Bank   | Type of Change  | Date of Change |
|--------|--|---|----------------|
| 1      | Sparkasse Bank d.d. Bosna i Hercegovina Sarajevo           | Sparkasse Bank d.d. Sarajevo changed its name into Sparkasse Bank d.d. BiH Sarajevo                     | Q3 2014        |
|        | Sparkasse Bank d.d. Sarajevo                               | ABS banka d.d. Sarajevo changed its name into Sparkasse Bank d.d. Sarajevo                              | Q3 2009        |
|        | ABS banka d.d. Sarajevo                                    | Became a member of Steiermaerkische Bank und Sparkassen AG, Erste Group                                 | Q4 2006        |
|        | Šeh-in banka d.d. Zenica                                   | Merged to ABS banka d.d. Sarajevo   | Q2 2002        |
| 2      | Bosna Bank International (BBI) d.d. Sarajevo               |   |                |
| 3      | Privredna banka Sarajevo d.d. Sarajevo                     | BOR banka d.d. Sarajevo changed its name into Privredna banka Sarajevo d.d. Sarajevo                    | Q1 2017        |
|        | BOR banka d.d. Sarajevo                                    | Privredna banka Sarajevo d.d. Sarajevo merged with BOR banka d.d. Sarajevo                              | Q4 2016        |
|        | Privredna banka Sarajevo d.d. Sarajevo                     | Privredna banka Sarajevo d.d. Sarajevo merged with BOR banka d.d. Sarajevo                              | Q4 2016        |
| 4      | UniCredit Bank d.d. Mostar                                 |   |                |
|        | UniCredit Zagrebačka banka BiH d.d. Mostar                 | UniCredit Zagrebačka banka BiH changed its name into UniCredit Bank d.d. Mostar                         | Q1 2008        |
|        | Zagrebačka banka BH d.d. Mostar                            | Merger with Univerzal banka d.d. Sarajevo into UniCredit Zagrebačka banka BiH                           | Q3 2004        |
|        | Univerzal banka d.d. Sarajevo                              | Merger with Zagrebačka banka BH d.d. Mostar into UniCredit Zagrebačka banka BiH                         | Q3 2004        |
|        | HVB Central Profit banka d.d. Sarajevo                     | HVB Central profit banka Sarajevo merged to UniCredit Zagrebačka banka BiH                              | Q1 2008        |
|        | HVB banka d.d. Sarajevo                                    | Merger with Central Profit banka into HVB Central Profit banka d.d. Sarajevo                            | Q4 2004        |
|        | Central Profit banka d.d. Sarajevo                         | Merger with HVB banka d.d. Sarajevo into HVB Central Profit banka d.d. Sarajevo                         | Q4 2004        |
|        | Travnička banka d.d. Travnik                               | Merged to Central Profit banka d.d. Sarajevo  | Q4 2002        |
| 5      | UniCredit Bank a.d. Banja Luka                             | Nova Banjalučka banka a.d. Banja Luka changed its name  | Q2 2008        |
|        | Nova Banjalučka banka a.d. Banja Luka                      | Merged to HVB group, continued its operations as a separate legal person                                | Q4 2005        |
|        | Banjalučka banka a.d. Banja Luka                           | Privatised and changed its name into Nova Banjalučka banka a.d. Banja Luka                              | Q1 2002        |
| 6      | Addiko Bank d.d. Sarajevo                                  |   |                |
|        | Hypo Alpe Adria Bank d.d. Mostar                           | Hypo Alpe Adria Bank d.d. Mostar changed its name and seat  | Q4 2016        |
| 7      | Addiko Bank a.d. Banja Luka                                |   |                |
|        | Hypo Alpe Adria Bank a.d. Banja Luka                       | Hypo Alpe Adria Bank a.d. Banja Luka changed its name   | Q4 2016        |
|        | Kristal banka a.d. Banja Luka                              | Kristal banka a.d. Banja Luka changed its name  | Q3 2003        |
| 8      | ASA banka d.d. Sarajevo                                    |   |                |
|        | Investiciono komercijalna banka (IKB) d.d. Zenica          | IKB d.d. Zenica changed its name and seat into ASA banka d.d. Sarajevo                                  | Q4 2016        |
|        | MOJA banka d.d. Sarajevo                                   | MOJA banka d.d. Sarajevo merged with Investiciono komercijalna banka d.d. Zenica                        | Q3 2016        |
|        | FIMA banka d.d. Sarajevo                                   | Changed its name into MOJA banka d.d. Sarajevo  | Q4 2010        |
|        | VABA banka d.d. Sarajevo                                   | Changed its name into FIMA banka d.d. Sarajevo  | Q3 2007        |
|        | Validus banka d.d. Sarajevo                                | Changed its name into VABA banka d.d. Sarajevo  | Q1 2007        |
|        | Ljubljanska banka d.d. Sarajevo                            | Established Validus banka took over a part of assets and liabilities of Ljubljanska banka d.d. Sarajevo | Q3 2006        |
| 9      | Komercionalno investiciona banka (KIB) d.d. Velika Kladuša |   |                |
| 10     | NLB Banka d.d. Sarajevo                                    |   |                |
|        | NLB Tuzlanska banka d.d. Tuzla                             | NLB Tuzlanska banka d.d. Tuzla changed its seat and name into NLB Banka d.d. Sarajevo                   | Q1 2012        |
|        | Tuzlanska banka d.d. Tuzla                                 | Tuzlanska banka d.d. Tuzla changed its name into NLB Tuzlanska banka d.d. Tuzla                         | Q3 2006        |
|        | Comercebank bančna skupina NLB d.d. Sarajevo               | Merged to Tuzlanska banka d.d. Tuzla  | Q3 2006        |



|    |  |  |         |
|----|--|--|---------|
| 11 | NLB Banka a.d. Banja Luka                            |  |         |
|    | NLB Razvojna banka a.d. Banja Luka                   | NLB Razvojna banka a.d. Banja Luka changed its name into NLB a.d. Banja Luka           | Q4 2015 |
|    | LHB banka a.d. Banja Luka                            | Merger with Razvojna banka jugoistočne Evrope into NLB Razvojna banka a.d. BL          | Q2 2006 |
|    | Razvojna banka jugoistočne Evrope a.d. Banja Luka    | Merger with LHB banka a.d. Banja Luka into NLB Razvojna banka a.d. Banja Luka          | Q2 2006 |
| 12 | Raiffeisen Bank d.d. BiH, Sarajevo                   |  |         |
|    | Raiffeisen Bank HPB d.d. Mostar                      | Merged to Raiffeisen banka d.d. Sarajevo   | Q1 2003 |
| 13 | ProCredit Bank d.d. Sarajevo                         | Microenterprise bank d.d. Sarajevo changed its name into ProCredit Bank                | Q4 2003 |
| 14 | ZiraatBank BH d.d. Sarajevo                          | Turkish Ziraat Bank Bosnia d.d. Sarajevo changed its name into Ziraat Bank BH          | Q1 2013 |
| 15 | Union banka d.d. Sarajevo                            |  |         |
| 16 | Sberbank d.d. Sarajevo                               | Volksbank d.d. Sarajevo changed its name into Sberbank d.d. Sarajevo                   | Q1 2013 |
|    | Volksbank d.d. Sarajevo                              | Sberbank group acquired Volksbank d.d. Sarajevo  | Q1 2012 |
| 17 | Sberbank a.d. Banja Luka                             | Volksbank a.d. Banja Luka changed its name   | Q1 2013 |
|    | Volksbank a.d. Banja Luka                            | Sberbank group acquired Volksbank a.d. Banja Luka                                      | Q1 2012 |
|    | Zepter Komerc banka a.d. Banja Luka                  | Became a member of Volksbank International AG, changed its name into Volksbank a.d. BL | Q3 2007 |
| 18 | Intesa Sanpaolo banka d.d. BiH                       |  |         |
|    | UPI banka d.d. Sarajevo                              | Changed its name into Intesa Sanpaolo banka d.d. BiH                                   | Q3 2008 |
|    | LT Gospodarska banka d.d. Sarajevo                   | Merged to UPI banka d.d. Sarajevo  | Q3 2007 |
|    | Gospodarska banka d.d. Sarajevo                      | Merger with LT Komercijalna banka Livno into LT Gospodarska banka d.d. Sarajevo        | Q1 2003 |
|    | LT Komercijalna banka d.d. Livno                     | Merger with Gospodarska banka Sarajevo into LT Gospodarska banka d.d. Sarajevo         | Q1 2003 |
| 19 | Vakufska banka d.d. Sarajevo                         |  |         |
|    | Depozitna banka d.d. Sarajevo                        | Merged to Vakufska banka d.d. Sarajevo   | Q2 2002 |
| 20 | Nova banka a.d. Banja Luka                           | Nova banka a.d. Bijeljina changed its seat   | Q3 2007 |
|    | Agroprom banka a.d. Banja Luka                       | Merged to Nova banka a.d. Bijeljina  | Q1 2003 |
| 21 | Pavlović International Banka a.d. Slobomir Bijeljina |  |         |
|    | Privredna banka a.d. Dobo                            | Merged to Pavlović International banka   | Q2 2003 |
|    | Privredna banka a.d. Brčko                           | Merged to Pavlović International banka   | Q4 2002 |
|    | Semblerska banka a.d. Bijeljina                      | Merged to Pavlović International banka   | Q4 2001 |
| 22 | Komercijalna banka a.d. Banja Luka                   |  |         |
| 23 | MF banka a.d. Banja Luka                             |  |         |
|    | IEFK banka a.d. Banja Luka                           | Changed its name into MF banka a.d. Banja Luka   | Q3 2010 |

**The banks the operating licenses of which have been revoked since 2002:**

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

Source: CBBiH

Table A8: Positions of the Non-government Foreign Debt according to NACE Rev 2 Classification of Debtors' Activities

thousands KM

| NACE CODE | NACE ACTIVITY  | 31.12.2012 | 31.12.2013 | 31.12.2014 | 31.12.2015 | 31.12.2016 | 31.12.2017 |
|-----------|--|------------|------------|------------|------------|------------|------------|
| 01        | <i>Crop and animal production, hunting and related service activities</i>  | 10,465     | 14,569     | 14,692     | 18,348     | 21,960     | 22,077     |
| 05        | <i>Mining of coal and lignite</i>  | ...        | ...        | 540,526    | 623,551    | 666,938    | -          |
| 07        | <i>Mining of metal ores</i>  | 1,333      | 1,640      | 2,232      | 4,874      | 6,824      | 11,373     |
| 08        | <i>Other mining and quarrying</i>  | 41,890     | 39,506     | 30,916     | 36,687     | 25,570     | 22,627     |
| 10        | <i>Manufacture of food products</i>  | 54,187     | 40,610     | 22,804     | 111,580    | 90,609     | 81,607     |
| 11        | <i>Manufacture of beverages</i>  | 21,965     | 15,692     | 16,546     | 16,557     | 16,278     | 7,419      |
| 12        | <i>Manufacture of tobacco products</i>   | ...        | ...        | 32,076     | 27,925     | 10,500     | 7,066      |
| 13        | <i>Manufacture of textiles</i>   | 9,395      | 14,386     | 12,852     | 13,681     | 11,420     | 12,241     |
| 14        | <i>Manufacture of wearing apparel</i>  | 1,280      | 1,187      | 520        | -          | -          | -          |
| 15        | <i>Manufacture of leather and related products</i>   | 6,673      | 6,292      | 5,686      | 5,686      | 4,430      | 9,662      |
| 16        | <i>Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials</i> | 39,858     | 46,760     | 48,034     | 52,028     | 54,874     | 52,259     |
| 17        | <i>Manufacture of paper and paper products</i>   | 56,274     | 60,722     | 46,042     | 36,999     | 29,524     | 20,722     |
| 18        | <i>Printing and reproduction of recorded media</i>   | -          | -          | -          | 9,438      | 2,837      | -          |
| 19        | <i>Manufacture of coke and refined petroleum products</i>  | 1,191,300  | 1,123,315  | 1,454,498  | 1,402,330  | 1,536,503  | 1,554,246  |
| 20        | <i>Manufacture of chemicals and chemical products</i>  | 74,000     | 110,178    | 99,910     | 111,058    | 74,561     | 67,551     |
| 22        | <i>Manufacture of rubber and plastic products</i>  | 7,855      | 9,484      | 14,753     | 18,459     | 24,574     | 19,547     |
| 23        | <i>Manufacture of other non-metallic mineral products</i>  | 89,663     | 87,732     | 129,311    | 87,213     | 75,305     | 52,881     |
| 24        | <i>Manufacture of basic metals</i>   | 161,457    | 185,656    | 200,888    | 194,455    | 173,121    | 233,456    |
| 25        | <i>Manufacture of fabricated metal products, except machinery and equipment</i>  | 9,197      | 11,822     | 18,143     | 21,009     | 22,075     | 12,020     |
| 26        | <i>Manufacture of computer, electronic and optical products</i>  | 7,237      | 8,664      | 10,620     | 10,656     | 10,799     | 10,565     |
| 27        | <i>Manufacture of electrical equipment</i>   | 9,826      | 8,886      | 8,635      | 13,221     | 13,322     | 12,564     |
| 28        | <i>Manufacture of machinery and equipment n.e.c.</i>   | 12,658     | 12,112     | 12,942     | 8,068      | 14,767     | 14,085     |
| 29        | <i>Manufacture of motor vehicles, trailers and semi-trailers</i>   | 43,224     | 39,173     | 28,316     | 28,189     | 28,189     | 50,979     |
| 31        | <i>Manufacture of furniture</i>  | 2,638      | 2,609      | 2,609      | 1,076      | 1,512      | 1,708      |
| 35        | <i>Electricity, gas, steam and air conditioning production and supply</i>  | 51,327     | 65,622     | 111,612    | 138,953    | 155,634    | 810,226    |
| 38        | <i>Waste collection, treatment and disposal activities; materials recovery</i>   | 664        | 664        | 664        | 664        | 664        | 664        |
| 41        | <i>Construction of buildings</i>   | 3,197      | 2,796      | 2,894      | 2,894      | 2,918      | 2,918      |
| 42        | <i>Civil engineering</i>   | 39,136     | 42,644     | 43,176     | 45,709     | 46,170     | 41,398     |
| 43        | <i>Specialised construction activities</i>   | -          | -          | -          | -          | 5,357      | 7,709      |
| 45        | <i>Wholesale and retail trade and repair of motor vehicles and motorcycles</i>   | 8,582      | 7,615      | 11,494     | 8,740      | 11,013     | 13,415     |
| 46        | <i>Wholesale trade, except of motor vehicles and motorcycles</i>   | 265,164    | 253,776    | 244,239    | 256,932    | 239,262    | 166,918    |
| 47        | <i>Retail trade, except of motor vehicles and motorcycles</i>  | 324,596    | 426,891    | 366,168    | 334,617    | 345,692    | 357,668    |
| 49        | <i>Land transport and transport via pipelines</i>  | 978        | 978        | 782        | -          | 2,350      | 2,350      |
| 52        | <i>Warehousing and support activities for transportation</i>   | 2,721      | 2,291      | 2,174      | 2,067      | 1,851      | 1,447      |
| 55        | <i>Accommodation</i>   | 70,624     | 80,126     | 90,651     | 37,931     | 32,160     | 28,323     |
| 56        | <i>Food and beverage service activities</i>  | -          | -          | -          | 2,167      | 3,316      | 4,782      |
| 59        | <i>Motion picture, video and television programme production, sound recording and music publishing activities</i>                      | ...        | 2,473      | 3,744      | 3,744      | 2,209      | 2,209      |
| 61        | <i>Telecommunications</i>  | 66,827     | 96,284     | 90,910     | 169,014    | 200,749    | 198,280    |
| 62        | <i>Computer programming, consultancy and related activities</i>  | 1,772      | 1,007      | 1,007      | 2,043      | 1          | 1          |
| 63        | <i>Information service activities</i>  | ...        | ...        | 1,280      | 1,276      | 3,166      | 1,381      |
| 64        | <i>Financial service activities, except insurance and pension funding</i>  | 4,977,555  | 4,629,082  | 4,206,982  | 3,341,072  | 3,144,333  | 3,102,785  |
| 66        | <i>Activities auxiliary to financial services and insurance activities</i>   | 10,708     | 11,472     | 10,855     | 10,855     | 10,732     | 10,734     |
| 68        | <i>Real estate activities</i>  | 452,112    | 542,753    | 691,732    | 309,406    | 193,539    | 182,019    |

|    |  |                  |                  |                  |                  |                  |                  |
|----|--|------------------|------------------|------------------|------------------|------------------|------------------|
| 70 | Activities of head offices; management consultancy activities                            | 89,034           | 73,099           | 68,662           | 76,929           | 77,961           | 83,021           |
| 71 | Architectural and engineering activities; technical testing and analysis                 | 220,363          | 148,835          | 163,642          | 177,945          | 183,987          | 170,503          |
| 73 | Advertising and market research  | 6,001            | 5,481            | 26,991           | 26,995           | 26,017           | 25,431           |
| 79 | Travel agency, trip organizer, tour operator, reservation service and related activities |                  | ...              | ...              | 137              | 175              | 261              |
| 82 | Office administrative, office support and other business support activities              | -                | -                | -                | 1,514            | 1,514            | 1,514            |
| 86 | Human health activities  | 12,436           | 10,532           | 5,574            | 6,113            | 5,450            | 4,433            |
| 92 | Gambling and betting activities  | 1,708            | 3,073            | 622              | 622              | 622              | 622              |
| 93 | Sports activities and amusement and recreation activities                                | 8,741            | 8,827            | 8,696            | 9,161            | 10,663           | 14,379           |
|    | Unclassified   | 321,856          | 384,767          | 150,682          | 256,266          | 248,080          | 257,953          |
|    | <b>Total</b>   | <b>8,788,477</b> | <b>8,642,083</b> | <b>9,058,784</b> | <b>8,076,854</b> | <b>7,872,077</b> | <b>7,769,999</b> |

Source: CBBH

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

ISSN 1840-4138



9 771840 413008