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CENTRALNA BANKA
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ЦЕНТРАЛНА БАНКА
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Financial Stability Report

2018

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Abbreviations

BARS	Banking Agency of RS
BH	Bosnia and Herzegovina
BHAS	BH Agency for Statistics
BIS	Bank for International Settlements
BLSE	Banja Luka Stock Exchange
CAC 40	French Stock Exchange Index (Cotation Assistée en Continue)
CAR	capital adequacy ratio
CBBH	Central Bank of Bosnia and Herzegovina
CET 1	common equity tier 1
CHF	Swiss franc
COREP	Common Reporting Framework
CPI	Consumer Price Index
CRD IV	Capital Requirements Directive IV
CRC	Central Registry of Credits
CRR	Capital Requirements Regulation
DAX	Index on Securities Stock Exchange in Frankfurt (Deutscher Aktien Index)
DIA	Deposit Insurance Agency
EBA	European Banking Authority
ECB	European Central Bank
EDIS	European Deposit Insurance System
EFTA	European Free Trade Association
EONIA	Euro Overnight Index Average
EUR	euro
€STR	Euro short-term rate
EU	European Union
FATF	Financial Action Task Force
FBA	Banking Agency of FBH
FBH	Federation of BH
FED	Federal Reserve System
FTSE	London Stock Exchange Index (the Financial Times Stock Exchange Index)
GBP	Great Britain pound
GDP	gross domestic product
HHI	Herfindahl-Hirschman's Index
ILO	International Labor Organization
ITA	Indirect Taxation Authority
IMF	International Monetary Fund
KM	convertible mark
KWD	Kuwaiti dinar
MCO	micro-credit organizations
MFT of BH	Ministry of Finance and Treasury of Bosnia and Herzegovina
MONEYVAL	Council of Europe Committee of Experts on the Evaluation of Anti-Money Laundering Measures and the Financing of Terrorism
NACE	Statistical classification of economic activities in EU
NPL	non- performing loans
OPEC	rganization of the Petroleum Exporting Countries
ROAA	return on average assets
ROAE	return on average equity
RS	Republika Srpska
RTGS	Real Time Gross Settlement
SASE	Sarajevo Stock Exchange
SRTA	Single Registry of Transactions Accounts
S&P	Standard and Poor's
USA	United States of America
USD	the United States dollar
TLTRO 3	Targeted longer-term refinancing operations III
WEO	World Economic Outlook
WTO	World Trade Organization

Countries

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

FINANCIAL STABILITY
REPORT 2018

Introduction

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

The CBBH's authority to monitor the financial system stability indirectly arises from the CBBH Law. The CBBH plays an active role in the development and implementation of the policy on stability and sustainable economic growth of BH, by ensuring the stability of the domestic currency and of the overall financial and economic stability in the country. One of the CBBH's basic tasks is to establish and maintain adequate payment and settlement 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 organisations engaged in the strengthening of financial and economic stability through the international monetary cooperation. CBBH's activities in the field of monitoring financial system stability also include a specialized communication with relevant international and domestic institutions ensuring the continuity of the process of system risks monitoring. CBBH contributes to the preservation of 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 the financial stability in BH through:

Improving understanding and stimulating dialogue on risks for financial mediators in the 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 focuses on the events from 2018, its coverage is expanded to include the most important developments from the first half of 2019, in line with data available at the time of its preparation. The Financial Stability Report 2018 is organized in chapters, as follows. The Executive Summary stresses the most important risks for the financial system stability. The first Chapter presents the main trends and risks from the international environment. This Chapter particularly stresses the main risks from the EU and the euro area and describes their effects on the banking sector and the real economy of this geographical area, with a focus on the risks that might affect the BH's banking sector and its real economy. The Second Chapter gives an overview of trends and potential risks from the domestic environment that have an impact on the functioning of BH's financial system. The Third Chapter gives an overview of main trends and risks coming from the fiscal sector. The Fourth Chapter illustrates the risk effects identified in previous chapters in relation to household debts. The Fifth Chapter focuses on the identified risk effects on the corporate sector. The Sixth Chapter evaluates risk effects on the financial system stability, focusing on the banking sector. The Seventh Chapter illustrates main trends in the financial infrastructure: payment systems and regulatory framework. The Financial Stability Report 2018 contains five text boxes: *Trade War between US and China*, *Assessment of the Main Macrofinancial Risks for Financial Stability, Network Analysis of Systemic Risk Spillovers, Calculation of Capitalization Indicators under the New Legal and Regulatory Framework, and Stress Tests*.

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

Summary

Some of the basic features of global economy in 2018 and the first half of 2019 were: moderate global economic growth driven by significant US economic growth, slowdown of economic growth in the euro area and the developing countries, continued low inflation in the EU and euro area, continued normalization of the FED's monetary policy and accommodative ECB's monetary policy, and rising tensions amid escalating trade war between the US and China. Increased uncertainties related to BREXIT, rising fiscal and financial risks in Italy, weakening of the industrial production in Germany as well as political instability in France, with continued excessive indebtedness of some countries, account for the most significant risks to the financial stability of the euro area and the EU.

In 2018, BH recorded a slight recovery in economic activity, decrease in total external debt, slight improvement in the labour market, and a fiscal surplus, as a result of a significant increase in budget revenues relative to the increased budget spending. External vulnerabilities arising from the country's balance of payments position are mitigated by a slight decrease in the current account deficit related to the GDP. However, the high unemployment rate, unfavourable business environment, low competitive position of the country, inefficient public sector and low purchasing power of households are still are hindrance to a significant mitigation of risks from the domestic macroeconomic environment. Although the country's credit rating remained unchanged, the outlook improved from stable to positive in early 2019 due to the expected development of BH's economic outlook.

The slight increase in consumption in the household sector, along with the improved labour market indicators, and a gradual revival of real estate market activity, contributed to the increase in total household debt, which was largely a consequence of the increase in household debt related to bank loans. The demand for loans slightly increased, also as a result of lower interest rates and a large supply of non-purpose and replacement loans with more favourable repayment terms. In 2018, the trend of growth in the total household deposits continued, but in relation to the structure of deposits there was a stagnation of household savings in the form of term deposits due to the low levels of disposable income and a continued lowering of deposit interest rates. The quality of loan portfolio in the household segment improved, largely influenced by the activities of banks to write off non-performing loans and reprogram the existing loans. However, given the significant proportion of loans granted with floating interest rates or with a fixed interest rate period of up to one year, the interest rate risk, although mitigated, still poses a potential risk to the household sector.

The main features of the corporate sector in 2018 were the lower credit activity compared to the previous year and a decrease in credit risk. In the financing of its business activities, the corporate sector, as in previous years, relied mostly on the credit support from banks. Although the share of non-performing loans in total corporate loans remained relatively high, in 2018 this indicator improved in most industries. In 2018, the average interest rates maintained a declining trend, enabling the corporates to borrow on relatively favourable terms. The interest rate risk in the corporate sector, although slightly reduced due to intensified lending at a fixed interest rate, is still significant, while the currency risk is not a significant source of risk.

In 2018, the banking sector recorded a continued decrease in the risks to financial stability. Higher capitalization indicators, asset quality improvements and high liquidity were recorded, while profitability indicators remained high. The long-standing trend of intense growth in operating revenues, which were a significant generator of the banking sector profitability in the past few years, discontinued. Despite the decrease in credit risk, the level of non-performing loans remained relatively high, especially in the non-financial corporate sector, which recorded weaker credit activity compared to the previous year. In 2018, the residual maturity of total banking sector liabilities continued to decline. In the context of still low interest rates, the interest rate risk was not materialized in the non-financial corporate and the households sector, but the risk exposure remained significant thus causing a potential exposure of banks to credit risk. The results of top-down stress tests conducted for the BH banking sector based on the end-2018 data indicate that the banking sector would be adequately capitalized in the case of materialization of potential extreme shocks.

In 2018, in line with its legal obligation, the CBBH maintained adequate payment and clearing systems within which interbank transactions were carried out seamlessly

through the real-time giro-clearing and gross settlement systems. By daily updating and maintaining the Central Registry of Credits (CRC), the CBBH enabled financial institutions to better manage credit risks by monitoring credit exposure and credit history of clients. The Single Registry of Transaction Accounts of Business Entities was upgraded to contain all the accounts of companies, which will give users a better insight into the status of these accounts. The transactions through international clearing of payments abroad were also unhindered.

In 2018 and the first half of 2019, domestic institutions continued with the activities of changing and upgrading the regulatory framework related to the work of banks and other financial organizations, as well as issuing new bylaws, thus significantly completing the key set of regulations governing this field.

1. Trends and Risks from the International Environment

Basic features of global economy in 2018 were: moderate global economic growth mostly driven by significant US economic growth; slowdown of economic growth in the euro area and developing countries; continued low inflation in the EU and euro area; continued normalization of the FED's monetary policy and accommodative ECB's monetary policy; political and geopolitical uncertainties related to BREXIT, escalated trade war between US and China; and deterioration of economic conditions in Italy due to the rising fiscal and financial risks. Conditions in the macroeconomic environment continued to weaken in the first half of 2019, and it is certain that their improvement cannot be expected in the short term, which is supported by the current projections of economic growth slowdown in all groups of countries over the next two years, but also by the rhetoric of the leading central banks with regard to possible further loosening of monetary policies.

1.1 Trends in the International Environment

Following a stronger economic recovery in 2017, the global economic growth in 2018 weakened, with the economic growth rate of 3.6%. According to the April 2019 IMF projections, the global economy is expected to slow down in 2019 to 3.3% of GDP, and to recover slightly in 2020 when it would return to the 2018 level. Compared to October 2018 projections, projections for the next two years have declined in almost all countries observed. The US recorded a growth in GDP of 0.7% compared to 2017, primarily due to the recovery in private spending and investments driven by the expansionary fiscal policy and fiscal reform package adopted at the end of 2017. However, the first projections for the next two years indicate that economic growth is expected to slow down in the US as well. The GDP of developed economies in 2018 was at 2.2% and it is estimated that the slowdown in GDP growth will continue over the next two years. Developing countries are facing somewhat more favourable situation with a projection of growth in 2020, following a slight weakening of economic activity in 2019 (Table 1.1).

Table 1.1: Real GDP, Annual Growth Rate

	Real GDP, Annual Growth Rate					Change Compared to Projection from October 2018		
	2016	2017	2018	2019	2020	2018	2019	2020
The world	**3,4**	**3,8**	**3,6**	**3,3**	**3,6**	**-0,1**	**-0,3**	**-0,1**
Developed economies	1,7	2,4	2,2	1,8	1,7	-0,1	-0,3	0,0
USA	1,6	2,2	2,9	2,3	1,9	0,0	-0,2	0,1
EU	2,1	2,7	2,1	1,6	1,7	-0,1	-0,5	-0,1
Euro area	2,0	2,4	1,8	1,3	1,5	-0,2	-0,6	-0,1
United Kingdom	1,8	1,8	1,4	1,2	1,4	0,0	-0,3	-0,1
Japan	0,6	1,9	0,8	1,0	0,5	-0,3	0,0	0,2
Developing countries and emerging markets	4,6	4,8	4,5	4,4	4,8	-0,1	-0,3	-0,1
Russia	0,3	1,6	2,3	1,6	1,7	0,6	-0,2	-0,1
China	6,7	6,8	6,6	6,3	6,1	0,0	0,1	-0,1
European developing countries and emerging markets	3,3	6,0	3,6	0,8	2,8	-0,2	-1,2	0,0
Main Foreign Trade Partners								
Germany	2,2	2,5	1,5	0,8	1,4	-0,5	-1,1	-0,1
Croatia	3,5	2,9	2,7	2,6	2,5	-0,1	0,0	0,1
Serbia	3,3	2,0	4,4	3,5	4,0	0,4	0,0	0,0
Italy	1,1	1,6	0,9	0,1	0,9	-0,3	-0,9	0,0
Slovenia	3,1	4,9	4,5	3,4	2,8	0,0	0,0	0,0
Austria	2,0	2,6	2,7	2,0	1,7	-0,1	-0,2	0,2
Montenegro	2,9	4,7	4,5	2,8	2,5	0,8	0,3	-0,5

Source: World Economic Outlook, IMF, April 2019, calculation by the CBBH

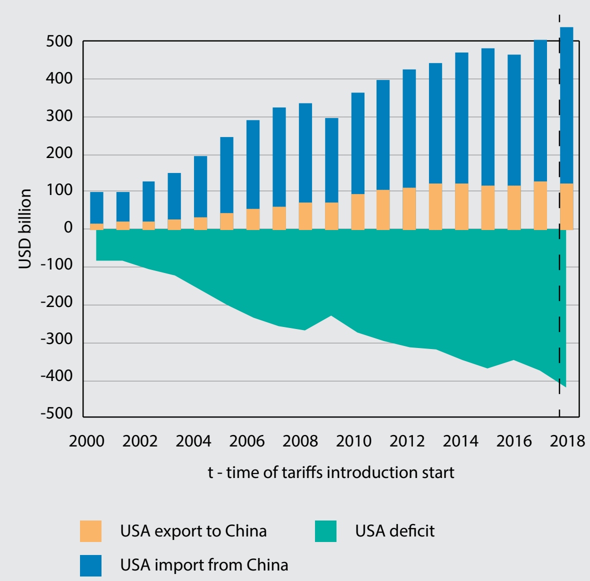
The weakening of global economic activity in 2018 was due to the weak economic growth in all groups of countries. The weakening of industrial production growth, largely due to the introduction of a more stringent emission standard in the German automotive industry, instability in the financial markets and a declining investment activity in Italy, as well as the uncertainty related to the UK's exit from the EU, were the main reasons for the weakening of economic activity in the euro area and the EU in 2018.

Developing countries recorded a slight slowdown in economic activity, driven primarily by the weakened economic growth in China, Argentina's recession, the stagnant recovery of Brazil's economy after last year's recession, and the continued recession in Venezuela. The slowdown in China's economy was primarily a consequence of the trade war with US and the introduction of tariffs. In order to ease the pressure on economic activity, the Chinese authorities announced the adoption of a number of fiscal and monetary policy measures and a progress in the implementation of structural reforms. Prospects for a continued economic growth in Russia were strongly influenced by developments in the world oil markets, and it is possible that the drop in oil prices at the end of 2018 will affect the economic activity in 2019. Significant decline in economic activity in the group of European developing countries is primarily affected by the unfavourable economic situation in Turkey, which recorded a GDP growth of 2.6% in 2018, i.e. 4.8% lower compared to 2017.

Text Box 1: US-China Trade War

Following China's accession to the World Trade Organization (WTO) in December 2001, the volume of foreign trade between the US and China began to grow significantly, and cooperation between the countries developed through a series of high-level bilateral economic and strategic dialogues in the field of trade and investments. China became the largest exporter of goods and services to the US and in 2018 accounted for 21.2% of total US imports. The total volume of foreign trade in goods and services between the US and China in 2018 was USD 737.1 billion. In 2018, the US imported USD 557.9 billion worth of goods and services from China, and exported USD 179.3 billion to China, which means that the US generated a foreign trade deficit of USD 378.6 billion in relation to China and the export-import coverage of only 32%.

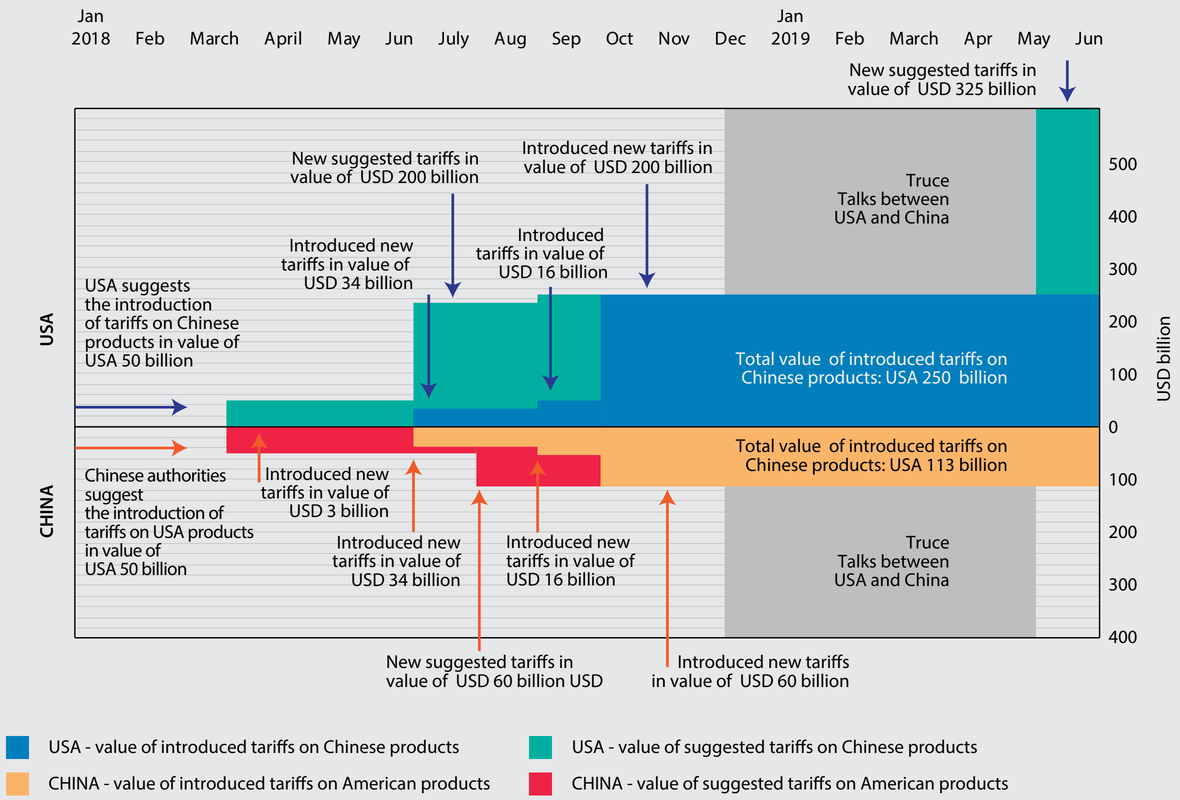
Graph TB 1.1: Foreign Commodity Exchange between USA and China



Source: census.gov; CBBH calculation

Following the introduction of tariffs, the relationship between these two leading global powers started changing significantly, affecting the global economic developments by slowing down the global growth, increasing instability and risking a future recession. The China's economic activity slowed down in 2018, with a 6.6% growth rate, i.e. the lowest level of Chinese growth since 1990. The inflation increased by 50 bp, to 2.1%, and public debt increased by 8% compared to 2017, with appreciation of the domestic currency and a decrease in the current account surplus. The tariffs imposed by the US on China did not stop Chinese exporters to the US, but had the opposite effect. China's exports to the US grew and the US trade deficit with China reached a historic high the end of 2018. Billions of dollars of import tariffs were eventually paid by US importers, citizens and companies that buy imported Chinese products. According to the Office of the United States Trade Representative, in 2018 the US imported USD 539.5 billion worth of goods from China (electrical and other machinery, furniture, toys, sports equipment and plastic products), i.e. 6.7% higher compared to 2017 or 59.7% higher compared to 2008, or as much as 427% higher than in 2001, when China joined the WTO. As the Chinese exports to US grew, the US exports to China declined, causing the US trade deficit with China to reach a record USD 419.2 billion at the end of 2018 (USD 43.6 billion or 11.6% more than in 2017). In 2018, China was the third largest export market for US goods, with the total exports of US goods (aircraft, electrical and other machinery, optical and medical instruments, vehicles) amounting to USD 120.3 billion, i.e. 7.4% less than in 2017. The total US-China foreign trade deficit was somewhat mitigated by the surplus that the US achieved in the services sector in 2018 amounting to USD 40.5 billion. The export of services amounted to USD 58.9 billion, while the imports from China amounted to USD 18.4 billion or 5.5% more than in 2017.

Graph TB 1.2: Time Horizon of Trade War between USA and China with Introduction of Commodity Tariffs

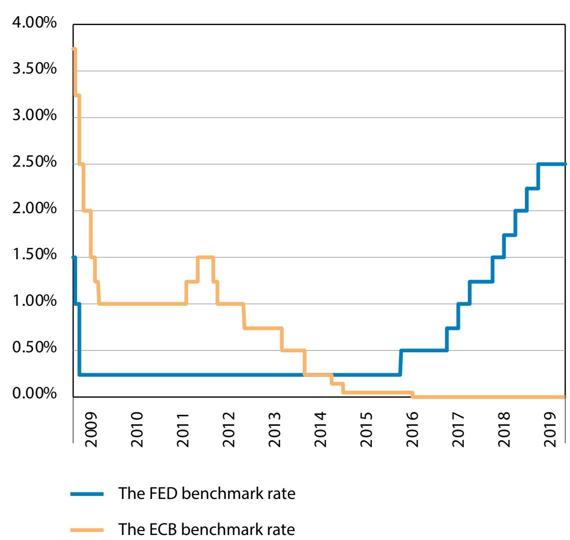


Source: ustr.gov, gss.mof.gov.cn, CBBH calculation

The escalation of US-China trade war led to a sharp decline in the value of Asian stock market indices, a decrease in global production and large corporate costs, higher borrowing costs due to the increased risks and a slowdown in global growth. Given that the US-China production cumulatively accounts for 40% of the world GDP, if the US-China negotiations fail and trade wars continue with the introduction of new tariffs, which would reach the full amount of Chinese exports to the US, there could be a new, much larger turbulence in the markets of these two leading economies as well as in all other markets, thus increasing the risk of a global recession.

In 2018 and the first half of 2019 there was a continuation of divergent developments in the monetary policies of the leading central banks. The FED's monetary policy continued to tighten, raising its benchmark interest rate four times in 2018, while boosting economic activity and the job market with a target inflation rate. The benchmark interest rate increased by 25 bp each time, rising from 1.5% at the beginning of the year to 2.5% in December 2018. In early 2019, the FED announced that there would be no new increases of interest rates by the end of the year. The main reasons for keeping the interest rates at the current level were the revised FED's projections of US economic growth for 2019, i.e. to decline from 2.3% to 2.1%, and expectations that the inflation would be at 1.8%, i.e. lower than the target level. A pessimistic tone regarding the continuation of monetary policy normalization was retained over the course of the year, in order to overcome the market expectations in June so that the FED could reduce the benchmark interest rate as early as in July due to a lower inflation and slowing down of the economic growth.

Graph 1.1: The Trend of the Benchmark Interest Rates of the FED and the ECB



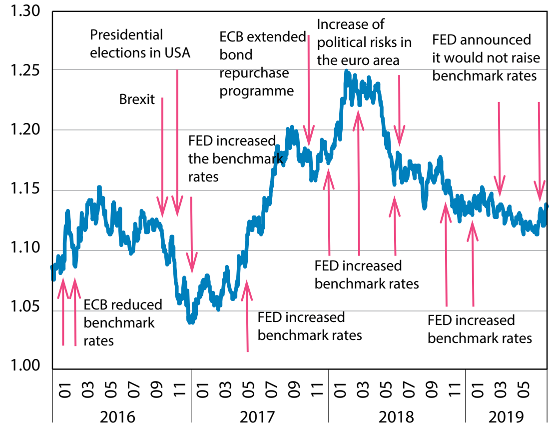
Source: FED, ECB

On the other hand, the ECB did not change its benchmark interest rates, despite the end of the bond repurchase program at the end of the year. It continued to pursue an accommodative monetary policy and in early 2019 announced a continuation of the bond repurchase program and, in mid-June, even the possibility of further reduction in the deposit interest rate. In June 2018, the ECB published a Methodology for the Calculation of a new Euro Short-Term Rate (€STR) to be used as a substitute for the Euro Overnight Index Average (EONIA), which should apply from October 2019 following all the test and analysis stages. The aim is to eliminate all the shortcomings identified in the current EONIA calculation methodology by applying the new Euro Short-Term Rate, and the expectation is that the Euro Short-Term Rate (€STR) would become one of the main benchmark interest rates in the euro area markets.

In 2018 and the first half of 2019, the Bank of Japan continued to implement accommodative monetary policy, with the benchmark interest rate was maintained at -0.1%. Influenced by favourable labour market conditions and rising the inflation above the 2% target, the Bank of England raised its benchmark interest rate in August 2018 by a quarter percentage point, i.e. to 0.75%, which is the highest level since 2009.

Due to the increase in the FED's benchmark interest rates, the euro depreciation was particularly pronounced against the US dollar. At the end of the year, the exchange rate of EUR 1.147/USD was recorded, accounting for a depreciation of 5% compared to the beginning of 2018. The depreciation of euro was also recorded in relation to Japanese yen and, to a lesser extent, to the Swiss franc. At the same time, the euro strengthened significantly against the most currencies of developing countries, especially against the Chinese yuan, Turkish lira and Argentine peso, which depreciated more strongly against the US dollar. The euro appreciated around 2% in 2018 against the British pound, which weakened amid rising political tensions and the inability to reach a deal on the UK's exit from the EU. The depreciation of euro against the US dollar continued into the first half of 2019, so that at the end of May the euro recorded its lowest value against dollar since mid-2017.

Graph 1.2: The Trend of the USD Exchange Rate against EUR

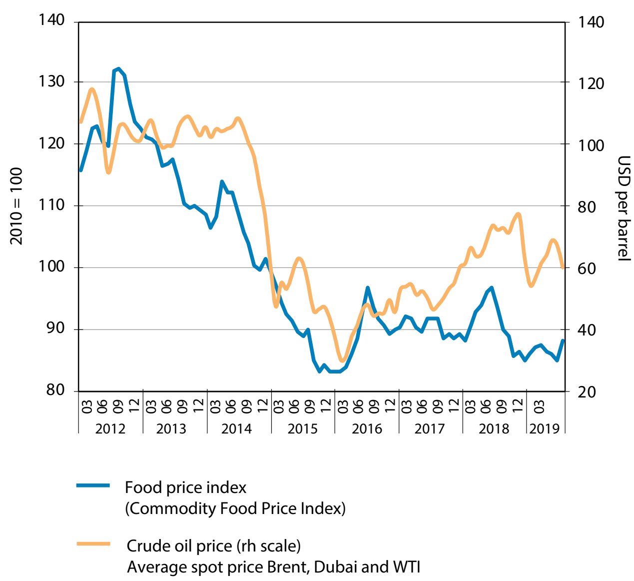


Source: Bloomberg

In January 2018, the gold price was USD 1,363 per ounce, which was also the highest recorded value in 2018. The rise in gold prices was fuelled by a strong depreciation of dollar against euro and other currencies of US trading partners at the beginning of the year, and the introduction of customs duties on imports of certain goods to strengthen their production in the US. Following constant fluctuations in the first and the second quarter, the gold price was in constant decline at the beginning of the third quarter due to the appreciation of dollar against euro and other currencies, and expectations that the FED would increase the benchmark interest rate, so that in mid-August it reached the value of USD 1,177 per ounce, which was also the lowest value since January 2017. Although the end of 2018 saw a slight recovery in gold price of USD 1,280 per ounce, it was still below the level from the beginning of the year, so the cumulative decline in the gold price in 2018 was 2.65%. In the first half of 2019, there was a significant upward trend in the price of gold so that the gold price reached USD 1,410 per ounce at the end of June, i.e. an increase of about 10% compared to the gold price at the end of 2018.

Globally, the inflation is still low, despite a slight increase over the previous year. The slowdown in global inflation began in November 2018 amid a sharp fall in oil prices. The oil price trends in 2018 were driven by a strong global demand and a decline in stocks. The average price of crude oil in 2018 was USD 68.3 per barrel, i.e. an increase of 29.36% at annual level in relation to the average price in the previous year. In the first half of 2018, oil prices gradually rose after 22 OPEC countries and producers outside OPEC reached agreements to reduce production. The highest average crude oil monthly price of USD 76.73 per barrel was recorded in October after the US reintroduced sanctions on Iran and following a sharp drop in oil exports. However, there was a significant fall in oil prices at the end of December due to an increased production in the US, some OPEC countries and in the Russian Federation, with the lowest average monthly price of crude oil recorded in December 2018 (USD 53.96 per barrel), representing a decrease of 12% as compared to the same period last year. In early 2019, due to the increased demand and sanctions imposed on oil exports to Iran and Venezuela, the oil prices rose again, and in May 2019 the prices started to decline due to the inability to reach an agreement to reduce production and the increase of US stocks. The prices of metals and food products were generally stable in the first half of 2018, while the prices of other raw materials were decreasing. However, as trade tensions intensified, the demand from China declined, causing a fall in the price of metals and agricultural products in the second half of the year. Food prices also started to decline due to the global supply growth, so that the average decline in the food price index at the end of the year was 5%.

Graph 1.3: Prices of Food and Oil



Source: the World Bank

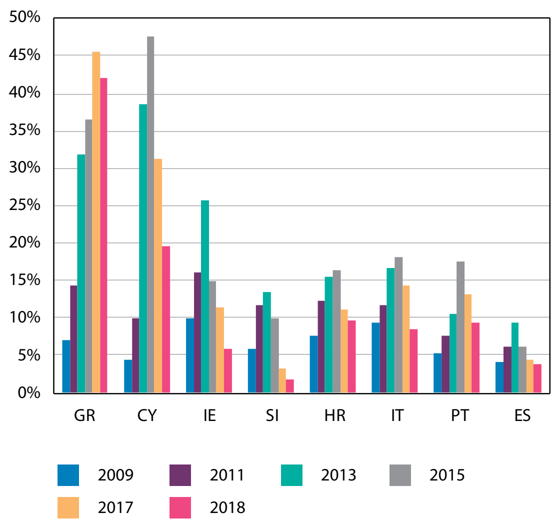
1.2 Overview of the Main Risks in the EU and the Euro Area

The main risks in the European Union in 2018 were the uncertainties associated with the BREXIT process, rising risks in Italy related to the country's fiscal position and financial market turbulences, declining industrial production in Germany, political instability in France, rising Euroscepticism and expectations related to the EU Parliament election results. Risks to the financial stability of the euro area are reflected in the volatility of the financial asset prices due to the political and economic instability in the euro area and other countries to which the financial sector is exposed and, in this connection, a possible increase in the risk premium in Italy and developing markets, the still excessive indebtedness of some euro area countries, difficulties that banks face in obtaining an adequate level of core business income, and increased liquidity risk in the investment funds sector.

1.2.1 Effects on the Banking Sector

The euro area banking sector successfully absorbed the existing risks from the macroeconomic environment in 2018. The activities of strengthening the regulatory framework for bank operations undertaken in previous years resulted in the maintained stability of major financial soundness indicators. Solvency was maintained at approximately the same level as in the previous year, while the liquidity coverage ratio and return on equity slightly increased. *Significant reductions in the level of non-performing loans were recorded as a result of the implementation of a comprehensive European strategy for tackling non-performing loans, so that the credit risk is no longer a systemic risk. In 2018, the non-performing loans decreased by EUR 142.4 billion, and the share of non-performing loans in the euro area total loans at the end of the year was 3.8%, i.e. a decrease of 1.13 percentage points compared to the end of 2017. The process of resolving non-performing loans through liquidation, write-offs or recovery either accelerated or continued at the same pace in most countries with high rates of non-performing loans. In addition, activities in the secondary markets for impaired assets have significantly contributed to the reduction of non-performing loans. Observed by country, sales activities for these assets were still strongest in Italy and Spain. The share of non-performing loans in total loans in Italy decreased from 14.4% at the end of 2017 to 8.4% at the end of 2018. Some countries, such as Greece and Cyprus, are still burdened by a significant level of non-performing loans that limit banks' profits, make them less resilient and reduce their ability to finance economic activities.*

Graph 1.4: Share of Non-Performing Loans in the Total Loans in the Selected EU Countries



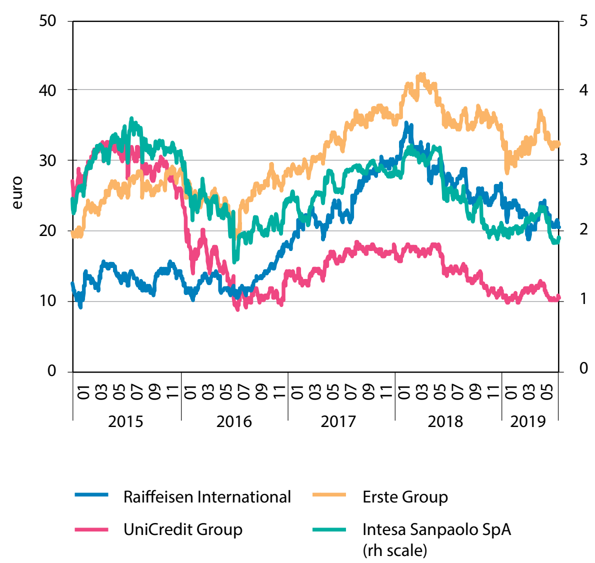
Source: IMF, CBBH calculation

A key risk to the financial stability of the euro area is the continued pressure on banks' profitability, which could jeopardize the banking sector's financial intermediation capacity. The credit activity of euro area banks continued to strengthen in 2018, with a credit growth of 6%. The asset quality improved significantly, but there was no strong profitability growth. Low interest rates are still a limiting factor for an increase in the net interest margins and profitability growth. On the other hand, the pressure on banks' profitability puts additional capital requirements on the securities trading risks due to a significant volatility of financial asset prices resulting from the rising risk premiums in Italy and developing markets, and the introduction of additional capital buffers for globally and systemically important banks.

The Italian banking sector recorded an increased risk arising from the significant exposure of Italian banks to the domestic government sector, which could spill over through the channels of interbank exposures of the euro area banks. Problems in the Italian fiscal sector resulted in the rising yields on government bonds, which reached their highest level in the last five years. Domestic banks and other financial institutions became the largest creditors of the Italian government, while the estimates show that the banks held 48% of Italy's public debt at the end of 2018. Bank d'Italia holds an additional 17% of public debt, excluding 3% of Italian bonds covered by the ECB program. It is estimated that in 2018, non-residents sold approximately EUR 40 billion of Italian debt securities while the customers were primarily Italian banks and the Banca d'Italia. According to EBA, Italian banks' exposure to the Italian government at the end of 2018 was EUR 234 billion. At the same time, the heightened political tensions between Italy and France in late 2018 and early 2019 threatened to further jeopardize the stability of the euro area, given the link between the two economies, as well as the high interbank exposure. Namely, according to data of the Bank for International Settlements (BIS) at the end of 2018, French banks accounted for the largest foreign holders of Italian debt as they held USD 319 billion of Italian debt, of which USD 24.6 billion accounted for the debt to Italian banks and USD 231 billion to the private sector.

The trend of shares growth in the largest banking groups from 2017 continued in early 2018, however, in the middle of the second quarter, the shares began to decline continuously due to the increased political uncertainty and turbulences in markets, and at the end of the year there was a significant fall in the prices of shares of the euro area banks. When it comes to the banking groups operating in BH, the largest drop was recorded in the shares of Italian banking groups UniCredit SpA and Intesa Sanpaolo S.pA, which at the end of 2018 saw a decline of 36% and 30%, respectively, compared to the end of the previous year, while the Erste Group share prices dropped by 20% at the end of 2018. Although at the end of 2018, the Raiffeisen Bank International AG's performance indicators improved compared to 2017, primarily in terms of profit, which increased by 14%, and a decrease in the non-performing loans in total loans, its share prices dropped by 26% compared to the end of the previous year.

Graph 1.5: Trend of Share Prices of Local Banks' Mother Banks



Source: Bloomberg

The credit ratings of banking groups operating in BH remained unchanged, however, the outlook for credit ratings of Italian banking groups changed to negative. In October 2018, the S&P rating agency reaffirmed the Italy's long-term BBB rating. The outlook changed from stable to negative due to deviations in the government's budgetary policy from the recommendations of the Council of the European Union, growth of public debt, stagnation of the Italian economy and the official start of recession. Consequently, the outlook for 11 financial institutions in Italy, including banking groups UniCredit S.p.A and Intesa Sanpaolo S.pA, also reduced to negative. In May 2019, Nova Ljubljanska Banka's long-term credit rating was raised from BB + to BBB- with a stable outlook. The transition from speculative to investment level was a consequence of the reduction of risk in the Slovenian banking sector, reduction of state ownership in banks and the strengthening of banking supervision. The Slovenian government sold 65% of Nova Ljubljanska Banka's shares in 2018 and, under the agreement with the European Commission, it should sell another 10% of its shares by the end of 2019.

Completing the banking union by establishing the European Deposit Insurance Scheme (EDIS) could not be implemented in 2018, so these activities will continue in 2019. In 2018, there was a continuation of activities related to the establishment of the banking union by developing a regulatory package to include directives and regulations prescribing banks' leverage ratios, additional capital requirements for securities trading risks, and capital requirements for globally and systemically important banks, in order to increase their capacities to cover losses.

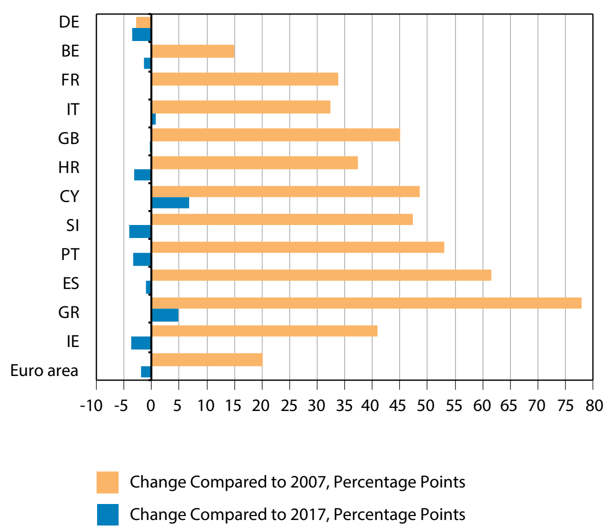
The last several years saw an increase in the financial stability risk in the euro area, arising from the non-banking sector. This risk relates to possible liquidity pressures in the investment funds sector. Of the total assets held by the financial sector, almost 20% relates to the investment funds sector. In less than ten years, total investment fund assets more than doubled, i.e. from EUR 5.7 billion at the end of 2008 to EUR 13.8 billion in mid-2018. The investment funds continued to invest in risk assets in 2018. With the growth of their investments, the liquidity reserves also decreased, thus increasing their vulnerability to possible shocks that could occur in the financial markets. Given the increasing market impact of the investment funds sector, there is a growing concern that the increase in liquidity risk could cause other related cyclical risks.

1.2.2 Effects on the Real Sector

Following a slightly stronger economic growth in 2017, economic activity in the euro area slowed down in 2018, with a growth rate of 1.8%. The growth in domestic demand was a major contributor to the economic growth in 2018, driven by a continued trend of improving labour market conditions, reflected in a moderate wage growth, a fall in the EU unemployment rate (the lowest since 2008) and a rise in the investment spending of non-financial companies. However, a weaker economic recovery was driven by a slowdown in the euro area's foreign trade, largely due to a decline in foreign demand, which began in the third quarter of 2018. The inflation rate was 1.6% in December 2018, while in May 2019 the inflation recorded a significant decline and amounted to 1.2% due to the fall in the prices of energy products and services.

In 2018, the downward trend in the budget deficit continued, and so did the downward trend in the euro area public debt. Despite the gradual decline, the euro area public debt remained high and there are concerns about the sustainability of public debt in some euro area countries (Greece, Italy, Portugal, Spain, Cyprus and Belgium).

Graph 1.6: Public Debt Changes as Percentage of GDP in 2018



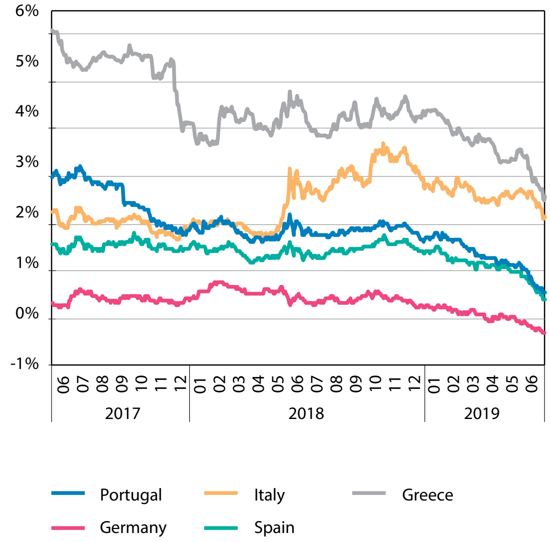
Source: Eurostat, CBBH calculation

Budget deficit of the euro area countries, expressed as GDP percentages in 2018, was reduced by 50 basis points compared to the same period last year, amounting to 0.5%, while the EU countries recorded a decrease of 40 basis points and in 2018 the deficit accounted for 0.4% of GDP.

In 2018, the budget deficit was reduced below 3% in all EU countries, except Cyprus, which had a budget deficit of 4.8% in 2018, although in 2017 it recorded a surplus of 1.8%, i.e. it decreased by 66 basis points.

Following the stabilization of the euro area debt securities market in 2017, which was reflected in a decrease in the range of yields on bonds of the euro area periphery countries, in relation to yields on German government bonds, and an increase in bond yields in early 2018, the end of the second quarter of 2018 saw positive trends and new market volatilities. The uncertainty surrounding the formation of the Italian government led to a sharp rise in yields on ten-year Italian bonds at the end of May 2018, which was also reflected in the rise in yields on other euro area periphery countries. As a result, there was an increase in demand for safer country bonds, so that the yields on ten-year German bonds fell to 0.26% (the yield range of ten-year Italian versus ten-year German bonds was 290 bp). Although a partial stabilization of market yields occurred within a short timeframe, yields on Italian bonds did not decline significantly. Yields were kept high, amid uncertainty over the adoption of the budget of the new Italian government, which significantly deviated from the recommendations of the Council of the European Union. Problems in the fiscal sector influenced the risk perception growth among the investors in the Italian public debt during the first half of 2019. The uncertainty stemming from the trade war, the investors' expectations about the right-wing parties joining the EU Parliament and the ineffectiveness of BREXIT negotiations caused an increased demand for safer investments, which brought pressure for a continued decline in the euro area bond yields since early 2019. This pressure was further intensified in early March 2019 after the ECB announced the decision to introduce a new round of targeted long-term bank loans (TLTRO 3) with a 2-year repayment period, expected to be implemented in September this year, and will be available until March 2021. Furthermore, previous expectations were prolonged, namely that the ECB benchmark interest rate could increase during the summer of 2019, and the ECB announced that the benchmark interest rate would remain unchanged until at least the end of 2019. As early as the end of March 2019, yields on ten-year German bonds were in the negative zone, and in June, following the ECB's statement about the willingness to take all measures to maintain price stability, which included the possibility of decreasing the deposit interest rate and having an additional repurchase of bonds, they reached a record low negative value of -0.32%.

Graph 1.7: Yield of Ten Year Government Bonds

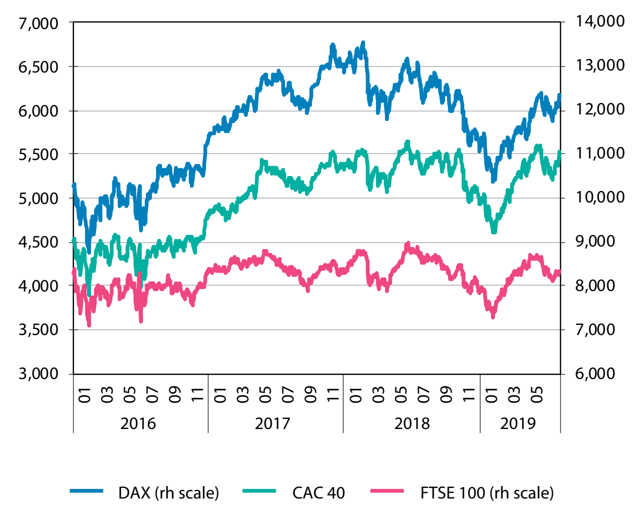


Izvor: Bloomberg

In the second half of 2018 and the first half of 2019, the S&P rating agency improved the credit ratings of Greece, Portugal and Cyprus as a result of economic recovery and the growth of economic activity, as well as due to the continued fiscal consolidation. Despite raising its rating, Greece is still in the speculative rank with a long-term credit rating of B+. Italy's credit rating remained the same, but the outlook was downgraded to negative due to an increased risk resulting from the high debt levels, stagnant economic growth and entering in the recession. Once again, the S&P rating agency reaffirmed the UK credit rating of AA with a negative outlook due to the increased tensions and uncertainty in the negotiations over the UK's exit from the European Union. With regard to countries in the region, the S&P increased Croatia's credit rating to BBB- (stable outlook) in 2019 due to a decline in public debt, progress in implementing structural reforms and stable economic growth. Serbia's (BB) credit rating was reaffirmed at the end of 2018, with improving the outlook from stable to positive due to a stronger economic growth and low and stable inflation, while the credit ratings of Montenegro and Albania were reaffirmed in 2019 (B + with stable outlook).

Curbed economic activity and negative developments globally, increased political uncertainty and the US-China trade war also affected the stock market price trend and led to a significant decline in major market indices in 2018. The German DAX, which had the highest growth of 12.51% in 2017, recorded the largest decline of 18.26% in 2018, followed by the French CAC 40 which, following a growth of 9.26% in 2017, recorded a decrease of 12.69% in 2018. Due to the uncertainties in resolving BREXIT issues as well as other negative developments in the country, Britain's FTSE declined by 12.69% in 2018. In early 2019, indices began to slightly recover, however, their trends were volatile, and in the second quarter they declined again due to the increased geopolitical tensions in the Middle East, uncertainties related to the trade war, as well as pessimistic forecasts of the leading central banks regarding the global economic growth.

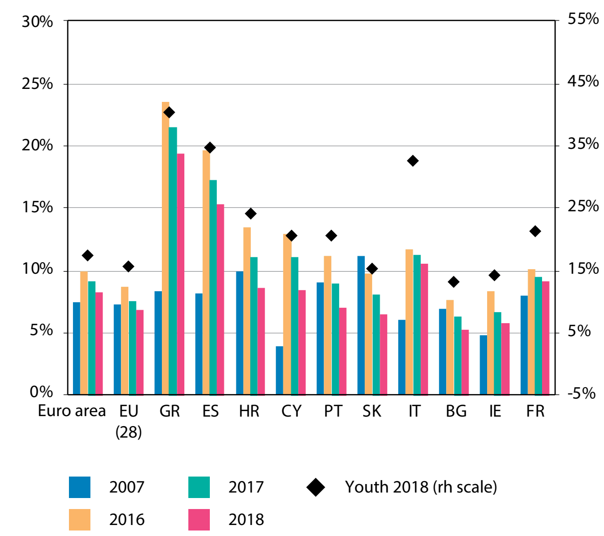
Graph 1.8: The Lead Market Indices Trend



Source: Bloomberg

The downward trend in the unemployment rate of the EU and the euro area with moderate wage growth continued in 2018, whereby the labour market conditions also continued to improve. Unemployment rates in the developed countries and those with emerging markets continued to decline and in many countries the rates fell to their lowest levels since the end of the crisis. Labour shortages were evident in several developed countries, especially when it comes to specialized and highly skilled workers. In the euro area countries, the unemployment rate dropped from 9.1% in 2017 to 8.2% in 2018. In the EU, the unemployment rate dropped from 7.6% to 6.8% in 2018, although some countries still recorded above-the-average unemployment rates despite the decrease (Greece 19.3%; Spain 15.3%; Italy 10.6%). Among other things, the youth unemployment rates in these countries were still extremely high and above the EU average (Greece 39.9%; Spain 34.3%; Italy 32.2%).

Graph 1.9: Unemployment Rate in the EU



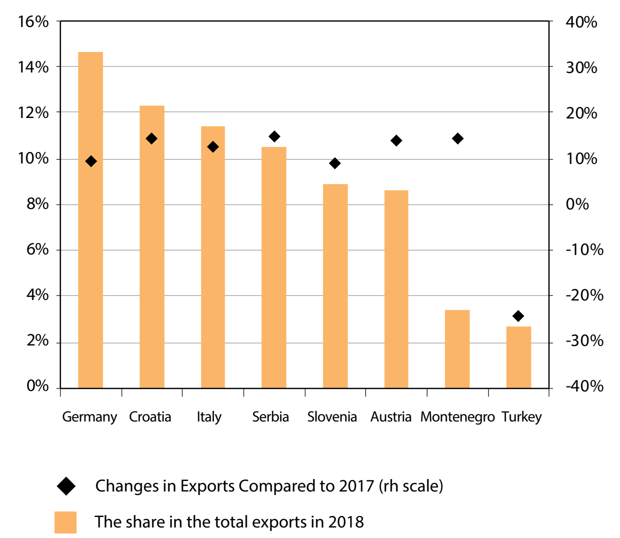
Source: Eurostat

The external sector's contribution to the euro area's economic growth in 2018 was significantly weaker than in 2017. A weak foreign demand, especially from Asia, particularly in relation to capital goods, caused by the increased uncertainties and higher trade tensions, was replaced by increased exports from the euro area to other countries. The growth of net trade in the euro area contributed to the GDP growth. The changing international environment had the strongest adverse effect on exports to the UK and China and a positive effect on exports to the United States, due to the increased risks of customs duties on imports from the EU. In the second half of 2018, there was a significant decline of trade in capital products and cars due to the increased trade uncertainty and the introduction of more stringent emission standards in the automotive industry as well as the appreciation of euro.

Low economic growth was recorded in the BH's main foreign trade partner countries. Economic trends on the world market in 2018 were also reflected in the economic trends of the BH's main foreign trade partner countries, all of which, except Serbia, recorded weaker economic growth compared to the same period last year. In Germany, as BH's most significant foreign trade partner and the largest European economy, the economic growth was below the euro area average of 1.5%, down 1 percentage point compared to the same period last year. In 2018, as a result of rising domestic demand and consumption, stronger exports and the growing investment activity, with a slight increase in wages and higher employment, Serbia recorded the highest economic growth in the last ten years, i.e. 4.4%. In 2018 Slovenia recorded the highest growth rate of domestic consumption since 2007, i.e. 4.6%, and with the growth of investments and exports, this country generated a stable growth of 4.5%. At the end of 2018, Italy officially went into recession amid a decline in economic activity for two quarters in a row, while its annual growth recorded at the end of 2018 was 0.9%. Croatia recorded a slowdown in economic growth in 2018, due to the deterioration in foreign trade balance and unfavourable international environment, and at the end of the year it recorded the economic growth of 2.7% supported by the increased domestic consumption and investment growth.

In 2018, the exports from BH amounted to KM 11.9 billion, i.e. 7.6% more than in the previous year, while the imports amounted to KM 19.27 billion or 6% more than in the same period last year. The import-export coverage amounted to 61.8%, while the foreign trade deficit amounted to KM 7.37 billion. Exports to EU countries amounted to KM 8.68 billion, i.e. 10.3% more than in 2017, while imports amounted to KM 11.67 billion, i.e. 5.3% more than in the same period last year. The import-export coverage with EU countries at the end of 2018 was 74.5%. The main foreign trade partners, i.e. Germany, Croatia, Italy, Serbia, Slovenia and Austria recorded the growth in exports in 2018 and still had the largest share in exports from BH. Exports to Montenegro increased by 14%, and this country became an important foreign trade partner in 2018, ahead of Turkey, were exports decreased by as much as 25% compared to the previous year.

Graph 1.10: BH Exports to Main Trade Partner Countries



Source: BHAS, CBBH calculation

2. Macroeconomic Trends in BH

The slight recovery in economic activity, which continued in 2018, had a positive effect on the BH's financial stability. Also, external vulnerabilities of the country were reduced due to a slight decrease in the current account deficit, expressed as a percentage of GDP, and a decrease in total external debt, expressed as a ratio to GDP. The country's credit rating remained unchanged, but in early 2019 the outlook changed from stable to positive as compared to its previous rating. On the other hand, the still existing structural vulnerabilities of BH's economy in the form of high unemployment rates, unfavourable business environment, low competitive position of the country, inefficient public sector and low purchasing power of the population, did not allow for a significant mitigation of risks in the domestic macroeconomic environment.

In 2018, a slight recovery of the BH's economy continued, and according to preliminary data from the BH Agency for Statistics, the real growth of economic activity reached the rate of 3.1%. The real growth in gross value added in 2018 was recorded in almost all areas of economic activity, with the exception of the following: Water Supply; Sewage Disposal, Waste Management, Public Administration and Defence; Compulsory Social Insurance, Education, and Other Service Activities. Wholesale and Retail Trade made the largest contribution to real GDP growth, and compared to 2017, the share of this activity in the generation of gross value added increased. Unlike the previous year, when Manufacturing Industry generated the largest share of real GDP growth, in 2018 this activity made a modest contribution to the economic activity growth.

In 2018, industrial production grew at lower intensity than in the previous year. Industrial production volume increased by 1.6%[1], with industrial production declining by 2.1% in December 2018 compared to December of the previous year. The slight increase in the volume of industrial production in 2018 was mostly driven by the growth of production in the field of Production and Supply of Electricity, Gas, Steam and Air Conditioning (11.4%), which in the last year recorded a decrease in production volume, while Manufacturing, as one of the areas with the highest share in the generation of gross value added, recorded a lower production volume than in 2017 (-1.1%).

External vulnerabilities arising from the country's balance of payments position were mitigated due to a slight decrease in the current account deficit, expressed as a percentage of GDP. Compared to the previous year, the current account deficit, expressed as a percentage of GDP, decreased by 52 basis points and accounted for 4.2% of GDP at the end of 2018. The deficit on the current account balance of payments amounted to KM 1.37 billion and was, as in the previous year, determined by a negative balance on the commodity and primary income account, which was mitigated by the growth of exports of services and positive net inflows on the secondary income account. Commodity deficit at the end of 2018 amounted to KM 7.53 billion and increased by KM 144.3 million or 2% compared to the previous year. The slight recovery in economic activity in the country and the strengthening of domestic demand influenced the increase in debt transactions within the current account, primarily through the increase in demand for imported products. At the same time, there was an increase in the current account receivables, mainly due to the growth of commodity exports. However, due to the slowdown in growth in almost all BH's key foreign trade partner countries, the pace of growth in commodity exports in 2018 slowed down significantly, which was partly compensated by the stronger exports of services. In the international exchange of services, a surplus of KM 2.46 billion was achieved in 2018, i.e. KM 201 million (8.9%) higher than in the previous year. The current account deficit was also mitigated by a positive balance on the secondary income account. Surplus on the secondary income account in 2018 amounted to KM 3.87 billion, i.e. KM 78.1 million higher (2.1%) than in the previous year. Negative balance on the primary income account amounted to KM 168.9 million and increased by KM 30.3 million or 21.9%, mostly due to an increase in outflows on the basis of direct investments related to an increase in dividend payments and a decrease in inflows related to employees' compensations.

The current account deficit in 2018 was largely financed by new borrowings related to other investments and inflows on the basis of foreign direct investments (Graph 2.1) [2]. The financial account balance at the end of 2018

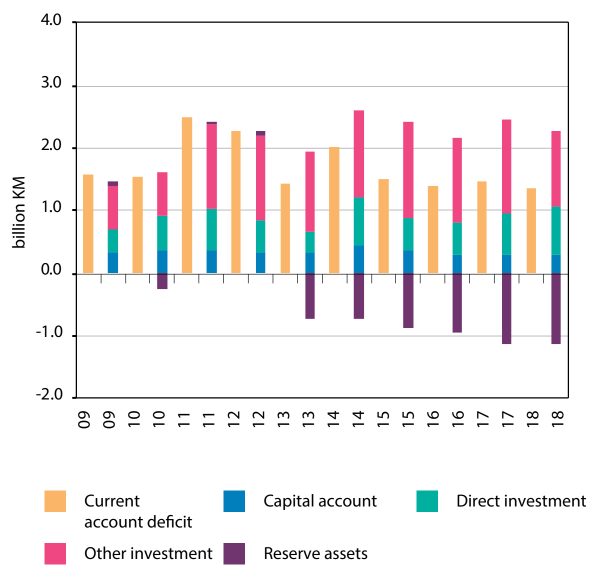
1 In 2017, the volume of industrial production grew at the rate of 3.1%.

2 Positive value of the reserve assets in the Graph 2.1 means that the assets decreased in the referenced year, that is, the reserve assets were partly used to finance the current account deficit, while in the years when the reserve assets did not participate in covering the current account deficit, its change during the year is shown below x-axis.

amounted to KM 857.8 million. Within the financial account, the net inflows on the basis of foreign direct investments amounted to KM 799.8 million. Out of the total inflows on the basis of foreign direct investments, the reinvested earnings accounted for KM 392.2 million, and equity investments for KM 565.1 million. At the same time, intercompany loans classified as foreign direct investments were repaid in the observed period, which reduced the value of foreign direct investments by KM 157.5 million. Net inflows from other investments in 2018 amounted to KM 1.45 billion, the most significant inflows being trade credits (KM 606 million), new loans (KM 412.8 million) and the currency and deposit inflows (KM 401.8 million). The increase in inflows on the basis of other investments, along with inflows from direct investments, resulted in a net inflow of foreign currency into the country, and in 2018 a dynamic growth of reserve assets was recorded, i.e. KM 1.14 billion higher compared to the previous year.

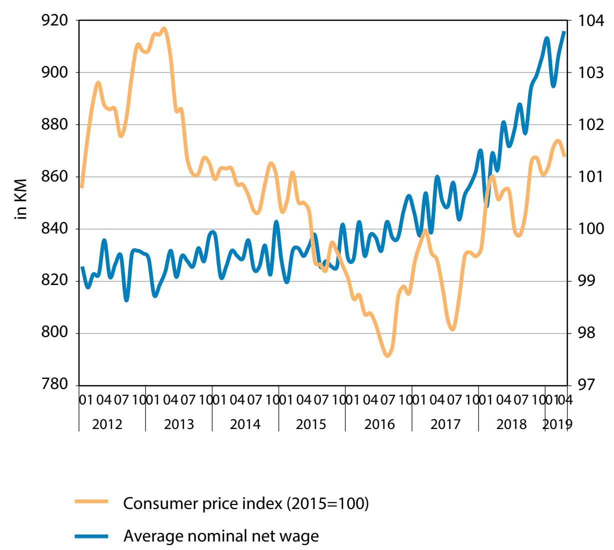
which accounted for only 8.6% of the total employment. In the sectors with the highest number of persons employed, *Manufacturing and Wholesale* and *Retail Trade* recorded an increase in the average net wage of 4% and 4.1%, respectively. Although the growth in the average net wage continued in 2018, recording its highest rate since 2009, the growth in monthly earnings was still mild and insufficient to significantly improve the purchasing power of employed population, especially when taking into account the increase of inflationary pressures in the second half of 2018 and early 2019 (Graph 2.2). It is also evident that the slightly higher annual increase in average monthly net wage over the last two years was not predominantly a result of improved economic conditions in the country, but rather of certain factors such as the amendment of the FBH Law on Income Tax or the signing of new collective agreements in certain sectors, with an increase in salaries and other benefits.

Graph 2.1: Financing Current Account Deficit



Source CBBH

Graph 2.2: Average Nominal Net Wage and Consumer Price Index

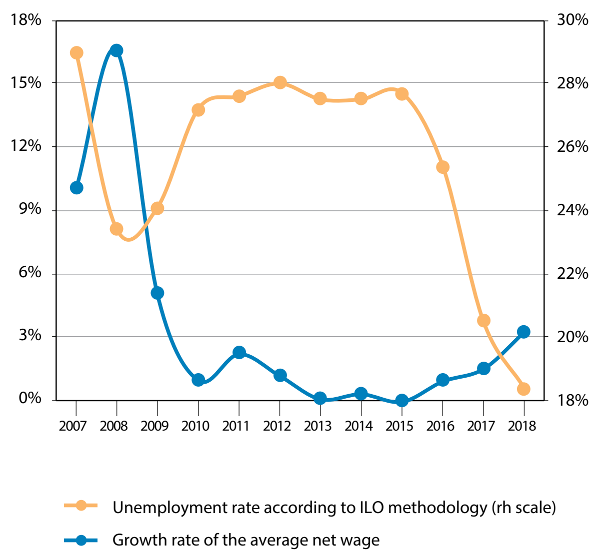


Source: BHAS, CBBH calculation

Although the labour market recorded some positive trends, there was still no significant recovery in terms of growth in the average monthly earnings and employment. The average nominal net wage in 2018 amounted to KM 879 and increased by 3.3% compared to the previous year. The increase in average nominal net wage was recorded in all sectors except the *Real Estate Business*. The highest growth in average monthly earnings was recorded in the following sectors: *Health and Social Care* (7.5%) and *Administrative and Support Services* (5.6%),

According to data from the Labour Force Survey conducted in April 2018 in accordance with the methodology of the International Labour Organization (ILO), as well as according to the administrative data of the Employment Bureau, the unemployment in BH continued to decrease in 2018. According to the Labour Force Survey 2018, the unemployment rate in BH was 18.4% and decreased by 2.1 percentage points compared to the previous year, while according to preliminary data from the Labour Force Survey 2019, the unemployment rate was further reduced to 15.7%. According to the 2018 survey, the number of employed persons increased by 0.8%, while the number of unemployed decreased by 12% compared to the previous year. Although data on the number of people who left BH in the observed period are not available, the data on the smaller number of persons included in the labour force and the lower number of working age population compared to the data from last year's Survey may be an indicator of a continued trend of migration of the population, i.e. emigration of the working age population from BH.

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

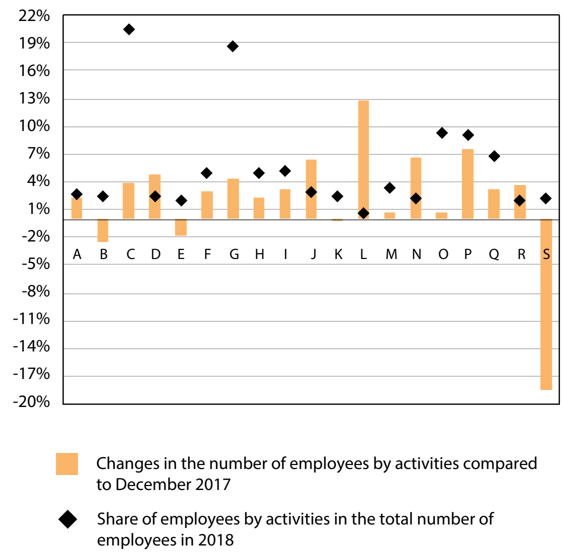


Source: BHAS

The unemployment rate, according to the Employment Bureau's administrative data in 2018, declined by 3.9 percentage points. According to this source, the number of employed in 2018 increased by 8.5%, while the number of unemployed decreased by 8.4% compared to 2017. The differences in administrative and survey data on employed and unemployed persons stem from the differences in the methodology used to calculate and determine the status of unemployed persons.

Administrative data on the number of employed, observed by economic activities, show that most activities recorded the employment growth, with the exception of four activities, one of which recorded the largest relative decline in the number of employed i.e. *Other Service Activities* (Graph 2.4). The largest contribution to the growth of the total number of employed was due to the increase in the number of employed in the *Wholesale and Retail Trade*; *Repair of Motor Vehicles and Motorcycles* and *Manufacturing*, which accounted for 38.7% of the total employed persons at the end of 2018.

Graph 2.4: Changes in the Number of Employees by Activities

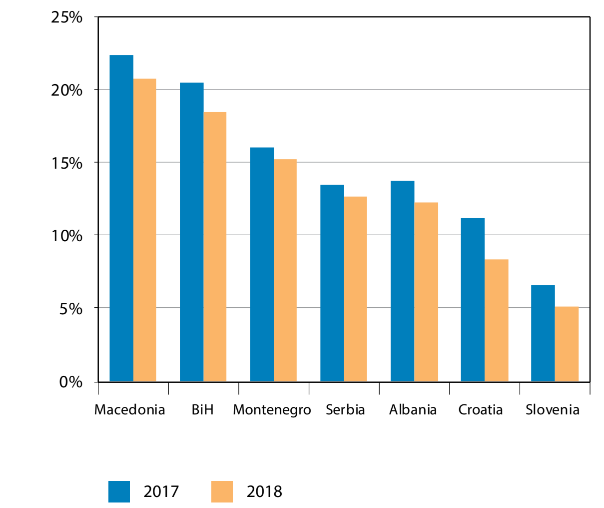


Source: BHAS, CBBH calculation

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

Despite the positive trends in the labour market, existing improvements are still insufficient to significantly reduce vulnerabilities coming from the labour market. BH is still one of the countries in Europe with the highest unemployment rate, and comparing the data with countries in the region, BH recorded the highest unemployment rate along with Macedonia (Graph 2.5).

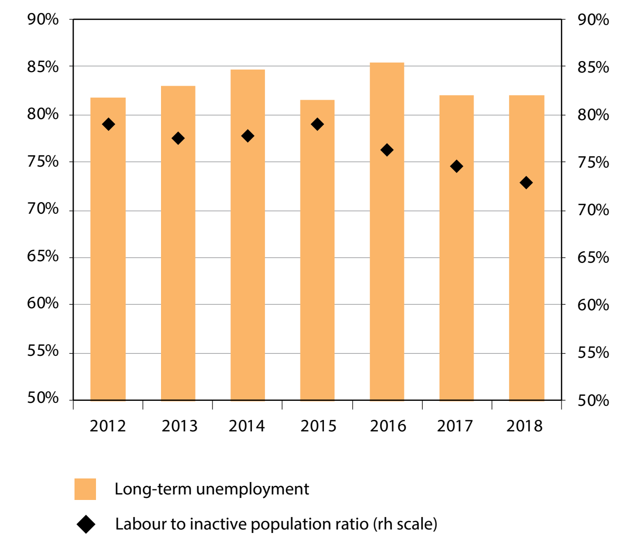
Graph 2.5: Unemployment Rates in the Countries in the Region



Source: ILO, BHAS
Note: BH Labour Survey, April 2018

Long-term unemployment, i.e. unemployment over 12 months, poses a particular problem in the BH's labour market. According to the 2018 Survey, the share of long-term unemployed persons in the total number of unemployed was 82% and far above the EU average[3]. In addition, a very unfavourable feature of the BH labour market is the problem of inactivity of its population, which is manifested in the fact that the number of inactive persons is greater than the workforce. In 2018, the labour force to inactive population ratio was 72.6%, down only 1.7 percentage points compared to the previous year (Graph 2.6).

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



Source: BHAS, CBBH calculation

The youth unemployment rate was also high and according to the 2018 Labour Force Survey, the rate was 38.8%, i.e. decreased by 7 percentage points compared to the previous year, while according to preliminary data from the 2019 Labour Force Survey the rate was further reduced to 33.8%. The decrease in the youth unemployment rate cannot be interpreted solely by the improvement of labour market conditions, but rather by the decreased number of people in the labour force.

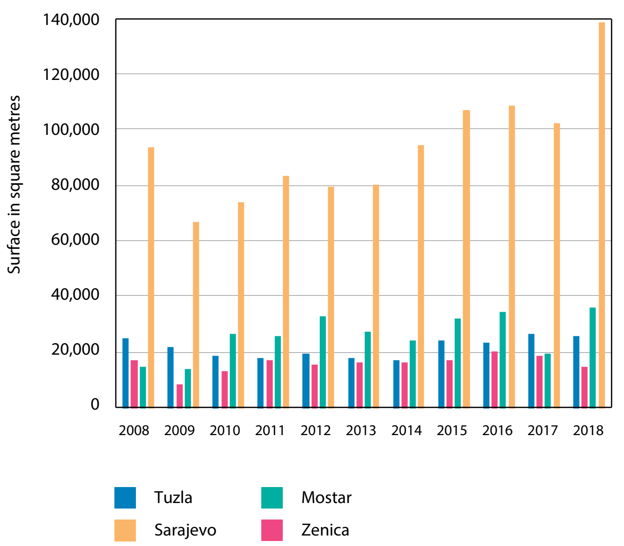
The actual individual consumption per capita and the GDP per capita in 2018 also did not show improvement in the prosperity. On the contrary, both indicators were lower by one percentage point compared to the previous year, so that BH remained significantly behind the European average. According to Eurostat, the BH's GDP per capita expressed in the purchasing power standards in 2018 was 31% of the EU-28 average. According to this indicator, BH is the worst ranked out of the 37 surveyed countries[4], along with Albania. The actual individual consumption per capita expressed in the purchasing power standard was 41% of the EU-28 average. The value of this indicator was only lower in the case of Albania, while Northern Macedonia, like BH, recorded a level of real per capita consumption, expressed in purchasing power parity, 59% lower than the EU average.

Strengthening of the real estate market activity in BH, caused by slightly higher demand for dwelling units, resulted in an increase in real estate prices both in the category of existing and newly built dwelling units. In 2018, there was a significantly higher volume of real estate turnover compared to previous years. Compared to 2017, the volume of real estate turnover in terms of the old construction, measured by the surface area of the sold residential space, was 28.7% higher. Growth in the volume of real estate purchase and sale was recorded in all three Sarajevo municipalities included in the analysis, as well as in Mostar. Although the area of the sold old construction residential space in Tuzla was slightly smaller than in 2017 (-2.4%), the volume of turnover in 2018 was still higher than the annual volume of real estate turnover in the period between 2008 and 2016. Unlike other cities included in the analysis, only the City of Zenica, for the second year in a row, recorded a decline in the volume of turnover of residential real estate belonging to old construction (Graph 2.7).

3 In 2018, according to the Eurostat data, a share of long-term unemployed in the total number of employed in the EU countries was 43%.

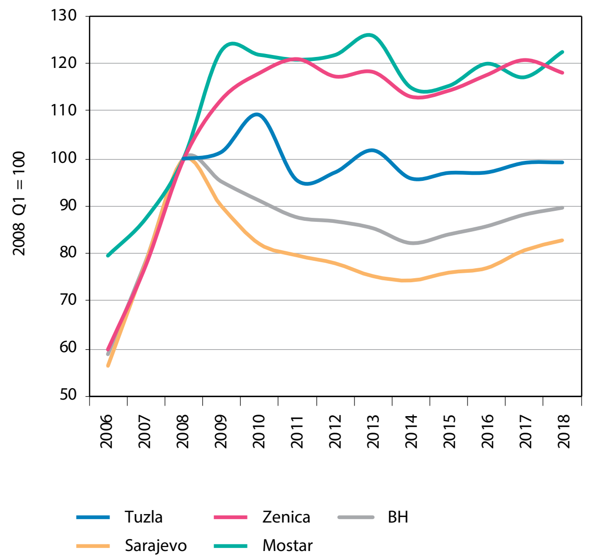
4 EU-28 countries, EFTA member states (Norway, Switzerland, Iceland), EU candidate countries (Turkey, Serbia, Montenegro, Northern Macedonia and Albania) and BH, as a potential EU candidate country.

Graph 2.7: Old Residential Real Estate Trade Level



Source: CBBH

Graph 2.8: Real Estate Price Index, Annual Average Values 2008 = 100



Source: CBBH

The turnover of newly built apartments continued to grow at a slightly faster intensity than in the previous year. The surface area of sold residential space of new construction increased by 13.8%, while the number of sold apartments increased by 8.3% compared to 2017. The growth in demand for the newly built residential real estate was partly driven by a higher supply of newly constructed apartments[5], as well as more affordable apartments in less attractive urban locations.

The average price per square meter of newly built dwelling units in 2018 was 0.7% higher than in the previous year, while the real estate price index in the old construction category also indicated a slight increase in the real estate prices. According to the Real Estate Price Index for BH[6], the residential real estate prices increased in all cities included in the calculation of the real estate price index, except Zenica, where a significantly lower volume of turnover was recorded than in the previous year. The largest increase in the prices of old construction real estate was recorded in Mostar, where the largest fluctuations occurred in the real estate price trends in the past period (Graph 2.8).

According to the data on newly constructed real estate for the first quarter of 2019, a slight increase in activity continues in the BH's real estate market. The number of sold new apartments increased by 0.8% compared to the first quarter of the previous year, while the surface area of the sold new apartments increased by 2.7%. The average price of the sold new apartments in the first quarter of 2019 increased by 1.8% compared to the same quarter of the previous year, i.e. 2.9% higher than the average price in 2018.

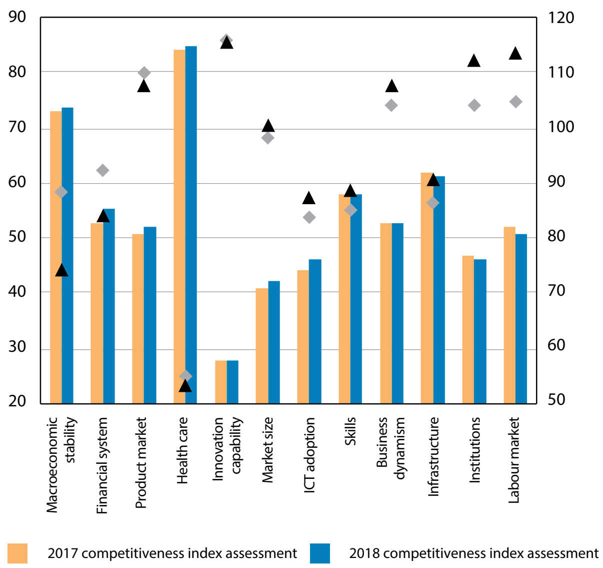
The unfavourable business environment and poor competitive position of the country are major weaknesses of the BH economy. In such circumstances, the ability to attract foreign capital is impaired. According to the World Bank's annual report on the ease of doing business – Doing Business 2018, BH is ranked 89th in the world in terms of the ease of doing business, and compared to last year's report, the country's position is ranked three places down. According to this indicator, BH is lagging behind all the countries in the region. BH is particularly poorly ranked in the area of business start-up (183rd position), while in the segment of resolving insolvency and obtaining loans, BH is ranked 37th and 60th in the world, respectively. The low level of competitiveness

5 In 2018, the number of finished apartments increased by 3.1%, as well as their area by 5.2% compared to the previous year.

6 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 Muncipality Stari Grad which did not respond to the data submission calls since 2008. Since 2010, the Muncipality of Tuzla has been included and 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.

of the BH economy is also indicated by the World Economic Forum's Global Competitiveness Report. According to this 2018 Report, BH ranks 91st out of the 140 countries surveyed, with a total score of 54.2. Following the recalculation for 2017, in line with the new methodology for calculating the Global Competitiveness Index, BH improved the score in 2018 by 0.4 points, but also ranked down one place in the list of countries. Regarding the ranking of countries on the competitiveness list, the country recorded progress in four out of twelve pillars of competitiveness, whereby a positive change in rank is recorded in the pillars: *Macroeconomic Stability* (ranked 13 positions up), *Financial System* (7 positions), *Commodity Market* (2 positions) and *Health* (1 position), while no changes were recorded in the *Innovation Capacity* pillar compared to the previous year. BH also recorded improvement in the Competitiveness Index compared to 2017 in relation to the following pillars: *Adoption of Information and Communication Technologies*, *Market Size* and *Business Dynamics* (Graph 2.9). In terms of individual components with highest effect on the rank improvement in the macroeconomic stability pillar, the annual inflation change made the largest contribution, whereas in the financial system pillar, the components of market capitalization and bank health had the highest impact on the ranking improvement.

Graph 2.9: Change of Ranking and Assessment of Competitiveness Indices 2017 - 2018



Source: Global Economic Forum. CBBH calculation

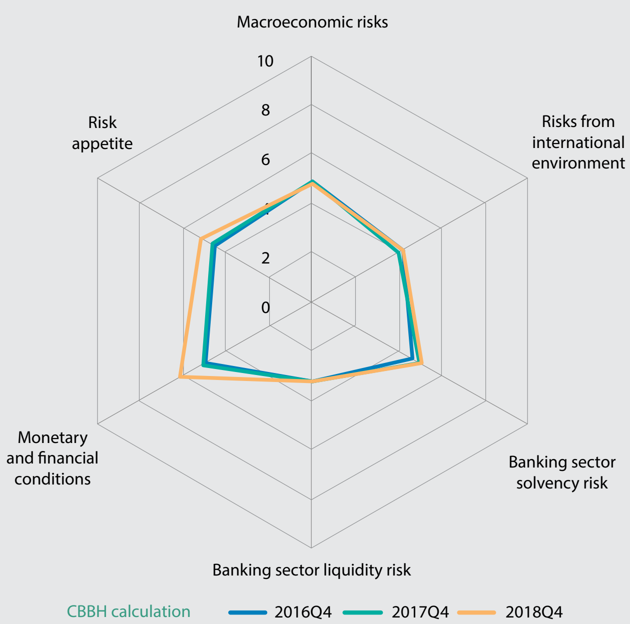
A number of factors continued to limit the competitiveness and business improvement, and the Report identified major problems in the pillars *Institution* and *Infrastructure*, which recorded the largest negative change in 2018. A negative change was also recorded in the pillar of *Labour Market*, affected by the employment and layoff practices, cooperation between workers and employers, internal labour mobility, but also wages and productivity and wage flexibility.

Although the Report indicated slight progress in many areas, the final score did not change much as other countries progressed faster than BH. Compared to other European countries, BH is still the least competitive country. Indicators of the business environment and competitive position suggest a strong need to implement structural reforms that would ensure an increase in the BH's economy growth rate.

Text Box 2: Assessment of Major Macro-Financial Risks to Financial Stability

An assessment of major macro-financial risks that may occur in the real, fiscal, external or financial sector, or as a result of their interconnection, as well as an assessment of monetary and financial conditions and risk appetite, were made using the Dashboard for the first time and published in the 2017 Financial Stability Report. The risk assessment is based on simplified standardization and positions ranking using a comprehensive set of indicators as the basis for quantifying the synthetic assessment of the degree of risks coming from different system segments. A score ranging from 1 to 5 represents a very low to mildly moderate degree of risk exposure; a score ranging from 5 to 8 stands for a moderate to mildly high levels of risk exposure; a score ranging from 8 to 10 stands for a high degree of risk exposure. The ranking score for monetary and financial conditions and risk appetite is moving in the opposite direction, i.e. increasing the distance from the centre of the Graph indicates an improvement in monetary and financial conditions, i.e. increasing investors' propensity to take risks.

Graph TO 2.1: Macrofinancial Risks Chart



CBBH calculation

A slight recovery in economic activity, as well as a reduction in the country's external vulnerabilities, reflected in a reduction in the current account deficit-to-GDP ratio and a decrease in total external debt-to-GDP ratio, had a positive effect on the financial stability in 2018. However, the growth of economic activity in BH is still insufficient to significantly mitigate the identified structural vulnerabilities of BH's economy and risks from the domestic macroeconomic environment. The economic growth was largely generated by private consumption of the population, while the share of gross investments in GDP decreased as compared to the last year. Economic growth projections for the next two years are only slightly more favourable than in 2018. Accordingly, the exposure to macroeconomic risks in 2018 is slightly reduced and is at a moderate level. Exposure to risks from the international environment increased slightly compared to the previous year, primarily due to the increased exposure of the banking sector to non-residents and due to the slowdown of growth in most BH's major foreign trade partner countries. In 2018, there was a significant increase in the banking sector foreign assets (KM 1.1 billion or 38.8%), and the trend of growth of the banking sector net foreign assets continued. The solvency risk of the banking sector slightly increased, primarily due to the significant credit growth in the household sector, while the risks coming from the non-financial corporate sector were lower, as the dynamics of debt growth in this sector was much slower than in the previous year. The vulnerabilities in bank balances also reduced this year, as shown by the financial soundness indicators. Only the profitability segment recorded a slight increase in the level of risk, which was reflected in the slightly lower return that the banking sector achieved relative to average assets and average capital in 2018. The banking sector's exposure to liquidity risk remained low as the trend of liquid assets growth continued into 2018. The lower real interest rate contributed to the improvement of monetary and financial conditions. The investors' perceptions of investment risks slightly reduced, which led to their somewhat greater propensity to take risks.

3. Government

Fiscal stability risks stemming from the fiscal sector in 2018 remained at a relatively low level and did not change significantly compared to the previous year. At the consolidated level, a fiscal surplus was achieved due to a significant increase in budget revenues compared to the budget spending growth. The general government sector debt was down in 2018 and all fiscal sustainability risk indicators were in the safe area.

Fiscal sustainability risk indicators in 2018 showed a low level of risk to financial stability coming from the Government sector[7]. All the fiscal sustainability indicators for BH in 2018 were in a safe zone according to the defined reference levels and did not suggest any concerns in terms of the fiscal sustainability (Table 3.1). Most indicators improved in 2018, while the three indicators recorded a slight deterioration compared to the previous year. Thus, the indicator "Implicit Real Interest Rate (r) Minus Real GDP Growth Rate (g)" recorded a slight deterioration of 7bp compared to the previous year, driven by an increase in the implicit real interest rate. Specifically, in 2018, there was an increase in the interest expenses related to the internal and external debt, which resulted in an increase in the implicit real interest rate at a lower level of total public debt of the BH general government sector. At the same time, the real GDP growth rate, calculated as a five-year moving average, increased slightly compared to the previous year, which mitigated the deterioration of the observed indicator. Furthermore, the indicator Financing Needs Expressed as a Percentage of GDP, calculated on the basis of projections from the document "Global Framework of Fiscal Balance and Policies in BH 2019 – 2021", was 3.2% higher than in the previous year. On the other hand, there was an improvement in the indicator General Government Public Debt Expressed as a Percentage of GDP compared to the previous year, due to a decrease in public debt and an increase in nominal GDP. According to IMF projections, the Cyclically-Adjusted Primary Balance Expressed as a Percentage of Potential GDP, improved slightly, driven by the significant growth in budget revenues achieved in 2018. In addition, the share of public debt denominated in foreign currencies in relation to the previous year was reduced, which led to a decrease of currency risk and fiscal sustainability risk on this basis. The slight deterioration of the three indicators did not lead to an increase in fiscal sustainability risks, since they were also in the safe zone, i.e. well below the reference limits.

Table 3.1: Fiscal Sustainability Risk Indicators

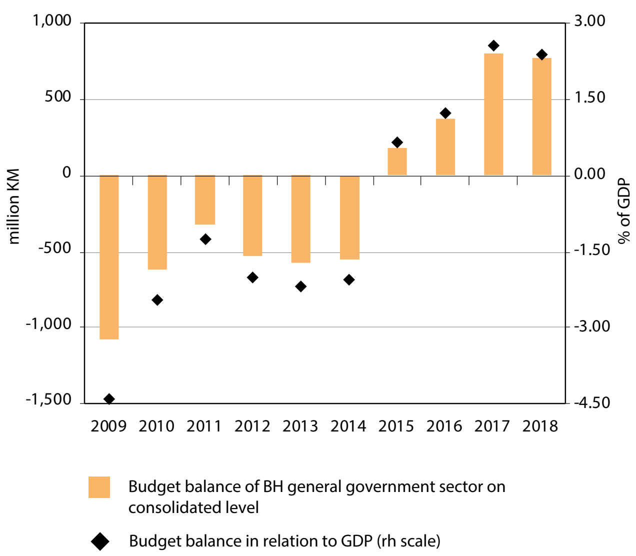
Indicator	Safe area	Bechmark level	The level in BH	Changes compared to the previous year
r - g[1]	<	1,1	-2,4	0,07
Public debt of the general government sector (% of GDP)	<	42,8%	33,9%	-1,2%
Cyclically adjusted primary balance (% of potential GDP)[2]	>	-0,5%	2,6%	0,4%
Financing needs (% of GDP)	<	20,6%	6,0%	3,2%
Short-term debt share in the total debt, residual maturity	<	44,0%	16,5%	2,1%
Debt denominated in foreign currency (other then euro)[3]	<	40,3%	30,6%	-0,2%
Average public debt maturity (years)	>	2,3	6,44	0,27
Short-term foreign public debt (% of foreign exchange reserves), residual maturity	<	61,8%	7,7%	-0,8%

Source:
CBBH, MFT BH, BHAS, BH Fiscal Council, IMF, Ministries of Finance of FBH and RS, calculation by the CBBH
Notes:
1 r - Implicit interest rate on government sector debt reduced by GDP deflator (five year moving average); g - growth rate of real GDP (five year moving average)
2 An IMF projection was used for 2018
3 Foreign currency denominated public debt calculation does not include the euro denominated part of public debt due to the fixed exchange rate of domestic currency to euro

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

In 2018, a fiscal surplus was achieved due to a significant increase in budget revenues compared to the budget spending growth. The overall budget surplus at the BH level on a consolidated basis was 2.36% of GDP. The fiscal surplus was achieved thanks to a strong increase in budget revenues, but unlike in previous years, there was also a significant increase in budget expenditures. According to the CBBH, the general government sector revenues increased by KM 923 million (6.8%) in 2018, compared to the previous year. The most significant influence on the increase of the revenue side of the budget was the growth of tax revenues, which in 2018 increased by KM 537.4 million (7.5%). The growth of the budget revenue side was also influenced by the growth of all other categories of budget revenues, i.e. the growth of revenues from social contributions (6.5%), grants (11.9%) and other revenues (4.7%). Unlike the previous three years, in which fiscal consolidation, in addition to the growth of budget revenues, was achieved by limiting current spending, the budget expenses in 2018 increased by KM 824.8 million (6.9%). The two largest items on the budget expenses side, namely expenses on social assistance and expenses on employees' compensations, recorded a significant increase of 5.3% and 3.3%, respectively, compared to the previous year.

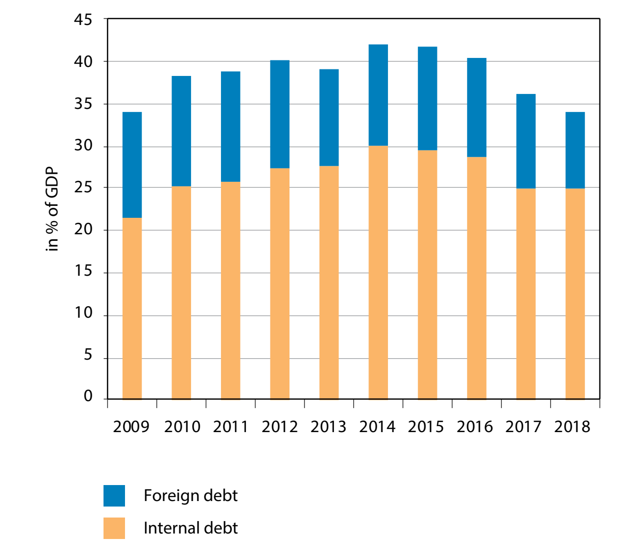
Graph 3.1: Budget Balance of BH General Government Sector, as Percentage of GDP



Source: CBBH, BHAS, CBBH calculation

General government sector debt continued to decline for the third year in a row, thus reducing the fiscal sustainability risks. According to MFT BH data, public debt stood at KM 11.12 billion at the end of 2018, down KM 235 million or 2.1% as compared to the previous year. The share of public debt as a percentage of GDP was 33.9% i.e. 2.26 percentage points lower than in the previous year (Graph 3.2).

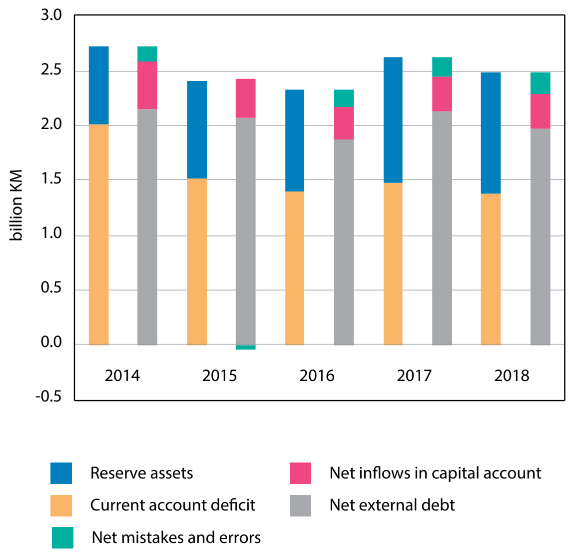
Graph 3.2: BH Public Debt, as Percentage of GDP



Source: MFT BH, BHAS, CBBH calculation

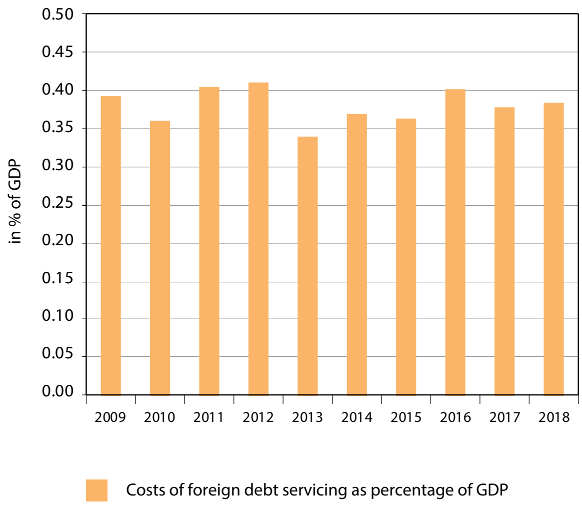
Direct impact of the government foreign borrowing on the level of foreign exchange reserves was weaker in 2018 compared to the previous years. In the last five years, reserve assets or foreign exchange reserves in BH were increasing primarily due to the growth of net external borrowing, which was significantly higher than the current account deficit (Graph 3.3). The left column shows reserve assets and current account deficits for each year, representing cash flows abroad. The right column shows inflows from abroad to BH, net foreign borrowing, net capital account inflows (which were approximately at the same level for years), and net errors and omissions. Net foreign borrowing is a sum of direct, portfolio and other investments. Government sector net borrowing as an integral part of other investments, unlike in earlier periods, had a negative effect on foreign exchange reserves in 2018, as the amount of external debt repayment exceeded the amount of the government's new borrowings abroad.

Graph 3.3: Impact of Balance of Payments Items on Foreign Exchange Reserve Changes



Source: CBBH

Graph 3.4: Costs of Foreign Debt Servicing, as Percentage of GDP



Source: MFT BH, BHAS, CBBH calculation

Government debt servicing was not questionable in 2018, primarily due to the high liquidity of the government sector. In addition, the legal framework provides for a security mechanism whereby the external debt servicing cannot be called into question even in the case of temporary financing, as it has priority in the allocation of revenue collected by the Indirect Taxation Authority (ITA). In 2018, KM 829.97 million of principal and KM 125.38 million of interest were repaid, and the serviced amount was 12.59% of the total indirect tax revenues[8]. External debt servicing costs, expressed as a percentage of GDP, were 0.38% in 2018, i.e. increased by 0.4 basis points from the previous year (Graph 3.4).

According to information from the "Global Framework of Fiscal Balance and Policies in Bosnia and Herzegovina 2019 – 2021", the amount of KM 1.68 billion of new external debt of the government sector is planned for the next three years. At the same time, KM 2.15 billion is planned for servicing the external debt principal in the same period. Consequently, it is expected that the government borrowing abroad will have a negative direct effect on the level of foreign exchange reserves in the short and medium term. This in no way implies an inevitable strengthening of pressure on the sustainability of the currency board, but only that other balance of payment factors will contribute more to the growth of foreign exchange reserves in the future. In 2018, the international rating agencies kept BH's long-term credit rating unchanged: B with stable outlook in the case of S&P and B3 with stable outlook in the case of Moody's. In early 2019, the S&P agency changed the outlook for long-term sovereign ratings from stable to positive, for the first time since 2012. If this potential for improving the credit rating were to be utilized in the short and medium term, then the foreign exchange reserves would certainly be influenced by more stable and, from the point of view of economic growth, more preferred items of the net external borrowing in the balance of payments, such as the foreign direct investments.

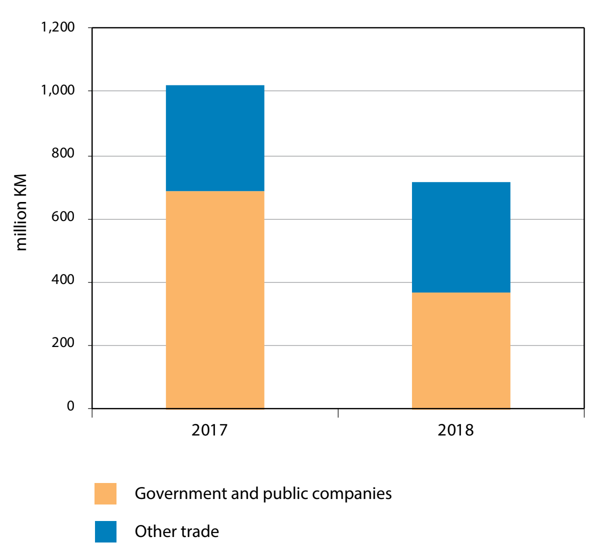
The average contracted interest rate on external debt, although higher than in the previous year, was still relatively low, but the interest rate risk exposure remained significant. According to the MFT BH, the average interest rate on foreign debt in 2018 was 1.58%, an increase of 17bp compared to the last year. Of the total external debt, 40.35% referred to debt contracted with a floating interest rate, and it can be estimated that the external debt exposure to interest rate risk remained high. However, the interest rate risk exposure decreased compared to the previous year, given that the share of floating interest rate loans in 2018 was 2.64 percentage points lower. The risk of refinancing was also slightly reduced, given the lower share of debt (in total debt) due in the coming year, while at the same time the average maturity of debt slightly improved compared to the previous year. In terms of currency risk, the situation was slightly more favourable in 2018 compared to the previous year, as the share of foreign debt contracted in other foreign

8 Source: CBBH and UINO.

currencies, excluding the euro, decreased by 3 percentage points. However, the currency structure of the external debt remained rather unfavourable and carried a high risk, given that 41.4% of the external debt was contracted in foreign currencies other than euro and exposed to the risk of changes in the exchange rate.

In 2018, the general government sector's indebtedness in the internal market continued to decline. The government sector as a significant driver of activity on the two domestic stock exchanges solely through the primary market emissions, in 2018 borrowed much less in the domestic capital markets, and thus the total turnover in the BH capital markets was significantly lower (Graph 3.5). Both BH's stock exchange markets recorded a total of 11 government and public sector bond issues and treasury bills during 2018, while 34 of such issues were recorded in 2017. The FBH Government recorded one issue of long-term bonds in the nominal amount of KM 20 million, with a maturity of 5 years and an interest rate of 0.91%, i.e. much lower than in the previous year. In addition, the FBH Government organized two auctions of treasury bills totalling KM 40 million with a maturity of 9 months, with interest rates ranging from -0.134 to -0.105%. The RS Government had one bond issue in the nominal amount of KM 100 million and a maturity of 5 years, with an interest rate of 3%. Also, the Government of RS had one issue of treasury bills in the total amount of KM 20 million with a maturity of 6 months, with interest rate from 0.3% to 1.01%.

Graph 3.5: Trading in BH Capital Markets



Source: SASE and BLSE, CBBH calculation

Financial mediators, primarily domestic banks, are generally buyers of governments' primary debt securities, which are rarely traded on the secondary market. On the other hand, there is no indication that the government sector exposure is increasing at the expense of the private sector. The exposure of domestic banks to the government sector, expressed as the ratio of government sector claims to total bank assets, continued to decline in 2018 (see Chapter 6 for details). Also, at the end of May 2018, the RS Ministry of Finance conducted the first BH issue of Eurobonds. Although the long-term bond was issued outside BH, the issue was purchased primarily by domestic banks (in June 2018, government securities in foreign currency were recorded for the first time, amounting to KM 289.6 million on the BH banks' balance sheets). The issue of Eurobonds by the Government of Republika Srpska was previously announced as a possibility in the documents related to the Public Debt Management Strategy. According to the CBBH, the total indebtedness of the government sector with commercial banks in BH was 3.2% higher, with the commercial banks' portfolios showing an increase of loan-based debt by 6.3% and the securities-based debt by 0.9% (Table 3.2). It should be noted that in 2018 the entity governments recorded a decrease in the loan-based debt for budgetary needs, while the health insurance funds and other extra-budgetary funds recorded an increase of debt from the commercial banks' loans.

Table 3.2: Commercial Bank Claims on Government Sector
million KM

Claims	2012	2013	2014	2015	2016	2017	2018
Central Government	**0,3**	**0,3**	**0,2**	**0,2**	**0,2**	**0,1**	**0,1**
Loans	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Securities	0,3	0,3	0,2	0,2	0,1	0,1	0,1
Government at the Entity Level	**845,3**	**952,4**	**1.273,1**	**1.589,6**	**1.633,3**	**1.624,8**	**1.735,3**
Loans	445,7	484,9	565,6	600,9	424,6	410,0	517,3
Securities	399,6	467,5	707,5	988,7	1.208,7	1.214,9	1.218,0
Cantonal Government	**52,6**	**66,2**	**142,0**	**209,7**	**218,2**	**206,2**	**160,5**
Loans	52,6	66,2	142,0	209,7	218,2	200,2	154,5
Securities	0,0	0,0	0,0	0,0	0,0	6,0	6,0
Municipal Government	**314,0**	**341,8**	**342,4**	**304,5**	**282,2**	**293,1**	**295,6**
Loans	309,4	337,7	339,2	301,9	280,2	291,0	285,7
Securities	4,6	4,1	3,2	2,6	2,0	2,1	9,9
TOTAL	**1.212,2**	**1.360,6**	**1.757,6**	**2.103,8**	**2.133,9**	**2.124,2**	**2.191,505**
Loans	807,7	888,8	1.046,7	1.112,5	923,2	901,2	957,5
Securities	404,5	471,9	710,9	991,3	1.210,7	1.223,0	1.234,0

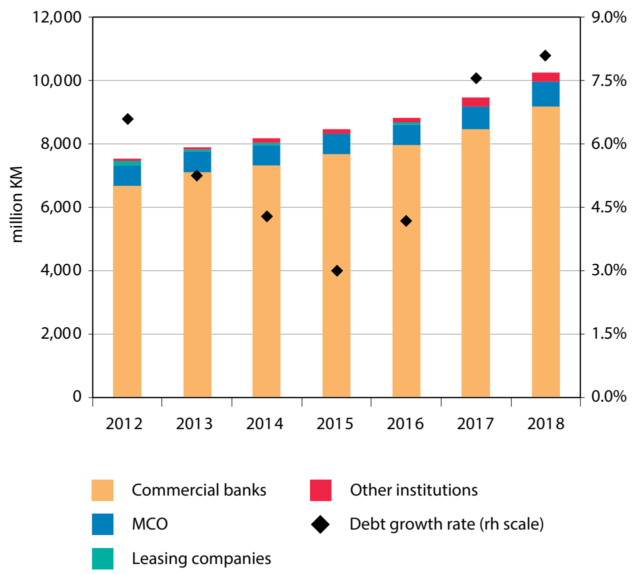
Source: CBBH

4. Households

Despite a slight recovery in the real sector, the gradual revival of real estate market activity and the improved labour market indicators identified in the previous chapter, there was no significant improvement in the household living standards. Somewhat more favourable labour market conditions contributed to a slight increase in consumption and increase in the household debts. The increase in household indebtedness was largely due to the increase in the household debts based on bank loans. The lowering of interest rates contributed to a slightly higher demand for loans, while banks still largely offered replacement loans with more favourable repayment terms. The quality of the loan portfolio in the retail segment continued to improve, also as a result of the activities undertaken by individual banks for the permanent write-off of non-performing loans and the frequent implementation of loan rescheduling. Additionally, there was a slightly lower intensity of reclassification of loans to non-performing loans compared to previous years. Although the upward trend in total household deposits continued, the household savings in the form of term deposits can be estimated as stagnant, which, in addition to the existing low level of disposable income, was also a result of continued lowering of the deposit interest rates. Given the significant proportion of loans granted with floating interest rates or with a fixed interest rate period of up to one year, the interest rate risk is considered a potential risk for the household sector.

The indebtedness of the household sector continued in 2018, driven by an increase in consumption in this sector due to a slight recovery of the economic activity and somewhat more favourable conditions in the labour market compared to previous years. According to CRC data, the total indebtedness of the population at the end of 2018 amounted to KM 10.21 billion and increased by 8.3% compared to the end of the previous year[9]. Expressed as a percentage of GDP, the household debt increased by 1.1 percentage points as compared to the previous year and made 31.1% at the end of 2018. Commercial banks were the main creditors of the household sector, and the increase in indebtedness with these financial institutions made the largest contribution to the growth of the total household debt. The household indebtedness with commercial banks increased by 8.2% compared to the end of the previous year. Household indebtedness with micro-credit organizations increased for the third consecutive year and recorded an increase of 12.9% as compared to the end of 2017. The upward trend of indebtedness with micro-credit institutions indicates that a significant number of households was still unable to meet the conditions for borrowing from commercial banks but were forced to borrow from micro-credit organizations under significantly less favourable conditions[10]. Household indebtedness with leasing companies increased slightly in 2018, but the share of debt to these institutions in the total household debt was negligible, i.e. only 0.16% (Graph 4.1).

Graph 4.1: Household Debt towards Financial Institutions



Source: CRC

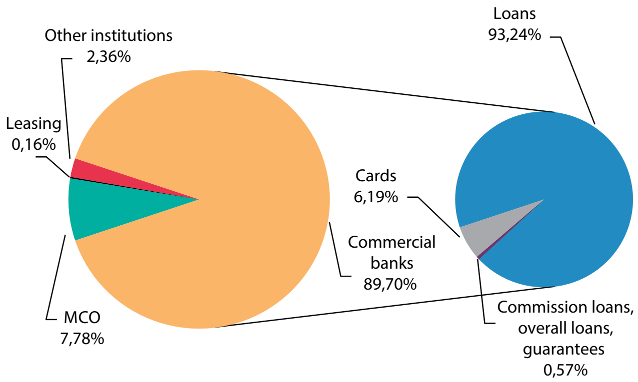
The structure of household indebtedness with commercial banks by the type of debt did not change significantly in the past period. The largest portion of household debt to commercial banks related to loans, which in 2018 recorded an increase of 8.9%. Over the last five years, the level of credit growth in the household sector, with no significant increase in the utilization of credit card limits, as well as borrowings related to other types of banking products, led to a slight increase in the share of loan-related debt in the total household debt with commercial banks. At the end of 2018, the loan-related

9 Total household debt grew by 7.5% in 2017.

10 In 2018, the average weighted effective interest rate on loans to MCOs in FBH was 24.13%, while the average weighted effective interest rate on loans to MCOs in RS was 24.62%.

debt accounted for 93.2% of the total household debt in banks and compared to the previous year its share increased by 63 basis points (Graph 4.2). The household indebtedness on commission loans and credit cards continued to decline, while in 2018, there was also a decrease in the amount of used limit on the debit and deferred payment cards.

Graph 4.2: Household Debt by Institutions and Type of Debt, 2018



Source: CRC

Despite the fact that in 2018 there were a large number of issued payment cards and an increase in the approved amount of card overdrafts, the household indebtedness on payment cards recorded a slight decrease compared to the previous year, and the average indebtedness per payment card decreased. According to CRC data, the household debt on payment cards decreased by 1.2% at the end of 2018 compared to the same period last year. In the segment of credit and deferred payment cards, there was an increase in the number of active cards, so that the debt per card decreased with the reduction of the used amount of limits, whereas in the case of debit cards there was no debt per card decrease due to the smaller number of recorded debit cards compared to the end of the previous year. It should be emphasized that the household credit indebtedness decreases for the fifth consecutive year, despite the increase in the number of issued credit cards. The low credit card debt was also likely to be contributed by the high costs entailed by this type of borrowing, wherefore credit card users sought to reduce their credit card debts (Table 4.1).

If we observe debit cards according to the range of the approved overdraft per card, it is evident that compared to the previous year, the used limit per card slightly increased only in the category of debit cards with lower amounts of the approved limit (up to KM 400) in which the used amount of the limit kept decreasing during the past three years. Given that the limit on debit cards is most often determined by the average monthly income[11], it implies that a large number of citizens with low monthly incomes still make significant use of credit card overdrafts to meet their basic needs, since this is the simplest form of financing current consumption, which this category of citizens cannot provide from regular income. As the lowest-income population was mostly affected by the deteriorating economic situation in the country in the past, this category of clients still record the largest share of non-performing in the total loans compared to the categories of clients with higher monthly earnings.

Table 4.1: Claims on Households, Cards in KM

	Number of Issued Cards		Approved Amount		Used Amount		Debt per Card	
	2018	Annual change	2018	Annual change	2018	Annual change	2018	Annual change
Debit Cards	691.210	-1,3%	793.199.710	2,7%	349.760.290	-1,3%	506	0,0%
Credit Cards	241.064	4,3%	349.236.663	1,0%	177.207.316	-0,8%	735	-4,9%
Deferred Payment Cards	144.738	4,8%	160.163.130	3,1%	39.707.141	-2,4%	274	-6,8%
TOTAL	**1.077.012**	**0,7%**	**1.302.599.503**	**2,3%**	**566.674.747**	**-1,2%**	**526**	**-1,9%**

Source: CRC

11 The average debit card overdraft at the end of 2017 was 57.6% of average net salary in 2018, i.e. 1.9 percentage points lower than in 2017.

Table 4.2: The Used Debit Card Overdraft Amount in KM

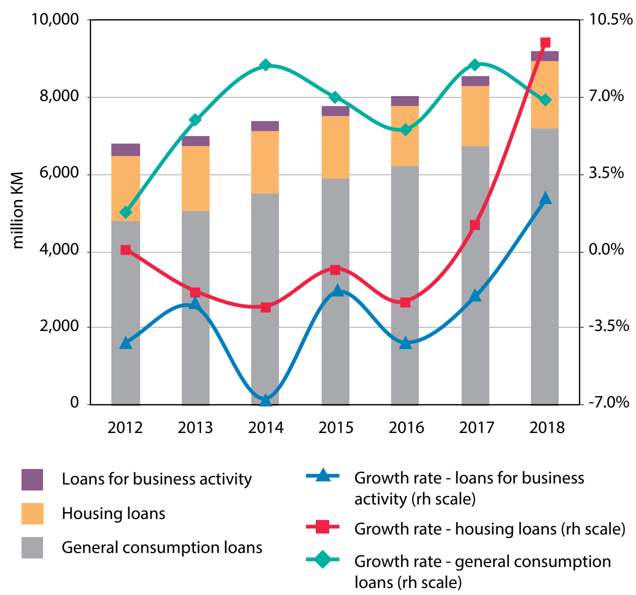
	Granted overdraft amount spread				
	up to 400	400-800	800-1200	1200-1600	over 1600
December 2017	156	298	487	690	1.142
Decembar 2018	159	282	466	651	1.121
Change, %	1,9	-5,4	-4,4	-5,6	-1,8

Source: CRC

The structure of household loans by purpose was dominated by general consumption loans, including loans on all types of cards (Graph 4.3). The general purpose loans recorded growth for the eighth consecutive year. At the end of 2018, household debt on this type of loan was 6.8% higher than at the end of 2017. Demand for this type of loan was, among other things, fuelled by a higher supply of non-purpose and replacement loans on more favourable terms. The continued trend of growth in consumer loans indicates that a large number of households continued to finance their current subsistence needs with approved card overdrafts, non-purpose loans or consumer loans, and given that some citizens were unable to meet the banks' required criteria for granting a housing loan, the general consumption loans were also partly used to finance the housing needs. After the multi-annual downward trend in household debt on housing loans was halted in 2017, the loans with this purpose recorded the largest growth in 2018 since the pre-crisis period, accompanied by a strengthening of activity in the real estate market, and they grew at an annual rate of 9.4%. Given the slightly stronger relative increase in housing loans debt related to other types of loans, their share in total household loans increased slightly and made 19.1% at the end of 2018. For the first time after six years, there was also a slight increase in household debt related to loans for business activities (2.3%).

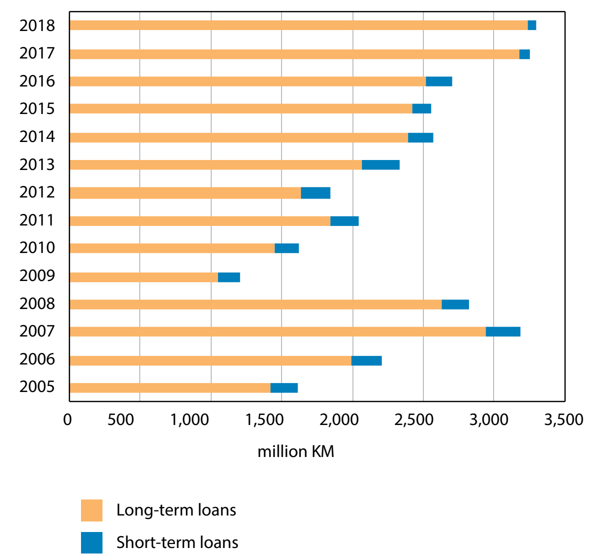
In 2018, 3.3 billion of new loans were granted to households, i.e. their highest amount so far. As these records include newly approved rescheduled loans, the growth of these loans cannot be interpreted solely as a result of the growth of consumption of the household sector and the improvement of the labour market situation, but also partly of the loan rescheduling under new conditions, i.e. the approval of replacement loans. Compared to the previous year, in 2018, 1.5% more loans were granted or rescheduled to households, with an increase recorded only in the case of long-term loans (Graph 4.4).

Graph 4.3:Loans to Households by Purpose and Credit Growth



Source: FBA and BARS, CBBH calculation

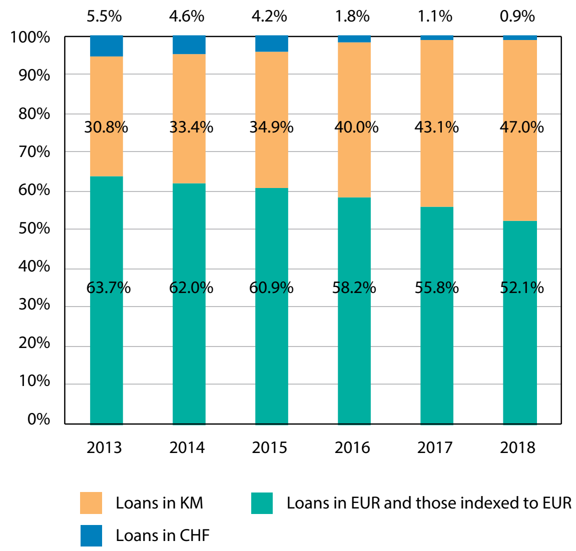
Graph 4.4: Newly Approved Loans to Households



Source: CBBH

The currency structure of household loans is dominated by loans with the euro currency clause. Taking into account the existing currency board regime in BH and the commitment to keep it in the future, the indebtedness of the population in EUR did not make the currency risk exposure higher. In addition, in recent years there was a noticeable trend of decline in the share of foreign currency loans and indexed loans in the total household loans, which continued into 2018, thus further reducing this risk. According to CRC data, loans in euro and the euro currency clause grew at a rate of 1.7% in 2018, while loans in KM recorded an annual growth rate of 18.8%, so that the share of households loans in foreign currencies and with a currency clause reduced from 55.8% at the end of 2017 to 52.1% of the total households loans at the end of 2018. The largest share of these loans involved the loans indexed in euro. Household debt on loans indexed by the CHF decreased from 5.5% in 2013 to 0.9% of the total household loans at the end of 2018 (Graph 4.5).

Graph 4.5: Currency Structure of Loans to Households



Source: CRC

In 2018, there was an increase in household loans in relation to all maturity categories, with the largest increase recorded in the category of loans granted for a period longer than ten years, which may be related to the increase in housing loans. Loans to households in the local currency increased compared to the previous year in each category of loans by maturity, while the household debt related to loans granted or indexed in EUR increased in relation to short-term and loans with agreed maturity over ten years (Table 4.3).

The level of non-performing loans to households continued to decline in 2018. Non-performing loans recorded a decrease of 7.1%, and the share of non-performing loans in total household loans continued to decline for the sixth consecutive year, which was also significantly contributed by the growth of placements to households. At the end of 2018, the share of non-performing loans in total household loans made 6.5%, i.e. 1 percentage point lower than in the same period last year (Graph 4.6). Improving the quality of loan portfolio in this sector was largely due to the activities carried out by banks, such as the permanent write-off of non-performing loans by individual banks. Also, more efficient credit risk management in banks over the past few years and facilitations in the repayment of loans in the form of loan rescheduling and moratorium to clients facing difficulties in the repayment of credit obligations greatly contributed to the prevention of deterioration in the quality of the credit portfolio in the household sector.

Considering the quality of the loan portfolio by the purpose of loan, the largest decrease in non-performing loans was recorded in the category of housing loans (-28.6%), as in the previous two years. In the general consumption loans segment, which recorded significant growth rates in the previous years, there was a 2.2% growth in non-performing loans. Thus, in thirteen banks in the category of general consumption loans in 2018, there was an increase in non-performing loans in absolute terms, and in six of them, their share in total loans increased. This indicates that a certain number of households still faced difficulty servicing their debts, that is, there was materialization of risk of the household over-indebtedness on the basis of general consumption loans. The share of non-performing loans in the total household loans in 2018 was reduced across all categories of loans by purpose. Although the largest decline in the share of non-performing loans in total household loans was recorded in the case of

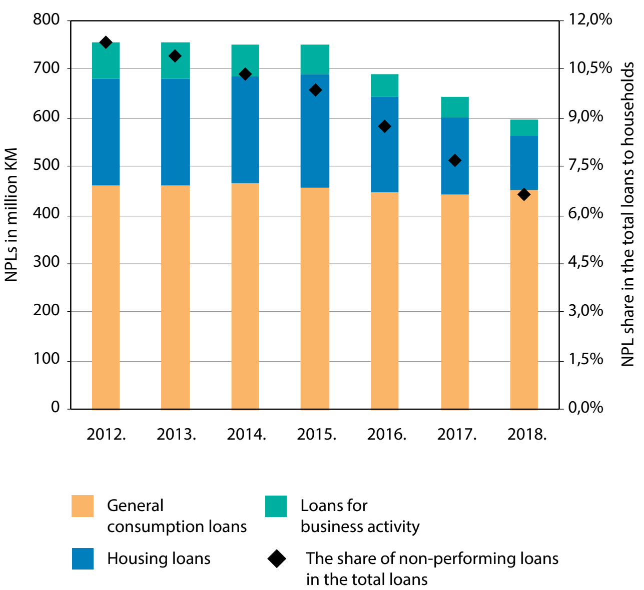
Table 4.3: Loans to Households, Maturity and Currency Structure

Maturity / Currency	Debt balance and due uncollected principal, thousand KM							
			Loans in foreign currency and those indexed to foreign currency					
	BAM		EUR		CHF		TOTAL	
	2018.	Annual change	2018.	Annual change	2018.	Annual change	2018.	Annual change
Up to 1 Year	72.296	8,0%	4.846	11,3%	0	0,0%	77.142	8,2%
1 - 3 Years	256.491	13,9%	92.677	-23,0%	7.067	-16,8%	356.235	0,6%
3 - 5 Years	602.403	26,7%	254.365	-26,5%	30.245	-3,7%	887.014	4,0%
5 - 10 Years	1.512.812	18,9%	1.674.345	-0,1%	28.088	-8,1%	3.215.244	7,9%
Over 10 Years	1.570.035	17,2%	2.422.051	8,8%	11.018	-36,0%	4.003.103	11,7%
TOTAL	**4.014.037**	**18,8%**	**4.448.283**	**1,7%**	**76.418**	**-12,9%**	**8.538.738**	**8,9%**

Source: CRC

business loans (4.4 percentage points), since they accounted for only 2.7% of total loans to households, much more important was the decrease in the share of non-performing loans in the total housing loans i.e. from 9.9% at the end of 2017 to 6.4% at the end of 2018, contributing to stronger credit growth in this category of loans.

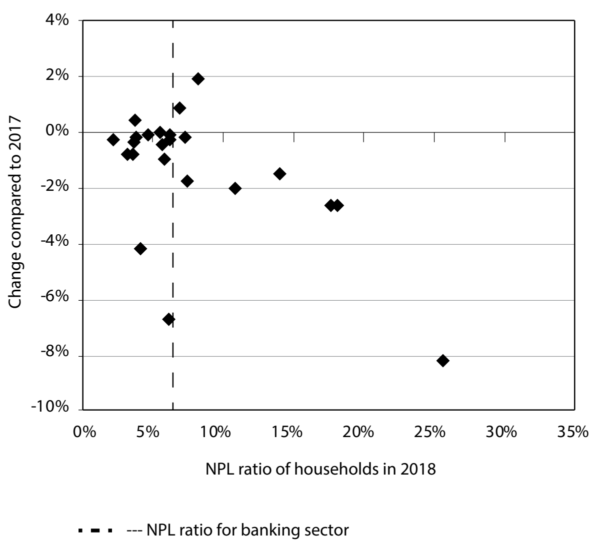
Graph 4.6: Non-performing Loans in the Household Sector by Purpose



Source: FBA and BARS, CBBH calculation

Observing the quality of the loan portfolio in the household segment by individual banks, it is evident that the share of non-performing loans in the total household loans in 2018 declined with most banks in the sector, including the banks with the largest concentration of non-performing loans (Graph 4.7).

Graph 4.7: NPL Ratio of Households, by Banks

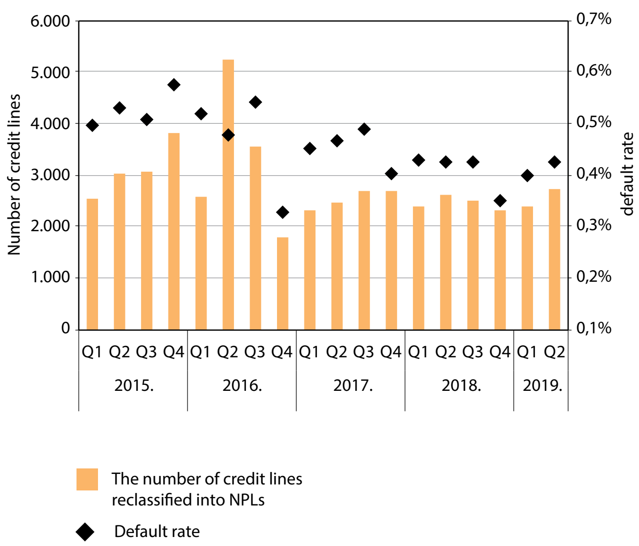


Source: FBA and BARS, CBBH calculation

In addition to the indicator of the share of non-performing loans in total loans, the intensity of deterioration of the repayment regularity is monitored on a quarterly basis, that is, the reclassification of loans from performing to non-performing loans, both by the number of loans and by the amount of outstanding debt used to calculate the default rate[12]. According to CRC data, the number of loans reclassified as non-performing from the end of 2017 to the end of 2018 indicates a slight decrease in the intensity of deterioration in the quality of the loan portfolio in the household sector, given that it is 2.1% lower than the number of loans that became non-performing in the previous year. However, the default rate for household loans, which made 1.34% in 2018, did not change significantly compared to the previous year[13].

Observed on quarterly basis, the default rate was on average lower than in the previous three years, and the number of loans reclassified as non-performing in 2018 did not have any major fluctuations per quarter. As in the previous two years, the lowest default rate was recorded in the fourth quarter of 2018, while in the second quarter of 2019 the default rate and the number of reclassified loans were slightly higher than the quarterly average in 2018, indicating that certain categories of households still faced debt repayment problems, wherefore we cannot conclude that the risk was reduced to a greater extent (Graph 4.8).

Graph 4.8: Quarterly Default Rate



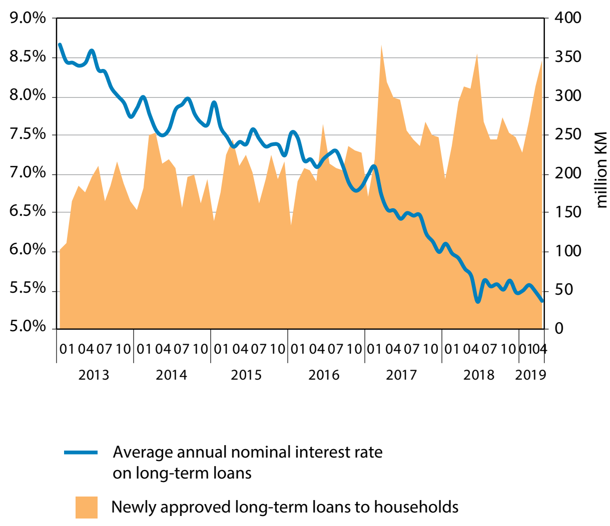
Source: CRC, CBBH calculation

12 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.

13 In 2017 the default rate was 1.36%.

As a result of continued low interest rates in the international financial markets and the efforts of banks to gain greater market share in the highly competitive banking market, the interest rates on household loans continued to decline in 2018, even at faster intensity than in the previous years (Graph 4.9). The average nominal interest rate on long-term loans in 2018 was 5.68% or 83 basis points lower than in the previous year, and the downward trend in interest rates continued in the first four months of 2019. The more favourable borrowing conditions for households partly contributed to the growth in demand for loans. According to the CBBH data that, in addition to new loans, include already approved loans that underwent rescheduling, there were 1,9% more approvals of new long-term household loans compared to the previous year, while in the first four months the number of newly approved long-term household loans was 11.6% higher compared to the same period last year.

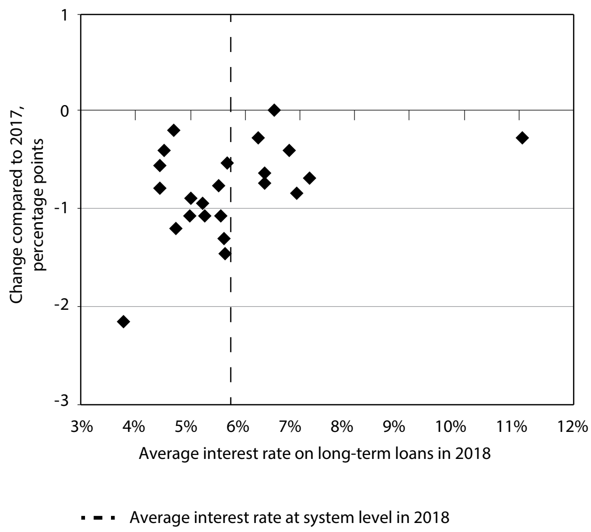
Graph 4.9: Newly Approved Long-term Loans and Weighted Average Interest Rates



Source: CBBH, CBBH calculation

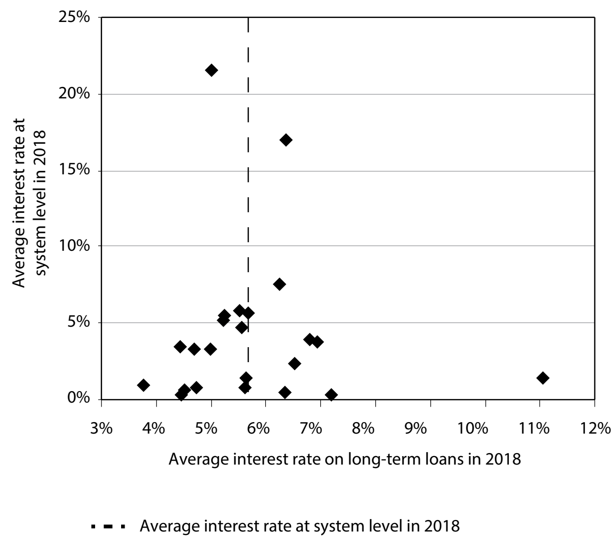
As the trend of low interest rates in international financial markets continued, most banks in BH were able to continue pursuing the policy of lower interest rates. The average weighted interest rate on newly approved long-term household loans in 2018 with most banks ranged from 4.4% to 7.2%. The increase in the average interest rate on long-term loans was recorded in only one bank (Graph 4.10). A larger deviation from the average interest rate on long-term loans was recorded in the case of one small bank, where interest rates were higher than the interest rates of other banks in the sector, as a consequence of a different business model compared to other banks and somewhat more difficult access to more favourable sources of financing from abroad, and in the case of another, also small bank, where the average weighted interest rate on long-term households loans recorded the highest decrease compared to the previous year (Graphs 4.10 and 4.11).

Graph 4.10: Average Interest Rates on Long-term Loans to Households Granted in 2018, by Banks



Source: CBBH, CBBH calculation

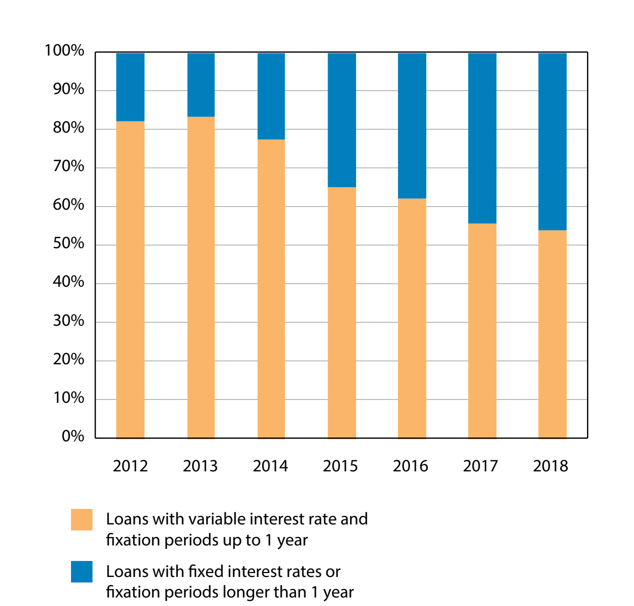
Graph 4.11: Interest Rates on Newly Approved Long-term Loans by Volume of Lending to Households, by Banks



Source: CBBH, CBBH calculation

Although the interest rates also recorded a downward trend in the beginning of 2019, whereby the interest rates are not expected to rise neither in the euro area nor in BH by the end of the year, the households' exposure to interest rate risk should not be underestimated, especially given that loans to households are dominated by loans with a floating interest rate or with a fixed interest rate of up to one year. Given that a stronger rise in disposable household income is uncertain, even a milder rise in interest rates would be a significant burden for some households and would make it difficult to repay credit obligations. Although the interest rate risk is gaining importance in the period when interest rates in international markets are expected to rise, this risk was partly mitigated in recent years in the BH's banking sector due to the increased lending at fixed interest rates or by extending the interest rate fixation period. Additionally, the rescheduling of previously approved loans often entails signing contracts with more favourable terms for clients, which also includes fixation of previously floating interest rate. The trend of decreasing share of loans with floating interest rate or fixation period up to one year in newly approved loans to households was recorded since 2014, and in 2018 these loans accounted for 53.8% of total newly approved loans to households, i.e. 1.8 percentage points less than at the end of 2017 (Graph 4.12).

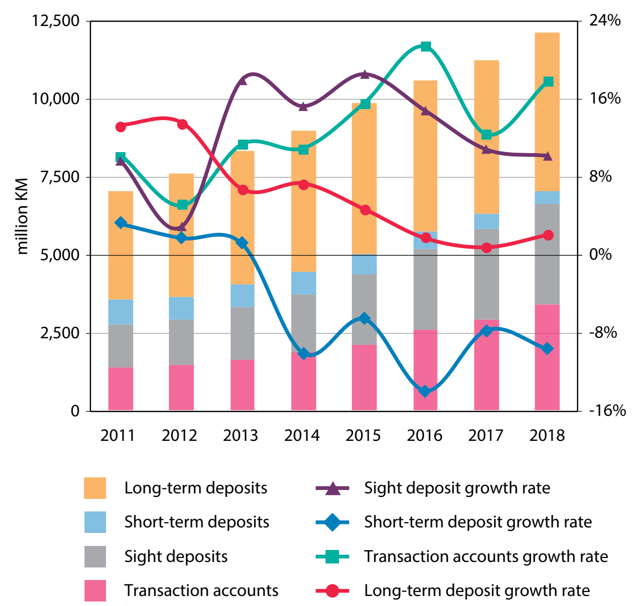
Graph 4.12: Newly Approved Loans according to Interest Rate Fixation Period



Source: CBBH, CBBH calculation

Although total household deposits continued to grow in 2018, their growth was driven primarily by the growth of funds in transaction accounts and the growth of demand deposits, while the growth of term deposits slowed down significantly over the past three years. In addition, the share of household deposits in total deposits with commercial banks was declining for two consecutive years14. According to the CBBH, at the end of the year, household deposits amounted to KM 12.15 billion, i.e. 7.8% more than at the end of 2017. The largest contribution to the growth of total household deposits was the growth of funds in transaction accounts (17.9%), as well as the growth of demand deposits (10.2%). While the short-term term deposits of households recorded a negative growth rate for the fifth consecutive year, long-term deposits in 2018 grew at a lower annual rate of 2.2% (Graph 4.13).

Graph 4.13: Household Deposits by Maturity



Source: CBBH, CBBH calculation

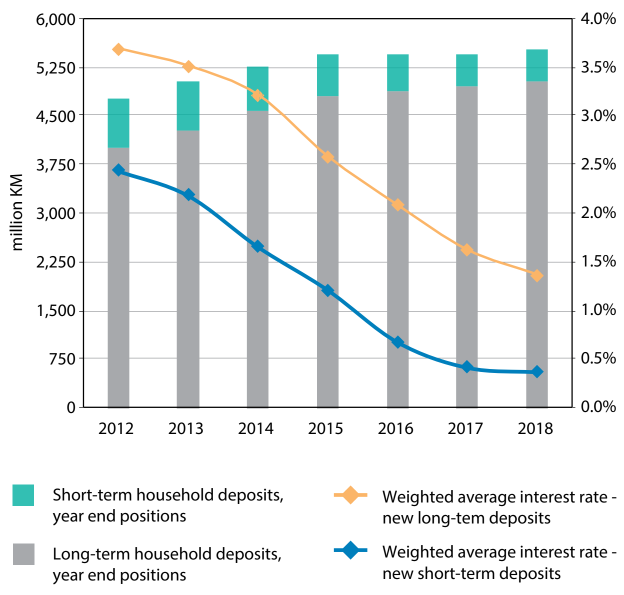
The growth in total household deposits cannot be interpreted as an indicator of better living standard, and the data on high unemployment rate and low average wage in BH indicate that the majority of population is unable to save money. The conclusion that a small share of population is able to save, not to mention to save a large amount of funds, is also supported by data from the Agency for Deposit Insurance (AOD) which show that deposits exceeding the insured savings amount of KM 50 thousand, which account for a half of the total amount of household deposits, are placed on a small number of deposit accounts, i.e. only 1.6% of the total household deposit accounts, and that these deposits show a

14 In 2018, the share of household deposits in total deposits in the banking sector decreased by 1.5 percentage points compared to the end of 2017, and by 4.2 percentage points compared to the end of 2016.

higher relative growth both in terms of the number of deposit accounts and in terms of their amounts. Also, the average amount of funds per one deposit account indicates that in the category of household deposits up to KM 50 thousand, deposit accounts with smaller amounts of funds prevailed, since all the current accounts of households are included here[15].

Under the influence of low interest rates on international financial markets, interest rates continued to decline in 2018, reflecting negatively on the level of household savings. The average weighted interest rate on deposits with agreed maturity (term deposits) in 2018 amounted to 1.21% and was 21 basis points lower than in the previous year, while the average weighted interest rates on long-term and short-term household deposits were lower by 25 and 5 basis points, respectively (Graph 4.14). In the first four months of 2019, the average weighted interest rate on new deposits did not change significantly compared to the 2018 level.

Graph 4.14: Household Term Deposits and Interest Rates on Deposits



Source: CBBH, CBBH calculation

15 The average amount of funds on deposit accounts in the category of deposits up to KM 50 thousand at the end of 2018 amounted to KM 2,233.

5. Corporates

The continuation of the downward trend in credit risk, with slightly weaker credit activity, was a key feature of the corporate sector in 2018. The gross value added growth was recorded in almost all sectors, while the sectors with a significant increase in gross value added recorded a stronger lending activity. In the financing of its business activities, the corporate sector, as in previous years, relied mostly on the bank credit support. Although the share of non-performing loans in total corporate loans was relatively high in 2018, an improvement of this indicator is evident in most industries. Average interest rates on loans maintained a declining trend, which allowed companies to borrow on relatively favourable terms. The currency risk remained an insignificant source of risk, while the interest rate risk was slightly reduced.

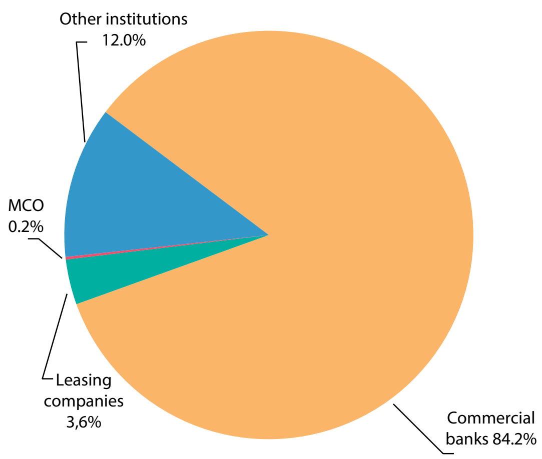
The volume of foreign trade in 2018 recorded an increase due to the increase in the value of imports and exports; however, the growth was lower than in the previous year. The growth rate of exports in 2018 was 7.6%, while imports were growing at a rate of 6%. Although all major export product groups recorded an increase in the nominal value of exports, in the last two quarters there was a slowdown in exports of goods, which can be linked to a slowdown in economic growth in most BH's key foreign trade partners. In some product groups, the increase in the nominal value of exports was the result of an increase in exported quantities, while in others the price effect had a more significant impact. The *Base Metals*, namely *Iron and Steel*, and *Aluminium and Aluminium Products* remained the most important export product; however, the growth in exports of these products weakened compared to the previous year, due to the difficulties in operations of the strategic company in the aluminium industry and the smaller volume of finished metal products. In this product category, the export growth rate in 2018 was 15.9% i.e. 10.8 percentage points lower than in the previous year. Thanks to favourable hydrological conditions and the rising stock market prices, the electricity exports increased by 24% compared to the previous year, whereby the BH's electricity export reached the record high. Export growth in the BH wood industry continued throughout 2018, although the growth rate was much lower than in the previous year. In the group of *Wood and Wood Products*, the decrease in the nominal value of exports was significantly lower than in the previous year, due to the decline in the manufacturing industry, which was recorded, among others, in the *Manufacture of Wood and Products of Wood and Cork*.

The achieved value of goods imports in 2018 amounted to KM 19.3 billion, and compared to the previous year it increased by KM 1.1 billion. As in the case of exports, all major import product groups recorded an increase in the nominal value of imports. The increase in imports was a consequence of increased consumption and demand for imported goods, but also of inflationary pressures and rising prices in the imported goods markets. The general price level trends, as measured by the Consumer Price Index, indicate a continuation of inflationary pressures in 2018, largely caused by an increase in excise duties on oil and oil products. In the category with the highest nominal value of imports, namely *Base Metals*, the increase in the value of imports was determined by the strong growth in the imported quantity of *Aluminium and Aluminium Products*, with a simultaneous decrease in the import price. The other two product groups (*Iron and Steel*, *Iron and Steel Products*) recorded an increase in import quantities as well as in import prices. In the category of *Mineral Fuels, Mineral Oils and Products of their Distillation*, the increase in the value of imports was determined primarily by the price effect, i.e. oil prices on the world market. The value of electricity imports in 2018 decreased by 43.6% and amounted to KM 178.9 million. The value of imports of *Food Products* grew at a slightly lower rate than in the previous year (2.56%), with deflationary pressures still present in one group of imported products in this category (*Beverages, Alcohol and Vinegar*). Table A4 in the Statistical Appendix shows the groups with the largest share in 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 in the most important product groups, compared to 2017.

In 2018, the BH's economic activity continued a slight recovery trend, while the industries that recorded a significant increase in gross value added also recorded a stronger credit activity in companies. Gross value added growth in 2018 was recorded in almost all sectors, except in the following: E (*Water Supply*; *Sewerage*, *Waste Management*), P (*Education*) and S (*Other Service Activities*). The highest growth rates of gross value added during 2018 were recorded in D (*Electricity, Gas, Steam Production and Supply and Air Conditioning*) and G (*Wholesale and Retail Trade*). Following the previous year's decline, the gross value added in A (*Agriculture, Forestry and Fishing*) recorded a significant increase of 6.8%. The credit activity of the banks to the companies operating in these three activities was more intense.

According to the CRC data, total corporate debt to all financial intermediary groups at the end of 2018 was KM 12.8 billion. Measured as a share of GDP, the total debt of companies to all groups of financial mediators made 39.0% of GDP. Indebtedness of the corporate sector in the domestic financial market mostly refers to indebtedness to the banking sector. Capital market borrowing remained insignificant. The corporate indebtedness in the banking sector accounted for 84.2% of the total debt to all financial mediators in BH (Graph 5.1).

Graph 5.1: Claims on Companies according to Debt Type in the End of 2018

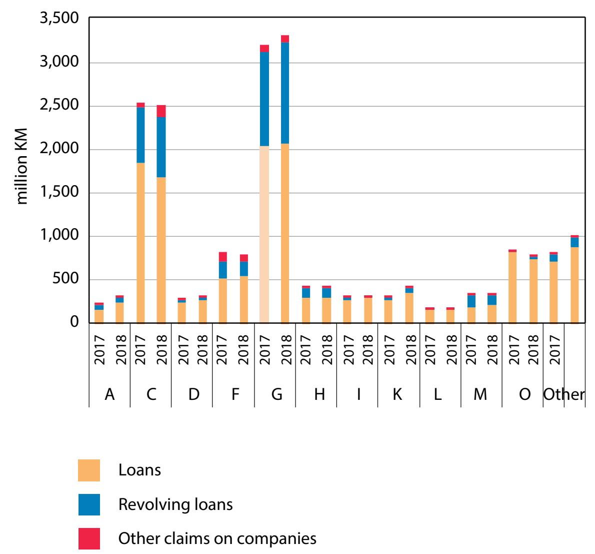


Source: CRC

The total corporate debt to banks in BH amounted to KM 10.8 billion or 32.9% of GDP. In the structure of banks' claims on companies, the classic and revolving loan claims, as in the previous year, made the most significant part of total claims, while the claims on guarantees, letters of credit and factoring were still insignificant (Graph 5.2).

Observed by economic activities, the exposure of the banking sector in BH, as in the previous year, was the largest for companies in the *Trade* and *Manufacturing Industry*. The banking sector's receivables from these two companies accounted for 54% of total receivables, i.e. 2.8 percentage points less than a year ago. The share of receivables from companies in the *Trade* sector in the total bank receivables continued to decline, i.e. decreased by 1 percentage point in 2018, while the share of receivables from companies in the *Manufacturing Industry* decreased by 1.79 percentage points compared to the previous year.

Graph 5.2: Claims on Companies by Type and Selected Activities in 2018



Source: CRC

A - Agriculture, Forestry, Fishing
C - Manufacturing Industry
D - Production and Supply of Electric Energy, Gas, Steam and Air Conditioning
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:
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 2018, the continued increase in corporate loans on the basis of standard loans continued. At the end of 2018, the balance of corporate loans at the end of 2018 amounted to KM 7.87 billion, i.e. an increase of 6.0% compared to the previous year. The largest contribution to the growth of debt on the basis of standard loans in 2018 was the increase of the companies' indebtedness in the Financial and Insurance Activities by as much as 42.5% compared to the previous year. Also, the debt growth was recorded in Agriculture, Forestry and Fishing, Health Care and Social Care Activities and in the Electricity, Gas, Steam Production and Supply and Air Conditioning. The increase in receivables from standard loans was recorded in the sectors that recorded a significant increase in the gross value added in 2018. Due to the increase in the volume of production in the Electricity, Gas, Steam Production and Supply and Air Conditioning, and due to the increase in exports, the support of banks in this activity was stronger. A similar situation was recorded in the Wholesale and Retail Trade, which saw an increase of share in the gross value added in recent years, resulting in a greater financial support from domestic credit institutions to the companies in this sector. On the other hand, the Manufacturing Industry, which made a modest contribution to the growth of economic activity in 2018, recorded a significant decrease of credit indebtedness in 2018.

In 2018, there was also an increased demand of the corporate sector to finance working capital through revolving loans. According to CRC data, in 2018, the increase of both the approved and the used amount of revolving loans was recorded. The indebtedness growth rate for revolving loans made 6.4%, while the total corporate sector debt in this loan category amounted to KM 2.5 billion. The growth of indebtedness on this basis was mostly due to the companies operating in *Trade*, *Manufacturing*, *Agriculture, Forestry and Fishing*. In *Trade* and *Agriculture*, an increase in economic activity was accompanied by an increase in credit activity, and the debt in 2018 increased on the basis of both standard and revolving loans.

In 2018, the credit activity in the non-financial corporate sector slowed down compared to the previous year. In 2018, the non-financial private sector was granted KM 3.77 billion by commercial banks in BH, i.e. a decrease of 9.8% compared to the previous year. In 2018, the financing of major investment projects in the non-financial corporate sector with bank loans was weaker, given that the amount of newly approved long-term placements in the category of over one million euros was 21.3% lower than in the previous year.

Following a multi-annual trend of reducing the share of loans with contractual maturity over 10 years in 2018, the share of these loans increased by 1.2%. According to the CRC data, the year of 2018 saw an increase in debt in absolute amounts across all maturity categories. In the corporate sector, according to the contractual maturity, long-term loans prevailed with a share of 89.6%. The share of loans with contractual maturity of up to 1 year did not change significantly compared to 2017 (Table 5.1). With respect to the structure of long-term loans, the loans with contractual maturity of 5 to 10 years (39.8%) still had the largest share, and in 2018, unlike the previous years, the share of loans with contractual maturity over 10 years in the total long-term loans increased slightly.

Table 5.1 : Corporate Loans, Maturity and Currency Structure of Debt Balance

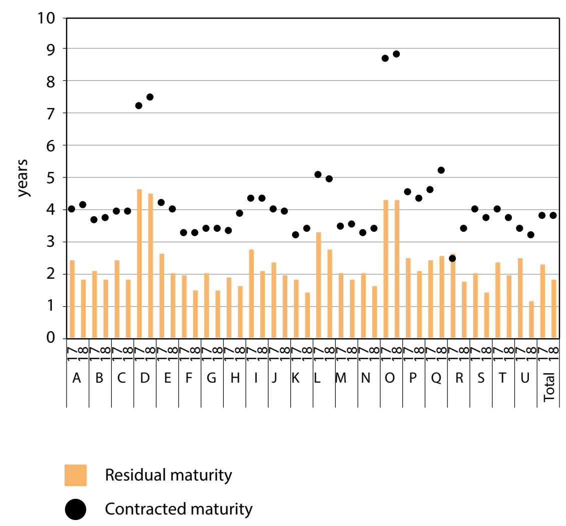
thousand KM

Maturity	Debt balance and due uncollected principal					
		Loans in foreign currency and loans indexed to foreign currency				
	BAM	EUR	CHF	|USD	KWD	TOTAL
Up to 1 Year	427.778	310.093	0	81.238	0	819.110
1 - 3 Years	692.628	501.712	0	25.787	0	1.220.127
3 - 5 Years	568.157	816.639	509	0	431	1.385.736
5 - 10 Years	944.043	2.187.626	275	0	559	3.132.502
Over 10 Years	363.721	950.795	866	521	43	1.315.946
TOTAL	**2.996.327**	**4.766.865**	**1.650**	**107.546**	**1.033**	**7.873.421**

Source: CRC

According to CRC data, the average contractual maturity of standard loans was 3.7 years in 2018, while the average maturity of loans at the end of 2018 was 1.8 years (Graph 5.3).

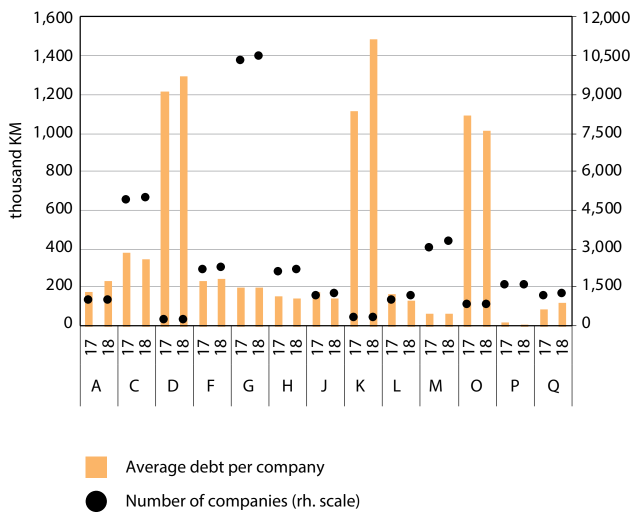
Graph 5.3: Contracted and Residual Maturities of Standard Loans by Activities in 2017 and 2018



Izvor: CRC

Compared to the previous year, the average maturity of standard loans in the corporate sector decreased. The contractual maturity of standard loans in 2018 remained at the level of the previous year, while the residual maturity was shorter by 0.45 years. With respect to the average maturity viewed by economic activity, the longest contracted as well as the residual maturity at the end of 2018 was recorded in the activities: *Electricity, Gas, Steam Production and Supply and Air Conditioning* – D and *Health Care and Social Care Activities* – Q. Activity D recorded the largest contractual maturity extensions in 2018, while the average maturity was shortened. In addition, the increase in the share of gross value added recorded in this activity, as well as the increase in average indebtedness, were partly a result of the increase in the number of companies operating in this industry. For the companies operating in C - *Manufacturing*, the contractual maturity slightly increased, while the residual maturity decreased by 0.13 years. Also, the number of companies in this industry increased, while the average indebtedness of companies decreased. The contractual maturity of companies operating in G - *Wholesale and Retail Trade* remained at the same level as in the previous year, while the residual maturity decreased by 0.49 years. Similar to activity C, the activity G also recorded a larger number of companies, with a decrease in average maturity (Graph 5.4)[16].

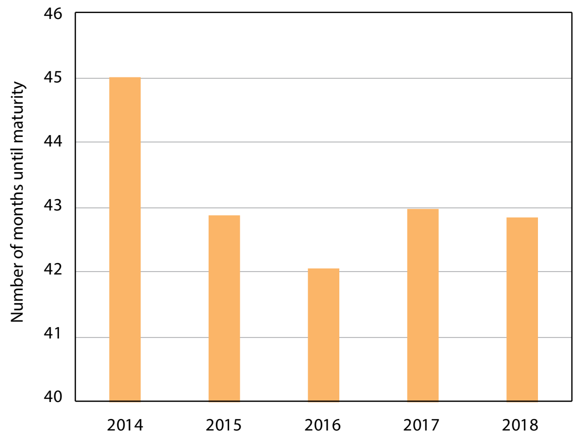
Graph 5.4: Average Corporate Debt by Selected Activities in 2017 and 2018



Source: CRC, BHAS, CBBH calculation

The average weighted maturity of loans[17] in the corporate sector calculated by residual maturity at the end of 2018 was 42.85 months, i.e. 0.13 months less than in the previous year.

Graph 5.5: Average Maturity of Loans



Source: CRC, CBBH calculation

Compared to the previous year, the corporate sector's exposure to currency risk did not change significantly, and the currency risk in the existing circumstances did not still entail a significant risk to the companies' operations. The trend of corporate sector's increasing exposure in the domestic currency continued, indicating a decrease in the currency risk. Largest share of the corporate sector debt is denominated in euro as the anchor currency in the currency board arrangement. In such circumstances, the currency risk is not a significant source of risk that would possibly jeopardize the business operations of BH companies or threatened the financial stability. Corporate debt on the basis of standard loans denominated or indexed in euro at the end of 2018 amounted to 60.5% of total bank receivables from the corporate sector. Compared to the previous year, their share decreased by 2.7 percentage points. At the same time, the share of loans granted in local currency increased by 2.5 percentage points, and at the end of 2018, the remaining

16 Data on the number of companies are provided by the BH Statistics Agency, namely from the Unit of Statistical Register of Companies 30/06/2018, and are related to the number of companies on 30 June 2017 and 30 June 2018.

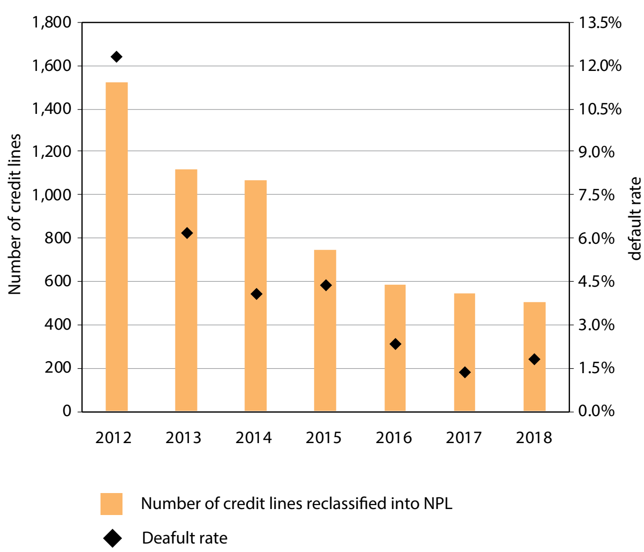
17 The end-of-year credit data used by commercial banks to report to CRC were used to calculate the average maturity of the loan. The average loan maturity at the end of each year is calculated as a weighted average of the residual maturity, where the remaining debt on each individual loan is used as a weight.

debt from these loans accounted for 38.1% of the total indebtedness of the corporate sector. The share of debt denominated in other currencies was only 1.4%. Observed by maturity categories, in the maturity category up to 1 year and from 1 to 3 years, most of the debt was denominated in KM, while in all other maturity categories most of the debt was denominated in euro. Table A.6 in the Statistical Appendix shows the currency structure of debt by economic activity.

The credit risk of the corporate sector was slightly reduced in 2018, although the banks' balance sheets still recorded a relatively high level of non-performing loans in this sector. The share of non-performing loans in total loans in the corporate sector at the end of 2018 was 10.79%. The downward trend in non-performing loans in the corporate sector continued into 2018, although at a slightly lower rate as compared to the previous year. The non-performing loans decreased by 1.52% in 2018 compared to the previous year. In previous periods, the banks undertook activities to address the problem of non-performing loans by selling a share of the non-performing loan portfolio to companies authorized to buy out debts, and by permanently writing off the non-performing loans. Consequently, most banks in the system recorded a lower level of credit risk as a result of the operations with the corporate sector. In relation to the quality of the loan portfolio observed by activity, a decrease in non-performing loans in total loans was recorded in almost all economic sectors in 2018, except in *Agriculture*, *Construction* and *Catering*. A significant decrease in the non-performing loans in total loans was also recorded the *Financial Intermediation* (10.60%), which accounted for the largest percentage decrease in the share of non-performing loans in total loans in the corporate sector.

In the corporate sector in 2018, despite the recorded decrease in non-performing loans, a higher default rate was recorded compared to the previous year. The default rate in the corporate sector was 1.76% in 2018, i.e. 0.42 percentage points higher than in the previous year. Although the amount of loans that changed from performing to non-performing loans was slightly higher than in the previous year, the past six years saw a clear trend of improving the regularity in the repayment of companies' loans, supported by a continuous decrease in the number of loans reclassified from performing to non-performing.

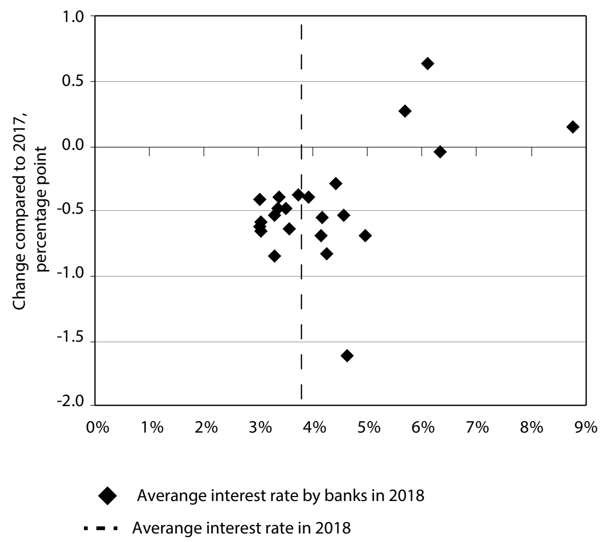
Graph 5.6: Annual Default Rate



Source: CRC, CBBH calculation

The trend of decreasing the interest rates on newly approved loans in the non-financial corporate sector continued throughout 2018. According to CBBH data, the average interest rate in the non-financial corporations sector was 3.80% in 2018, i.e. 0.59% lower than in the previous year. With the exception two banks, all other banks in the system recorded a decrease in the average interest rate. The average interest rate ranged from 3% to 8.75%, with the lower limit of the range lower by 41 base points, while the upper limit compared to the previous year increased by 15 base points. In 2018, the average interest rate on newly approved loans in local currency was slightly lower than in the previous year, i.e. 3.75%. The average interest rate on newly approved loans indexed in foreign currency also decreased from 4.48% to 3.86% compared to the previous year. The decrease of interest rates in the domestic banking market was primarily driven by favourable financial conditions in international markets and the still low bank financing costs. The fall in interest rates may also be attributed to the banks' competitiveness in the domestic banking market and their high liquidity. Significant interest rate cuts were recorded in the banks seeking to join the group of market leaders in the corporate sector, i.e. banks seeking to maintain the market leadership positions. As long as banks are able to maintain the net interest margins at acceptable levels, with unchanged macroeconomic conditions and monetary policies of the leading central banks, with a decrease in deposit interest rates, they will be able to continue the policy of low active interest rates.

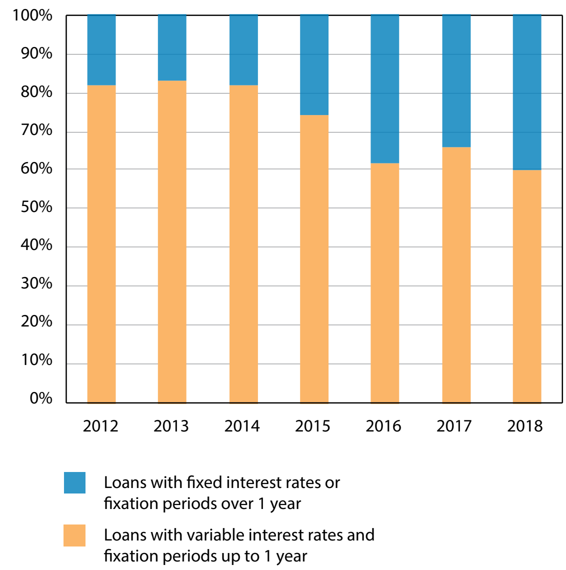
Graph 5.7: Interest Rates on Corporate Loans, by Banks



Source: CBBH, CBBH calculation

Although the exposure of corporate sector to the interest rate risk slightly decreased during 2018, due to a somewhat more intensive credit indebtedness with a fixed interest rate, this sector still recorded a significant interest rate risk. In the structure of newly approved loans in 2018, the share of floating rate loans, i.e. the initial period of fixed interest rate up to 1 year, accounted for 60% or 5.7% lower than in the previous year (Graph 5.8). After the multi-annual decline in the share of these loans discontinued in the previous year, the downward trend continued in 2018, and since 2012, the share of these loans dropped from 82% to 60%. The share of newly approved loans with the interest fixation period of 1 to 5 years, was 14.6%, while the share of loans with a fixed interest rate in the period of over 5 years reached 22.4%. The share of floating rate loans, that is, the initial period of interest rate fixation for a period of more than 5 years, increased by 12.5% compared to the previous year.

Graph 5.8: Newly Granted Loans according to Interest Rate Fixation Period



Source: CBBH, CBBH calculation

6. Financial Mediators

The slight growth of economic activity in the country had a favourable effect on the strengthening of stability and recovery of the financial system operations in BH. Total assets of financial mediators continued to grow during 2018, with the banking sector still playing a dominant role in the asset growth (Table 6.1).

6.1 Banking Sector

Positive trends observed in the banking sector in the previous year continued in 2018. At the sector level, higher capitalization indicators were reported, and the trend of asset quality improvement and high liquidity continued. Profitability indicators remained high and only slightly lower than in the previous year. For the first time in six years, the trend of intense growth in operating income, which was a significant generator of profitability in the banking sector in recent years, discontinued. The limited possibilities for a significant operating income growth, with lower net interest margins that banks were gaining in the last two years, could be a limitation to further profitability growth in the coming period. Despite the weakening of credit risk, the level of non-performing loans was still high, especially in the non-financial corporate sector, which recorded a weaker lending activity than in the previous year. In 2018, the residual maturity of total banking sector liabilities continued to decline. Although no risk is expressed, i.e. no restrictions on the supply loans, the unfavourable maturity structure of the source can be a limiting factor for long-term lending. In the context of still low interest rates, the interest rate risk did not materialize in the non-financial corporate sector and the household sector, but the risk exposure remained significant and represents a potential exposure of banks to credit risk.

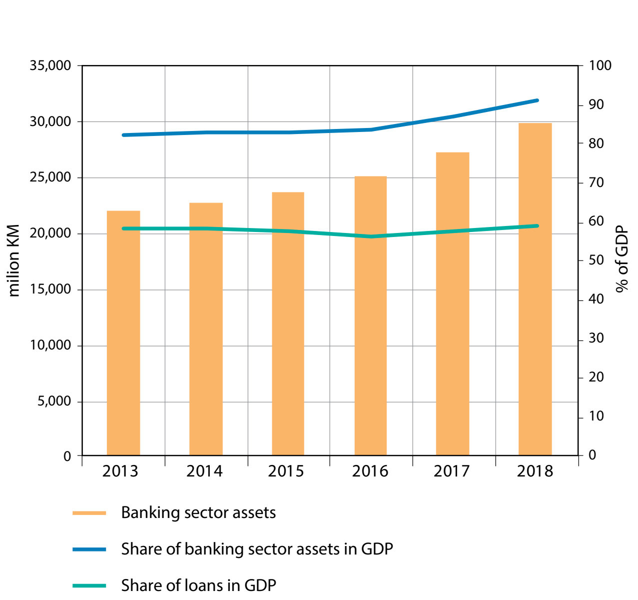
The balance sheet amount of the banking sector continued to record a dynamic growth in 2018, i.e. 9.6% on annual basis, whereby the share of the banking sector's assets in the nominal GDP reached the record high of 91.6% (Graph 6.1). The strong growth in deposits of the domestic resident sectors and the growth of the loan portfolio and liquid instruments marked the key developments in the banks' balance sheets in 2018. The credit activity growth slowed down slightly compared to the previous year, with a lower intensity of credit activity in the private non-financial corporate sector. At the same time, a stronger credit growth was achieved in the household sector. In 2018, the growth of securities portfolios was largely driven by an increase in investments in the foreign debt securities, while the share of entity securities in the bank portfolios was significantly lower than in the previous periods. Liabilities to residents continued to record dynamic growth, and contrary to previous trends, there was an increase in liabilities to non-residents. As in previous years, the growth of deposits of the domestic resident sectors, mainly those with shorter maturity, influenced the growth of all liquid assets, primarily cash and funds on the CBBH reserve account, as well as deposits with foreign banks (Graph 6.2).

Table 6.1: Value of Financial Mediators' Assets

	2016		2017		2018	
	Value, million KM	Share, %	Value, million KM	Share, %	Value, million KM	Share, %
Banks [1]	25.013,8	87,8	27.248,8	88,3	29.854,2	88,5
Leasing companies [1]	422,7	1,5	260,2	0,8	297,2	0,9
Microcredit organizations [1]	662,7	2,3	788,7	2,6	887,5	2,6
Investment funds [2]	801,6	2,8	846,9	2,7	887,3	2,6
Insurance and reinsurance companies [3]	1.578,4	5,5	1.717,2	5,6	1.818,7	5,4
TOTAL	**28.479,3**		**30.861,7**		**33.744,8**	

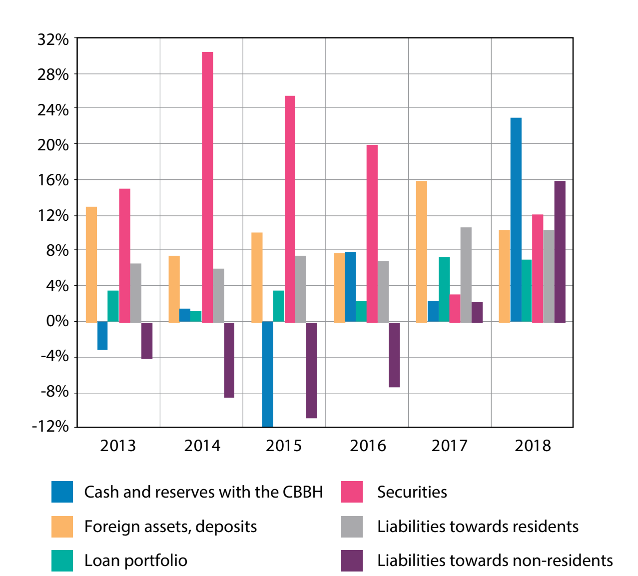
Source:
1 - FBA and BARS
2 - FBH Commission for Securities and RS Commission for Securities
3 - Entity Agencies for Insurance Companies Supervision, BH Insurance Agency
Calculation by the CBBH

Graph 6.1: Assets and Loans as Percentages of GDP



Source: FBA and BARS, BHAS, CBBH calculation

Graph 6.2: Changes of the Most Important Items of Banking Sector Balance Sheet

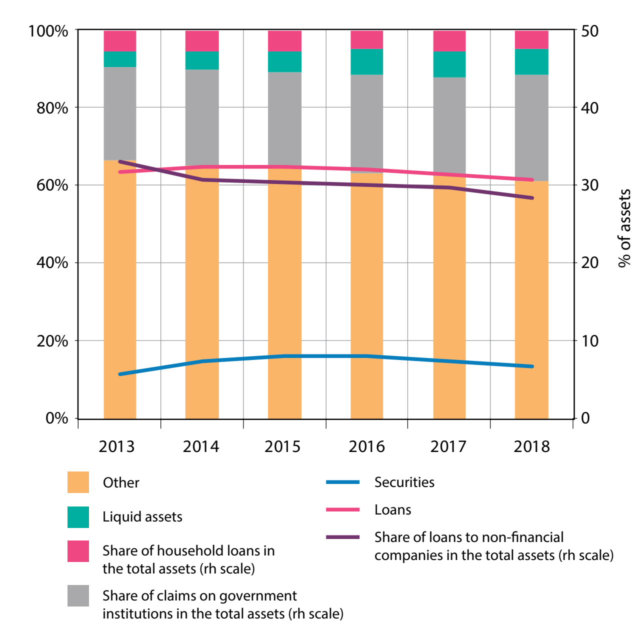


Source: FBA and BARS, BHAS, CBBH calculation

Credit activity in 2018 slightly decreased as compared to the previous year. During 2018, banks recorded growth of the loan portfolio in the amount of KM 1.28 billion or 7.1% annually. In the structure of assets, the largest growth in nominal amount was recorded in relation to total loans, with the share of loans in total assets continuing to decline in 2018 (Graph 6.3). The share of total loans in the banking sector's assets was 64.8%, i.e. 1.5 percentage points lower than in the previous year.

Total loans at the end of the year amounted to KM 19.3 billion, while the share of KM 9.16 billion or 47.4% of total loans involved household loans, KM 8.46 billion or 43.7% loans to private non-financial companies, and KM 757.1 million or 3.9% loans to government institutions. In 2018, the credit activity in the non-financial corporate sector slowed down significantly compared to the previous year and achieved an annual credit growth rate of 4.1%. During the year, private non-financial companies were granted KM 3.77 billion in loans, and the amount of newly approved placements to this sector decreased by KM 415.6 million or 9.9% compared to the previous year. The household sector recorded a higher credit growth than in the previous year (7.2% on annual basis), but the share of these loans in total assets also decreased and amounted to 30.7%.

Graph 6.3:Banking Sector Assets



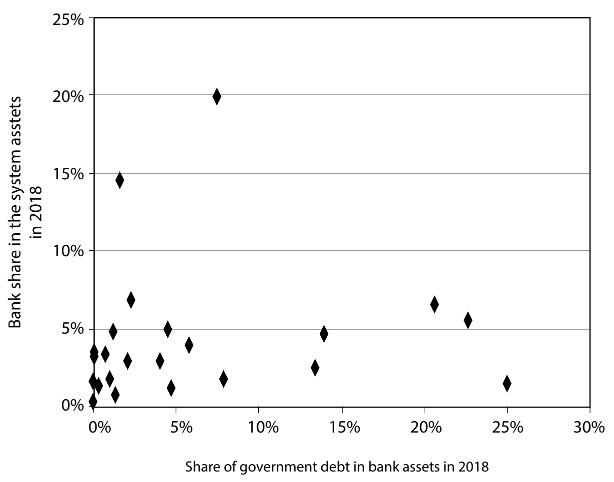
Source: FBA and BARS, CBBH calculation

In 2018, the banking sector's exposure to the government sector continued to decrease. The total exposure of the banking sector to the government sector at the end of 2018 was KM 1.99 billion, down by 2.6% compared to the previous year. Loans to government institutions continued to decline for the third consecutive year (-7.7%), while banks' exposure to the purchase of government securities[18] increased by only 0.9%, wherefore the share of government sector receivables in the total assets of the banking system decreased to 6.7% at the end of the year.

18 Government securities data taken from the CBBH monetary statistics. In accordance with the IMF methodology, the entity securities data also include securities of public companies.

The exposure of the banking sector to the government sector was not concentrated in a small number of banks (Graph 6.4)[19]. However, at the end of 2018, a small number of banks were relatively close to the maximum permissible exposure to the government sector under domestic regulations (up to 300% of the recognized or regulatory capital of the bank). At the level of the overall banking system, the exposure to the government sector at the end of 2018 was at the level of 65.3% of the recognized capital of the banking system.

Graph 6.4: Exposure to Government Sector, by Banks, in 2018

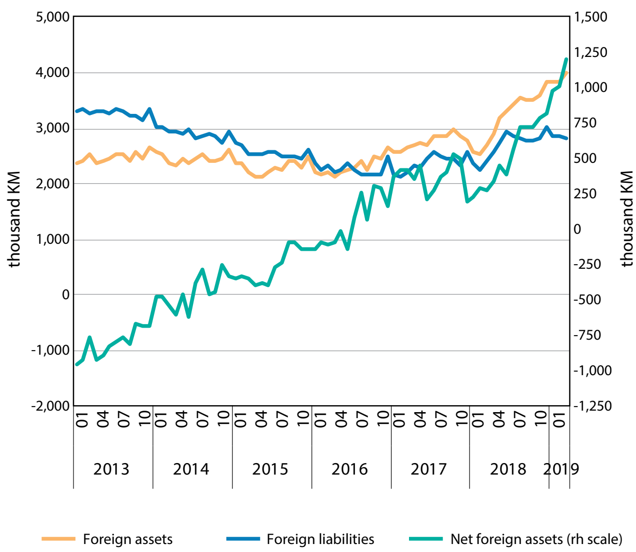


Source: CBBH, CBBH calculation

Liquid assets recorded a dynamic growth in 2018, i.e. 17% on annual basis. Affected by the continued growth of shorter maturity deposits of the domestic resident sectors, all liquid asset recorded growth, including cash in vaults, funds in the CBBH reserve accounts and deposits with foreign banks. The reserve account balance recorded an increase of KM 597.4 million or 12.5% compared to the previous year[20]. In 2018, the banks continued to increase the surplus funds in the reserve requirement account, and at the end of the year, there was an increase of surplus funds in the account with the CBBH in the amount of KM 349.6 million or 13.6%. With the growth of funds on the required reserve account, there was an increase in funds in the accounts of foreign banks in the amount of KM 646.6 million or 46.5%, and an increase in cash in vaults of KM 140.7 million or 14.5%.

Following the long-standing deleveraging trend of the banking sector towards majority foreign owners, liabilities to non-residents continued to grow for the second consecutive year. According to CBBH data, foreign liabilities of the banking sector increased by KM 451.4 million or 17.4% compared to the end of the previous year (Graph 6.5). The growth of foreign liabilities of the banking sector was largely driven by the growth of deposits from non-residents. At the same time, the foreign assets of commercial banks recorded a more dynamic growth than the foreign liabilities during 2018, which is why the net foreign assets continued to record positive values throughout 2018. The multi-annual trend of banks' deleveraging towards majority foreign owners and their affiliates for the first time equalized foreign liabilities with foreign assets in mid-2016, whereafter the banks became net lenders to non-residents.

Graph 6.5: Foreign Assets and Liabilities of Commercial Banks



Source: CBBH

In 2018, the banking sector recorded net inflows of KM 457.9 million (Graph 6.6)[21]. The largest portion of inflows in the banking sector during 2018 was generated by deposits from sister companies, while liabilities to direct foreign investors decreased this year. The increase in liabilities to non-residents, which was recorded in 2018, under the conditions of continued growth of deposits of the domestic resident sectors, indicates that the existing

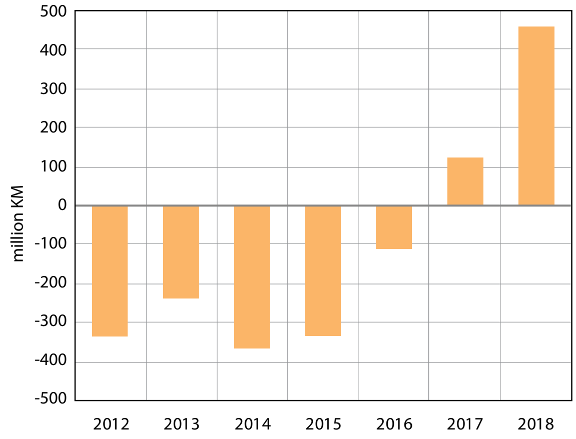
19 The Graph illustrates banks' exposure to all levels of government in BH, including off-budget funds and social security funds (health and pension and unemployment funds).

20 These data do not include the FBH Development Bank.

21 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.

structure of domestic sources is relatively unfavourable from the point of view of their stability. Although the growth of domestic sources of funds, as a rule, reduces the banks' dependence on foreign sources of funding, and therefore the potential risks of sudden and unplanned cross-border outflows of funds, due to the unfavourable structure of domestic sources in BH banks, the current level of long-term placements and deposits of non-residents contributes to the maintained stability of funds. Reliance on foreign long-term sources of funding will be necessary until banks are able to ensure adequate stability of domestic sources of funds.

Graph 6.6: Flows of Foreign Liabilities in Banking Sector



Source: CBBH

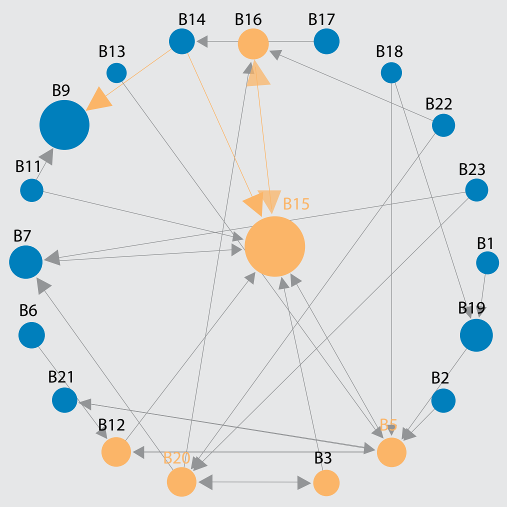
Text Box 3: Network Analysis of the Systemic Risks Spillover

The purpose of the network structure analysis in the BH banking sector is to estimate the intensity of potential shocks due to mutual connection, as well as cross-border exposure of domestic commercial banks. The analysis was carried out on the basis of data as of 31 December 2018 in two directions, as: analysis of mutual balance sheet exposures of 23 commercial banks, with simulation of failure of each of them, and the analysis of cross-border exposure of domestic commercial banks to the banking and public sectors of the 33 countries to which the banks are most exposed.

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 default, i.e. the loss of the total amount of claims. As a condition for the existence of interbank contagion, we analysed 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 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' data, the total interbank exposures of commercial banks in BH at the end of 2018 amounted to KM 93.6 million. Compared to the end of 2017, the amount of total inter-bank exposures of commercial banks decreased by 6.6%, accounting for 2.8% of the total regulatory capital of the banking sector, i.e. only 0.3% of total assets. The network of interbank exposures in the BH banking sector, shown on Graph TO3.1, is not particularly dense, since the Graph shows only the interbank liabilities and claims of banks on one particular day, while the average volume of overnight transactions between individual domestic banks could not be included in the analysis.

Graph TO3.1: Network of Interbank Exposure, on 31 December 2018



Source: FBA and BARS, CBBH calculation

The size of the circles in the TO3.1 Graph representing banks in the BH banking sector is determined by the amount of total assets. The amount of interbank exposures is illustrated by the thickness of the links, and by their colour, being in the spectrum from green to red. The thicker the bonds and the more intense the red, the greater the bilateral claims and liabilities between banks. The colour of the circles indicates the number of a bank's links with other banks. It is also displayed in the spectrum from green to red. Banks marked with a stronger red colour are linked to more banks in the domestic banking sector.

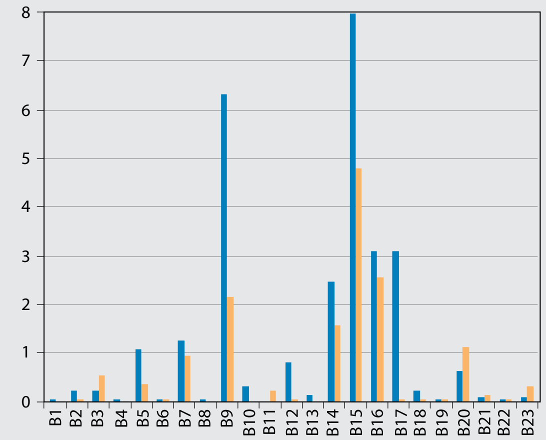
Unlike in the previous year, when the network analysis results showed that one bank would suffer greater losses in the event of a credit shock due to the insolvency of three other banks in the sector to which it is exposed, which would lead to a significant decrease in the bank's regulatory capital and a decrease in that bank's capital adequacy ratio below the regulatory minimum, an analysis conducted with the data available at the end of 2018 did not indicate any major threats to the capitalization of other banks. Due to the credit shock, assuming that the default of one bank would bring loss to another bank in the amount of 100% of its claims against the insolvent bank, no bank would suffer decline of the capital adequacy[22].

The results of the analysis are not significantly different even if, in addition to the credit shock, the financing shock is included in the analysis. If the shock assumption is a loss of 50% of the exposure due to non-substitutable termination of the funding, the findings of the analysis do not indicate that any of the banks would run into more serious problems and jeopardize its capitalization. These results were influenced by both the lower interbank exposures compared to the end of 2017, as well as the better capital base, which was also influenced by the application of new regulation in the banking sector.

Compared to the end of 2017, the risk index and vulnerability index also indicate lower risks (Graphs TO3.2 and TO3.3). The contagion index[23] is lower for most banks compared to the end of 2017, which indicates less importance of individual banks for other banks in the sector, and less exposure of other banks to one individual bank. In banks with a higher contagion index than at the end of the previous year, however, there was no significant increase in the average loss rate of other banks in case of potential failure of this bank.

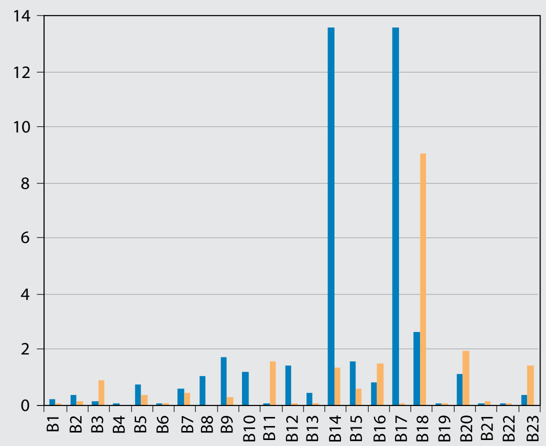
The vulnerability index[24] shows a much lower sensitivity of most banks in the sector in case of insolvency of other banks, compared to the end of 2017, which is especially evident in the case of two banks that faced extremely high vulnerabilities, capital base improvement and slightly less exposure to other banks in the sector. In case of the bank with the highest vulnerability index at the end of 2018

Graph TO3.2: Contagion Index in 2017 and 2018



Source: FBA and BARS, CBBH calculation

Graph TO3.3: Vulnerability Index in 2017 and 2018



Source: FBA and BARS, CBBH calculation

in the TO3.3 Graph, it should be noted that this is a smaller bank in the sector that does not meet the capital requirements in terms of regulatory capital and capital adequacy ratio at the end of the year. For several other banks with a higher vulnerability index than at the end of the previous year, there was no significant increase in the average loss percentage due to potential failure of all other banks in the sector.

22 The analysis did not take into account the results for a smaller bank, which according to real data from the end of 2018 had a lower level of capital adequacy than the prescribed regulatory minimum.

23 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.

24 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.

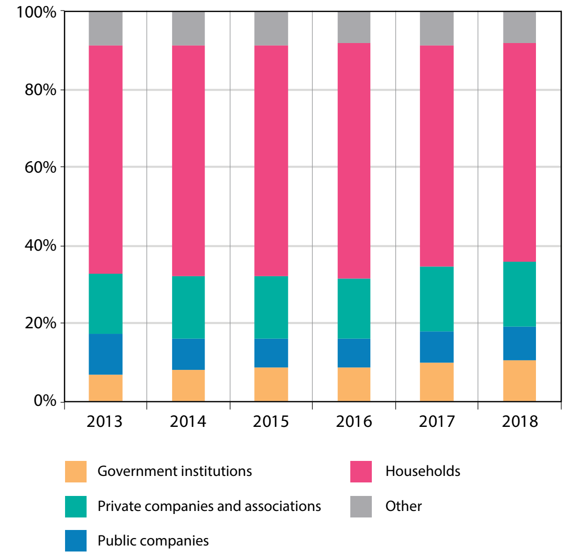
In order to identify foreign banking systems of systemic significance for banks in BH, the network analysis of cross-border linkage was also carried out. A cross-border linkage analysis showed that a higher contagion risk arises from cross-border exposures than from the exposure to the domestic interbank market. Two shocks were included in the analysis: the credit shock and the financing shock, and the assumptions are identical to those used in the interbank links analysis[25]. Results of the analysis indicate that major shocks in several countries according to which BH banks have significant exposures could have direct or indirect contagion effects on the BH banking sector. Risk spillovers from Austria and Germany pose a key risk of the cross-border financial contagion for banks in BH, while significant exposures to individual banks also exist to Italy and Slovenia.

25 Loss given default of 100% and 50% of lost funding that is not replaceable.

In 2018, the dynamic growth of deposits of the domestic resident sectors continued. Total deposits at the end of the year amounted to KM 21.7 billion and compared to the end of 2017 they increased by 10.5%. In the structure of total deposits, the most significant were the household deposits, which at the end of the year amounted to KM 12.1 billion and recorded a growth of 7.9%. In addition to the increase in household deposits, there was also an increase in deposits from private companies and government institutions, which increased their share in total deposits this year (Graph 6.7). According to CBBH data, at the end of 2018, the deposits on transaction accounts and demand deposits accounted for 28.2% and 26.5%, respectively, of the total household deposits. At the same time, the share of long-term deposits in total household deposits continued to decrease, from 43.8% at the end of the previous year to 41.5% at the end of 2018. Household deposits continued their long-term upward trend mainly due to the increase in deposits on transaction accounts (KM 520.3 million or 17.9%) and demand deposits (KM 297.2 million or 10.2%), while the level of term deposits of households in the banking sector was almost unchanged in the last three years. This deposits trend was a consequence of the fall in deposit interest rates in previous periods and weak opportunities for other types of investments.

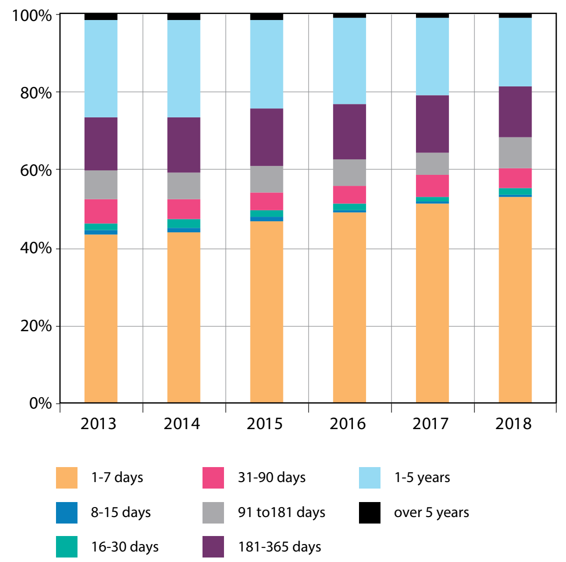
Due to the growth of deposits on transaction accounts and demand deposits, the residual maturity of total liabilities of the banking sector continued to decline. During 2018, the deposits with a maturity of 1 - 7 days continued to grow, accounting for 53.3% of total deposits at the end of the year. At the same time, the share of deposits with a maturity of 1-5 years decreased to a level of 17.9%, while deposits with a maturity over five years accounted for only 0.9% of total deposits. Based on end-2018 data, the deposits with residual maturity of less than one year accounted for as much as 81.3% of total deposits (Graph 6.8). The continuous reduction in residual maturity of total liabilities continued to increase the risk of short-term sources being transformed into long-term placements.

Graph 6.7: Sector Structure of Deposits



Source: FBA and BARS, CBBH calculation

Graph 6.8: Structure of the Total Deposits by Residual Maturities

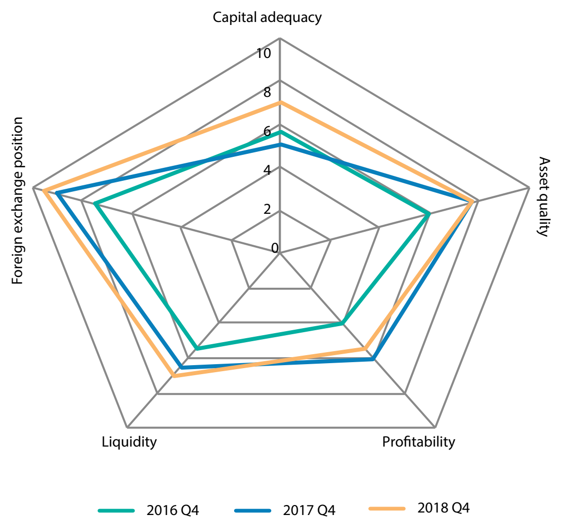


Source: FBA and BARS, CBBH calculation

The assessment of the banking sector stability is summarized in the financial soundness indicators graph that illustrates changes in the main indicators, which are used as a basis for evaluating capital adequacy, asset quality, profitability, liquidity and foreign exchange risk in the banking sector. The graph shows ratings for the last year and their values for the period they are compared to, or for the previous two years. Based on the financial soundness indicators graph it can be concluded that the banking sector of BH is stable and that in 2018 it increased its resilience to risks (Graph 6.9). The improvement of indicators was recorded in the segment of capitalization, liquidity and foreign exchange risk, while the rating in the asset quality segment remained at the same level as in the previous year. Only the profitability segment involves a slight decrease in resilience, reflected in the slightly lower return that the banking sector achieved in relation to average assets and average capital in 2018. It should be noted that the high rating in the capital adequacy segment was significantly influenced by the implementation of the new legislation, according to which the lower capital requirements for credit risk ultimately reflected a reduction in the overall risk exposure and, consequently, a higher level of adequacy capital (described in more detail in Text Box 2). Asset quality indicators continued the trend of improvement at the system level, but due to the high level of credit risk in some banks, the asset quality rating remained unchanged from the previous year. High ratings in the liquidity segment, especially in the foreign exchange position segment, indicate that the banking sector is highly liquid and that the foreign exchange risk is minimal due to the currency board arrangements.

The banking sector of BH was adequately capitalized at the end of 2018. With respect to the total risk exposure, the equity and the regulatory capital amounted to 16.5% and 17.5%, respectively, at the end of the year. The largest positive impact on the amount of equity and regulatory capital was made by the previous year's profit distribution to equity, the transfer of credit loss reserves formed from profit to equity in the case of three banks[26], and the recapitalization carried out by four banks in 2018 in the amount of KM 82.3 million. With the exception of four banks that paid dividends from profit for 2017 (KM 171.1 million), other banks retained profits from the previous year and increased their capital reserves in 2018. The total amount of risk exposure amounts to KM 19.2 billion and, under the new decisions on capital calculation[27], it involves the sum of risk weighted exposures for credit, market, operational risk, settlement/free delivery risk and the risk associated with large exposures arising from the trading book records. Of the total risk exposure, the credit risk weighted exposures account for KM 16.6 billion or 86.5% of the total risk exposure, the market risk exposures account for KM 304.7 million or 1.6% of the total risk exposure, and the operational risk exposures account for KM 2.3 billion or 11.9% of the total risk exposure.

Graph 6.9: Chart of Financial Soundness Indicators of Banking Sector



Source: CBBH, CBBH calculation

Stability estimate for each variable is based on simplified standardization of several indicators representing the base for quantification of syntetic estimate of a degree of stability of various segments of banking sector operations. For comparability of indicators,they need to be transformed first, i.e. standardized, and then, depending on the obtained value of z-score, each indicator is assigned a grade according to relative position compared to its empiric distribution. The increase of distance to the centre of the chart for each variable, i.e. higher grade, indicates the increased stability in the system, while grades closer to the centre warn of the increase of risk or decrease of banking sector resilience and accordingly stronger threat to stability.

26 Based on the decision of the General Meeting of Shareholders, three banks transferred the formed reserves for credit losses to the equity in the total amount of KM 191.6 million.

27 Decision on the calculation of bank capital (Official Gazette of the FBH, No. 81/17) and Decision on the calculation of banks' capital (Official Gazette of the RS, No. 74/17).

Text Box 4: Calculation of Capitalization Indicators in Accordance with the New Legal and Regulatory Framework

In the fourth quarter of 2018, the CBBH started compiling and disseminating capitalization indicators in accordance with the new legal and regulatory framework in the field of operations and supervision of the FBH and RS banking sectors, adopted during 2017 and 2018. Domestic legislation regarding regulatory requirements for maintaining capitalization have been harmonized with EU directives and regulations (CRD IV and CRR 575) and the Basel III framework and are harmonized between BH entities. Indicators that measure capital adequacy, equity based on the total risk exposure amount and regulatory capital based on the total risk exposure amount, at the system level, are higher than those calculated according to the previous methodology, which is largely a result of applying lower weights for the exposures of small and medium companies, and the application of lower weights for household exposures up to KM 250 thousand and the secured credit risk exposures. Although banks are required, in accordance with the standardized approach, to allocate capital requirements for operational and market risk in addition to capital requirements for credit risk, the lower capital requirements for credit risk ultimately resulted in a lower value of total risk exposure. On the other hand, the main change in the calculation of regulatory capital relates to the change in the calculation base for general adjustments of credit risk values, which is lower as compared to the previous methodology. In accordance with standardized approach, the general credit risk adjustments, which form an integral part of supplementary capital, are calculated at 1.25% of total credit risk exposure, while according to the previous methodology they were calculated at 1.25% of total asset risk. As the calculated general allowances for credit risk now have a lower value, the total amount of regulatory capital at the system level has a lower value than if calculated as per the previous methodology.

Also, the treatment of direct or indirect investments of a bank in the common equity instruments of financial sector entities has been modified if the bank has a significant investment in that entity. According to the new approach, it represents a deductible item from the common equity[28,29].

A comparative overview of capitalization indicators according to the new and the previous methodology is shown in Table TO4.1.

The capital adequacy ratio, calculated in accordance with the new regulation and the Basel III framework, at the banking sector level is higher by 1.6 percentage points, while the equity ratio is higher by 1.4 percentage points compared to data from the previous methodology. Although at the sector level the adequacy ratio is higher than in the previous methodology, in the case of individual banks the new regulatory requirements are reflected in the reduction of CAR and equity ratio. This involves banks with an increased level of vulnerability in the system, which will need to strengthen their capital base in the coming periods to absorb potential credit losses that may result from the high levels of credit risk. It is important to note that due to methodological changes in the calculation of equity and regulatory capital, as well as the total amount of risk exposure, the indicators Equity based on the total risk exposure amount and Regulatory capital based on the total risk exposure amount at the end of 2018 deviated from the values recorded in previous periods and are therefore not comparable to earlier periods.

TO4.1: Comparative Survey of Capitalization Indicators according to New and Previous Methodology, Q4 2018

Basel I	Tier I capital, million KM	3.263
	Own funds, million KM	3.431
	The total asset risk, million KM	21.553
	Tier I capital to total asset risk	15,1%
	CAR	15,9%
Basel III	Tier I capital, million KM	3.159
	Own funds, million KM	3.358
	The total asset risk, million KM	19.158
	Tier I capital to total asset risk	16,5%
	CAR	17,5%
Change compared to the previous methodology	Tier I capital	-3,2%
	Own funds	-2,1%
	The total asset risk	-11,1%
	Tier I capital to total asset risk	1,4
	CAR	1,6

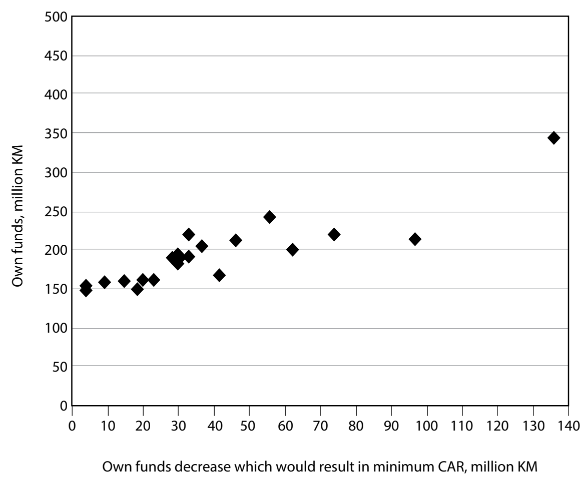
Note: The values of capitalization indicators according to Basel I methodology were calculated on the basis of preliminary data for 2018 end, while the capitalization indicators according to Basel III methodology were calculated on the basis of the final revised data for 2018 end.

28 According to the previous methodology, the bank investments in the capital of other legal entities that exceeded 5% of the bank's equity represented a deductible item from the overall capital of the bank.

29 A bank has a significant investment in a financial sector entity if it owns more than 10% of its common equity issued by that entity or is closely related to that entity and has the common equity instruments issued by that entity.

Most banks in the system are adequately capitalized, with the exception of one small bank that did not meet the regulatory minimum of capital adequacy at the end of 2018. In the case of several small banks, a relatively small reduction in regulatory capital would jeopardize their adherence to the prescribed level of capital adequacy (Graph 6.10)[30]. On the other hand, the Graph indicates that most banks, with unchanged levels of risky assets, could endure a significant decrease in regulatory capital before their CAR is lowered to the regulatory minimum.

Graph 6.10: The Effect of Own Funds Decrease on CAR, by Banks



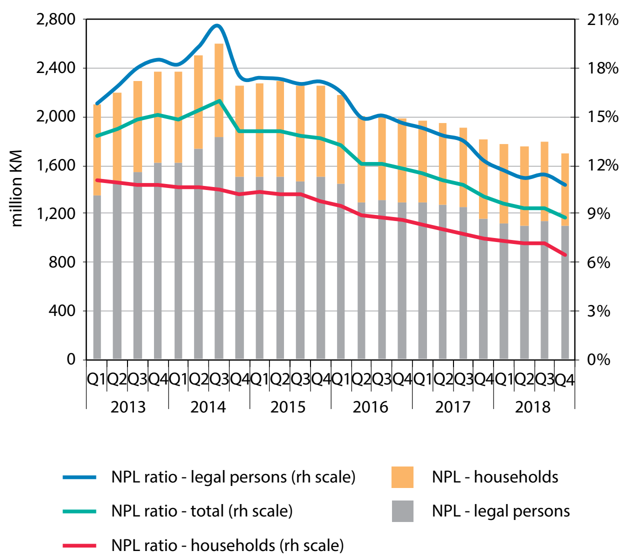
Source: FBA and BARS, CBBH calculation

All asset quality indicators continued the trend of improvement at the banking sector level in 2018. The share of non-performing assets in total assets at the end of 2018 was 6.27%, i.e. a decrease of 89 bp compared to the end of the previous year. The decrease in non-performing assets was largely the result of the continuation of "clearing" the banks' balance sheets, i.e. permanent write-offs of assets estimated as loss and sale of non-performing loans. In 2018, banks wrote off KM 135.4 million of assets and KM 9.8 million of interest rates estimated as losses. The largest portion of non-performing assets involved non-performing receivables, which recorded a decrease of KM 117.8 million (6.5%) in 2018. With the continuing write-off and sale of non-performing loans, the quality improvement of the loan portfolio can partly be attributed to the recovery of non-performing loans, driven by the mild economic growth and facilitated financing conditions, reflected in the downward trend in interest rates. According to CRC data, KM 17.7 million of household loans and KM 18.7 million of corporate loans in 2018 turned from non-performing to performing loans.

The share of non-performing loans in total loans at the end of 2018 was 8.77% and recorded a decrease of 1.28 percentage points compared to the previous year. In addition to the decline in non-performing loans, the increase in credit activity had a positive effect on the asset quality indicators in 2018. Total loans increased by KM 1.28 billion (7.1%). Also, the coverage of non-performing loan with provisions was higher than in the previous year. The average coverage of NPLs at the end of 2018 at the banking sector level was 77.4%, while at the end of the previous year the coverage of non-performing loans with provisions was 76.7%.

Credit risk is still the dominant risk in the BH banking sector. The share of non-performing loans in total loans remains high, especially in the segment of loans to legal entities (Graph 6.11).

Graph 6.11: Loan Portfolio Quality



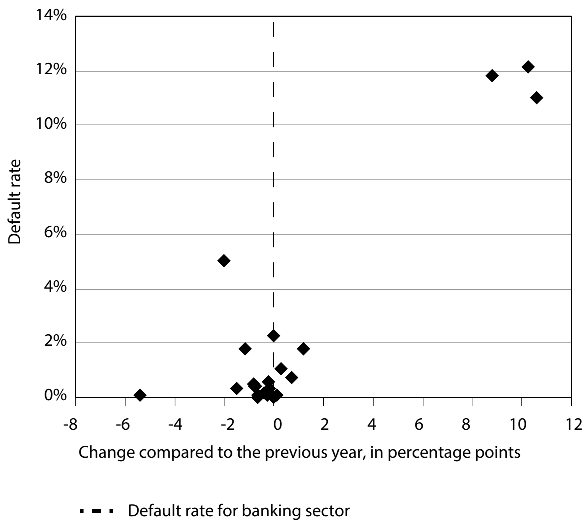
Source: FBA and BARS, CBBH calculation

In the segment of legal entities, the downward trend in non-performing loans continued, which was largely due to the continuing write-offs of non-performing loans. Although the credit risk weakened in the corporate sector, by analysing

30 The Graph shows how much regulatory capital for each individual bank should be reduced, with total risk weighted at the end of 2018, to bring the capital adequacy ratio down to the regulatory minimum of 12%. A bank that does not meet the regulatory minimum of capital adequacy is not shown in the Graph.

the default rate per bank, it can be concluded that in 2018 the level of credit risk increased in individual banks. Three banks in particular stand out in which default rates rose significantly, while other banks in the system had default rates at approximately the same or lower level compared to the previous year (Graph 6.12).

Graph 6.12: Default Rates in Corporate Sector, by Banks in 2018

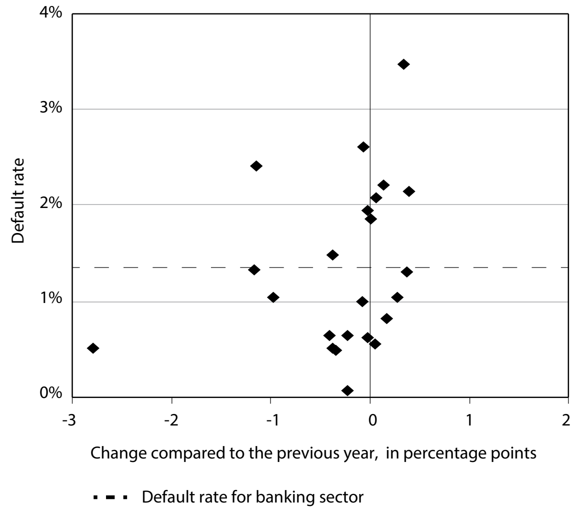


Source: CRC, CBBH calculation

Non-performing loans in the household sector continued their downward trend in 2018. In addition to the permanent write-off, the quality of loan portfolio is further enhanced by the frequent loan rescheduling. The improvement in the quality of loan portfolio in the household sector was also due to the more intensive growth of loan placements than in the previous year. Concerning the default rate by banks, most banks had a lower default rate than in the previous year (Graph 6.13). In banks with the highest share of non-performing loans in total loans, the intensity of deterioration in the quality of household loans in 2018 was still higher than the banking sector average.

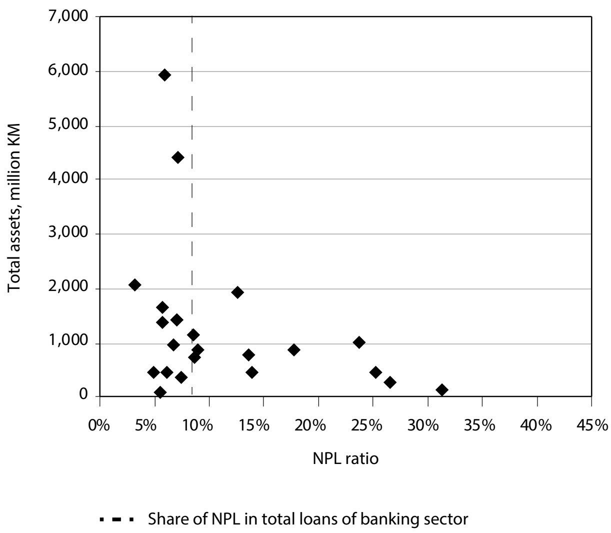
The share of non-performing loans in total loans at the end of 2018 was particularly high in four banks in the system where the non-performing loans accounted for more than 20% of the total loan portfolio (Graph 6.14).

Graph 6.13: Default Rates in Household Sector, by Banks in 2018



Source: CRC, CBBH calculation

Graph 6.14: NPL ratio by Banks at the End of 2018

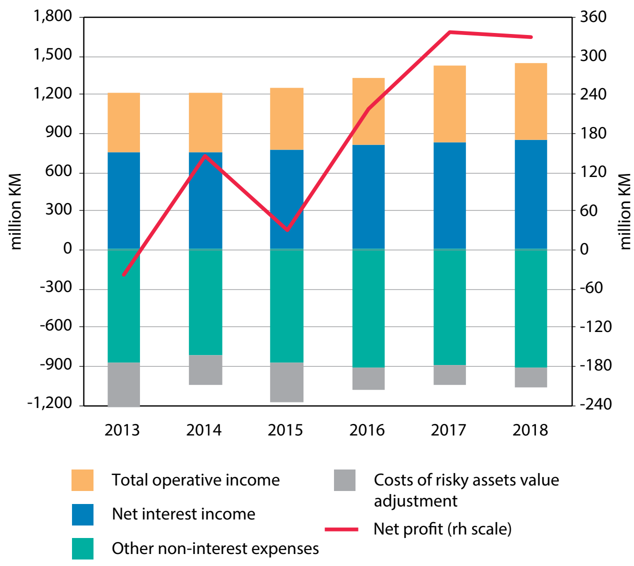


Source: FBA and BARS

Although the exposure of non-financial companies and households to the interest rate risk is lower than in the previous year, banks are still exposed to the indirect credit risk that may arise if the interest rate risk materializes in these two sectors. Data on newly approved loans to households and non-financial companies show that out of the total newly approved loans to these sectors in 2018, 57.2% were approved at a floating interest rate, i.e. initial period of interest rate fixation of up to 1 year. The share of floating rate loans in total newly approved household loans at the end of 2018 was 53.8%, i.e. decreased by 1.79 percentage points compared to the previous year. The share of these loans in total newly approved placements to the household sector continued to decline for the fifth consecutive year, indicating a greater client caution in relation to taking the interest rate risk. At the same time, banks reduced their placements with floating interest rates to non-financial companies by 17.8%, i.e. initial period of interest rate fixation up to 1 year, and at the end of 2018, the share of these loans in total newly approved loans was 60.2%. Although the share of floating rate loans in total loans to households and private non-financial companies decreased, it can still be estimated that the exposure of both sectors to interest rate risk is very high, which can indirectly affect the transformation of interest rate risk into credit risk in the banking sector. The expected rise of interest rates in international markets would increase the cost of financing for debtors who took floating rate loans, which could delay repayment of a share of the debt and deteriorate the quality of the credit portfolio in the banking sector

The banking sector profitability remained high, but the return on average assets and average equity was slightly lower than in the previous year. At the end of 2018, the BH banking sector reported a net profit of KM 330.4 million. With the exception of two banks that generated losses, other banks in the system operated positively and recorded net profit of KM 376 million. Most of the banking sector's profit was still concentrated in several large banks. Thus, the two largest banks generated as much as 55% of total profit in the sector, while the four most profitable banks generated 75.7% of the total banking sector net profit. In 2018, the banking sector generated slightly more total revenues than in the previous year, and as a result of higher non-interest expenditures, a slight decrease in profit was recorded compared to the same period of the previous year (Graph G15). The growth in non-interest expenditures largely occurred due to the growth of other operating and direct costs in banks, while the costs of adjusting the value of risky assets remained almost unchanged compared to the same period last year. Total revenues recorded a slight increase as a result of net interest income growth.

Graph 6.15: Banking Sector Profit

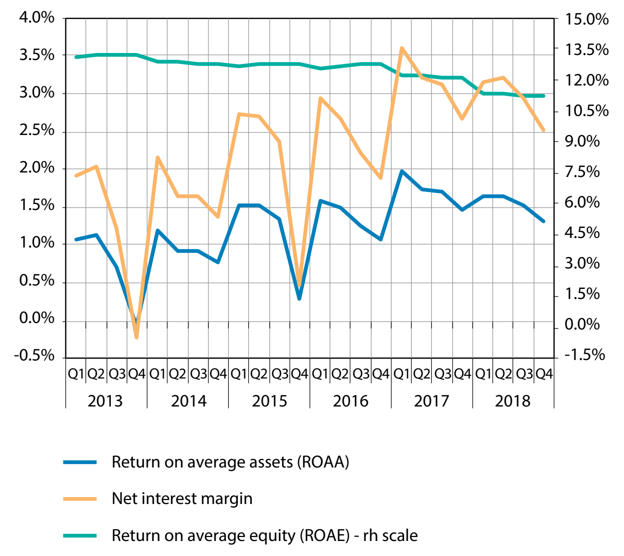


Source: FBA and BARS, CBBH calculation

The ROAA and ROAE trends indicate that the banking sector achieved a stable return on average assets and equity over the last three years, unlike in earlier periods when, due to high losses in individual banks, the values of these indicators were significantly more volatile (Graph G16). The return on average assets and equity in 2018 was lower than in the previous year, which was primarily caused by a significant increase in average assets and a slightly slower growth in average equity in the observed period.

The slight increase in net interest income had a positive impact on the profitability of banks, but due to more substantial growth in average assets, the net

Graph 6.16: Profitability Indicators

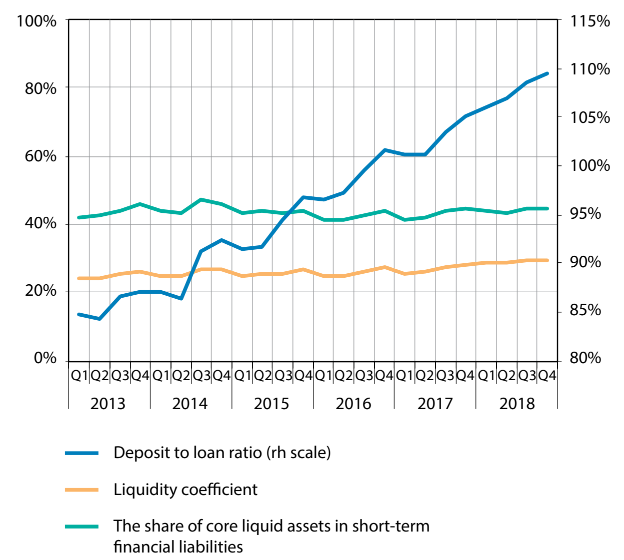


Source: FBA and BARS, CBBH calculation

interest margin[31] was lower than in the previous year. This trend was recorded mainly due to a significant increase in liquid assets items, which generally have a low or negative interest rate[32]. An analysis of the banking sector's revenue structure shows that the trend of falling interest income continued in 2018, despite the recorded growth in the credit activity. Total interest income at the end of the year was KM 1.04 billion, down KM 17 million or 1.6% compared to the previous year. The decrease in interest income was primarily the result of the continued fall in interest rates on newly approved loan placements. On the other hand, the continued favourable financing conditions for banks largely contributed to the reduction of interest expenditures at the banking sector level. Total interest expenditures and other similar expenses at the end of 2018 amounted to KM 196.6 million and were lower by KM 32.8 million or 14.3% compared to the same period of the previous year. Due to the continued decrease in deposit interest rates and an increase in the share of deposits in transaction accounts and demand deposits, on which banks pay negligibly low interest rates, the net interest income of the banking sector continued to grow. Furthermore, for the first time in six years, the upward trend in operating income, which was a significant generator of profitability growth in the banking sector in recent years, discontinued. Thus, at the end of 2018, the share of net interest income in total revenues was 58.83%, i.e. increased by 52 bp compared to the end of the previous year. Given that banks largely used their capacities to generate operating income, the limited possibility for a significant increase in operating income with lower net interest margins, which banks achieved in the last two years, could limit the profitability growth in future.

Liquidity of the banking sector in BH remained high during 2018, primarily due to a continuous trend of increasing deposits (Graph 6.17). At the end of 2018, liquid assets accounted for 29.7% of the banking sector assets, while 44.7% of short-term liabilities were covered by liquid assets. The high value of indicators at the system level indicate that banks can tolerate a significant amount of short-term withdrawals before they face the liquidity problem.

Graph 6.17: Liquidity Indicators



Source: FBA and BARS, CBBH calculation

31 The net interest margin is calculated as the ratio of net interest income to average assets.

32 The banks paid KM 5.8 million to the commercial banks for funds above the required reserve in 2018 on the basis of the negative fee paid by CBBH, while on the same basis in 2017 they paid KM 4.4 million.

Text Box 5: Stress Tests

Results of the top-down stress tests conducted for the BH banking sector based as on the end of 2018 data suggest that the sector-level capitalization would remain above the regulatory minimum of 12% even in the more severe of the two extreme scenarios, implying significant deterioration in the domestic and international macroeconomic environment. The resilience of the sector is based on the high initial level of capital adequacy, which was 17.5% at the end of December 2018, current profitability of banks, and the significant resilience to extreme shocks of the two largest banks in the system, whose assets represent 35% of the total banking sector assets.

The CBBH conducts top-down stress tests for the country's banking sector on quarterly basis, which are among the main tools for assessing its resilience to potential shocks from the macroeconomic environment and the banking sector. Stress tests assess the ability of both the entire banking sector and individual banks to absorb the potential losses that would arise in the event of assumed shocks materialization.

In order to assess the solvency of the banking sector, three different macroeconomic scenarios were considered - one baseline and two extreme scenarios. Each scenario includes projections of a large number of macroeconomic and financial variables for the period 2019-2021.

The baseline scenario is based on the IMF's projections of trends in the major macroeconomic indicators, the ECB's projections of trends in the European financial markets, and the CBBH's assumptions about relevant indicators' trends in the BH economy, based on continuous monitoring of historical trends.

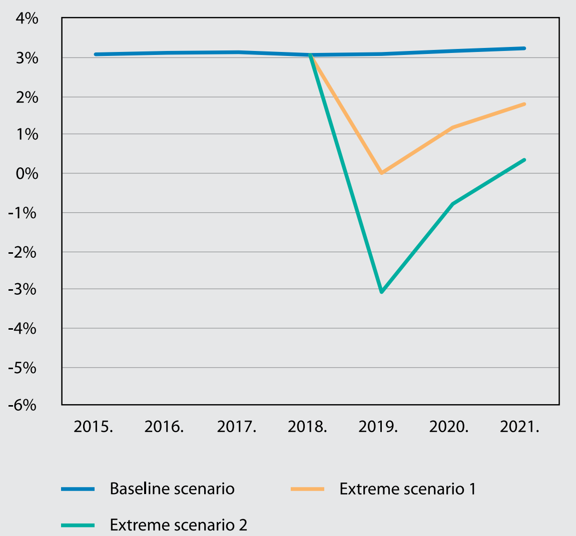
Two extreme scenarios were developed to test the resilience of the banking sector in the cases of extreme shocks of varying intensity:

- Extreme scenario 1: Mild extreme scenario that reflects an external shock resulting from further weakening of economic activity in euro area countries.

- Extreme Scenario 2: A severe extreme scenario, where the external risks described in the mild extreme scenario are further intensified and combined with a significant increase in the cost of external bank financing due to the deterioration of the sovereign rating of the country and further deterioration of the financial soundness of the banks.

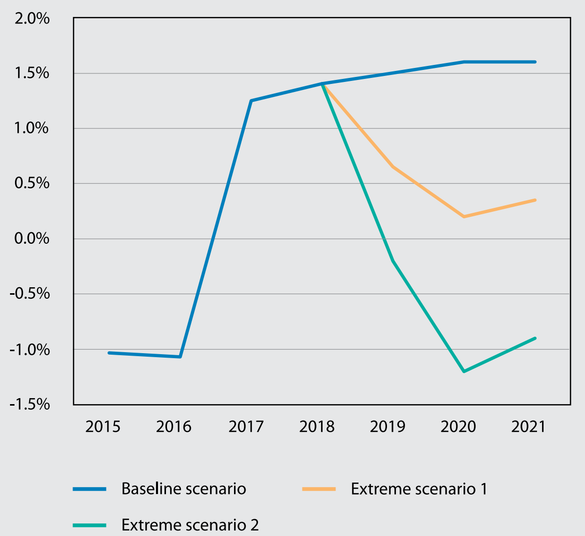
Stress test scenarios quantifications include projections of macroeconomic and financial variables - such as the real GDP, inflation, interest rates in the euro area, long-term interest rates on loans to households and companies, real estate prices and credit growth. The effect of interbank contagion risk was implemented in the stress test framework, which is based on a network analysis of the systemic risk spillovers in the BH banking sector. The effects of this risk are assessed at the end of the third year of the stress test, and since the interbank exposures are not significant, these effects are extremely weak and would have a little impact on the capital adequacy ratio at the banking sector level. The graphs from TO5.1 to TO5.6 show basic projections and assumptions used in the stress test scenarios.

Graph TO5.1: Real Growth of GDP



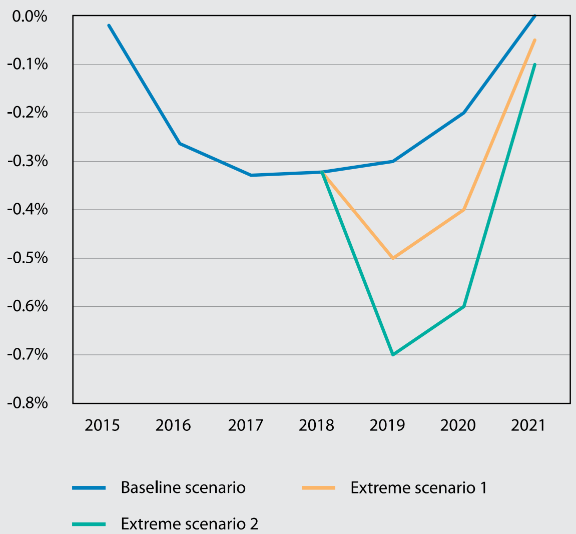
Source: CBBIH

Graph TO5.2: Inflation Rate



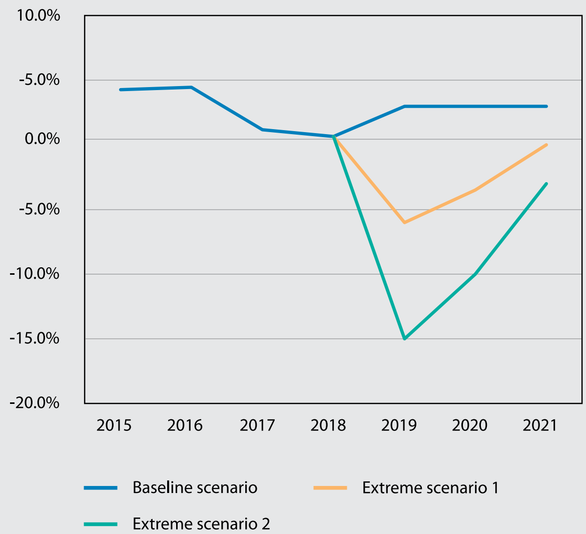
Source: CBBIH

Graph TO5.3: M Euribor



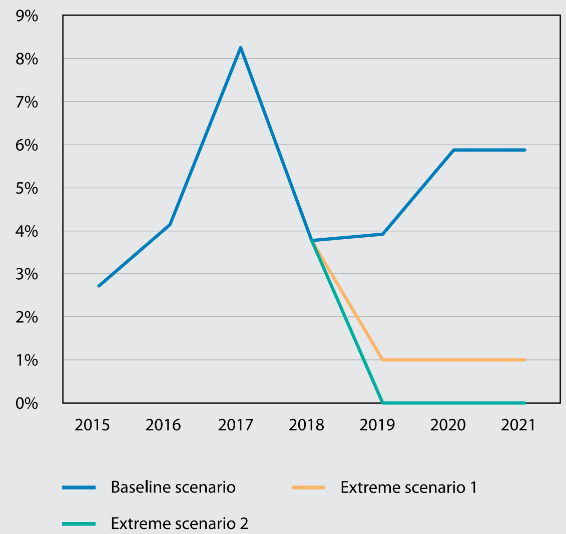
Source: CBBIH

Graph TO5.4: Growth of Real Estate Prices



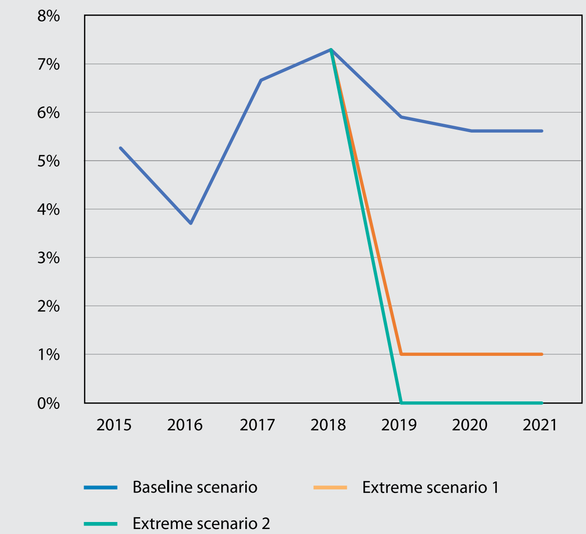
Source: CBBIH

Graph TO5.5: Credit Growth, Companies



Source: CBBIH

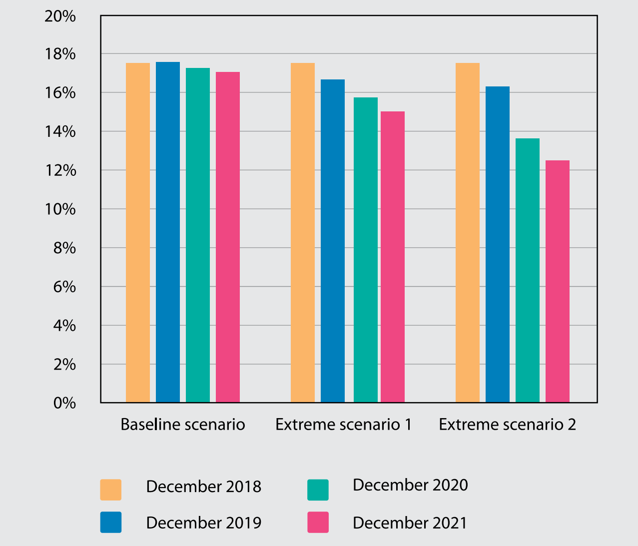
Graph TO5.6: Credit Growth, Households



Source: CBBIH

The impact of stress tests on the capital adequacy ratio was quantified based on the initial balance as of the end of 2018. In the Extreme Scenario 1, the banking sector reported a decrease in capital adequacy ratio by 252 bp in 2021, while in the Extreme Scenario 2, the capital adequacy ratio decreased by 505 bp in 2021 (Graph TO5.7)..

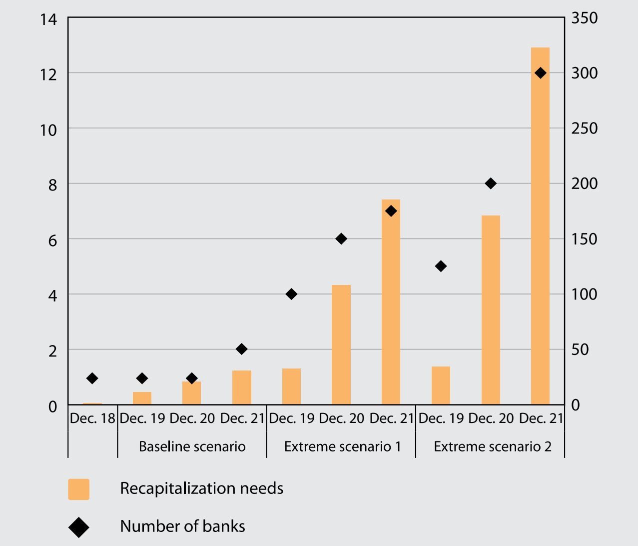
Graph TO5.7: Banking Sector Capital Adequacy Rate



Source: CBBIH

Although the results of the stress tests indicate that the banking sector as a whole is resilient to the assumed shocks, in the last year of the stress test in the Baseline scenario, capital adequacy ratio of two banks would be below the minimum regulatory rate (12%). In order to meet regulatory requirements, banks would have to revise their business models or provide additional capital in the amount of KM 30.5 million by the end of 2021.

Graph TO5.8: Number of Banks with Insufficient Capital and Recapitalization Needs

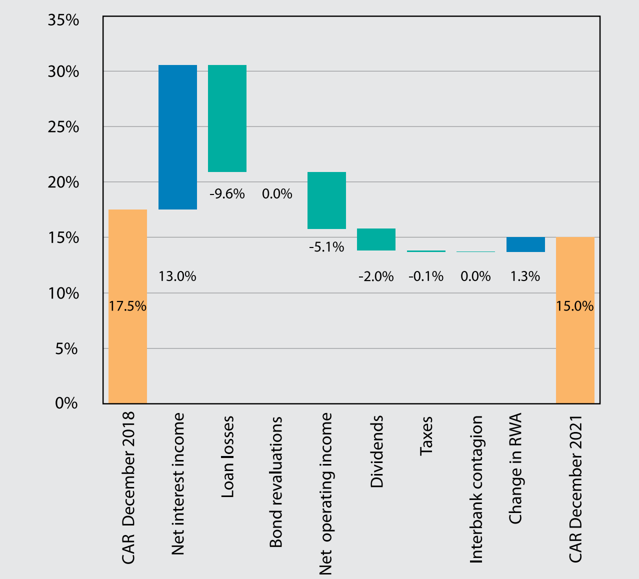


Source: CBBIH

In extreme scenarios, the banking sector would record losses that would have a significant impact on the regulatory capital and a fall in the capital adequacy ratio. In the Extreme scenario 1, the aggregate level capital adequacy ratio would decrease from the initial 17.5% to 15%. In this scenario, a total of seven banks would find their capital adequacy ratio below the regulatory minimum at the end of the testing period. The total capital required to return the capital adequacy ratios of these banks to the regulatory minimum of 12% in 2021 would be KM 185.15 million, i.e. 0.6% of GDP. In Extreme Scenario 2, the capital adequacy ratio at the aggregate level would fall to 12.5% and a total of twelve banks would not meet the minimum required capital adequacy ratio. Total recapitalization needs in this scenario are KM 322.63 million (1% of GDP) (Graph TO5.8). Despite such strong shocks assumed in stress tests, the banking system as a whole would maintain stability. Such results are, to a certain extent, a result of the significant resilience to shocks in case of the two largest banks by total assets (35% share in total banking sector assets).

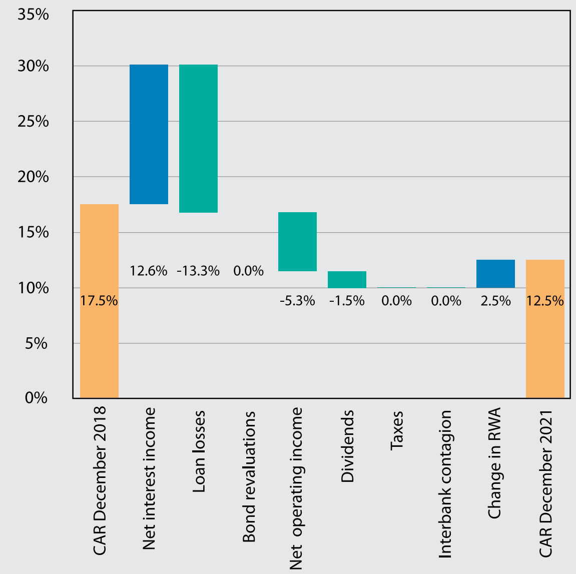
Graphs TO5.9 and TO5.10 show the contribution of individual balance sheet and income statement items to the change in the aggregate capital adequacy ratio, cumulatively, in extreme scenarios, from the end of 2018 to the end of 2021.

Graph TO5.9: Impact of Individual Positions on Capital Adequacy Rate, Extreme Scenario 1



Source: CBBIH

Graph TO5.10: Impact of Individual Positions on Capital Adequacy Rate, Extreme scenario 2



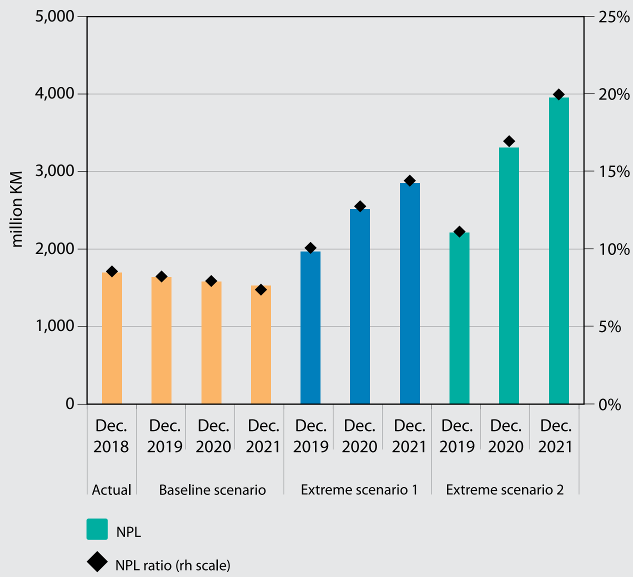
Source: CBBIH

Credit risk is the most significant risk in BH banking sector. The results of stress tests indicate that the quality of the loan portfolio is very sensitive to the changes of macroeconomic conditions. The drop in the capital adequacy ratio over the three-year period is dominated by losses related to increase in provisions due to the deterioration of the loan portfolio quality.

The basic measure of credit risk is an indicator of the share of non-performing loans in total loans. In the Baseline scenario, due to the continued recovery in the macroeconomic environment, the share of non-performing loans in total loans continues to decline slightly in the period 2019 - 2021, with the decline being slightly stronger in the corporate sector as compared to the household sector.

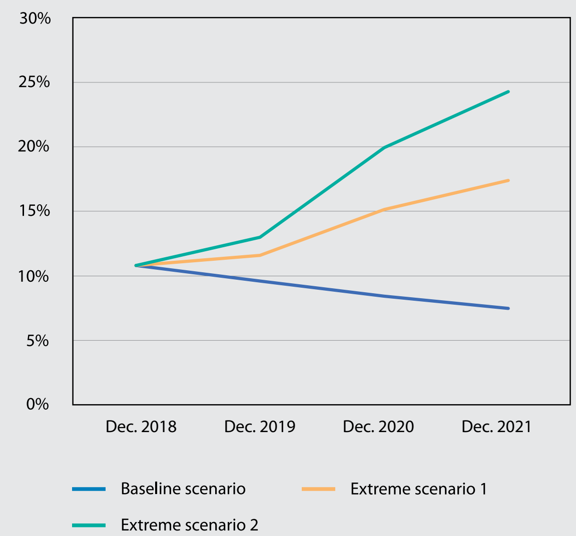
In extreme scenarios, there will be a significant increase in the level of non-performing loans, as well as the share of non-performing loans in total loans, both in the corporate and household sectors. Consequently, banks will need to significantly increase their credit risk provisions, which will affect their profitability. Graphs TO5.11 through TO5.13 show the loan portfolio quality in different years and scenarios.

Graph TO5.11: Non-performing Loans and Share of Non-performing Loans in the Total Loans



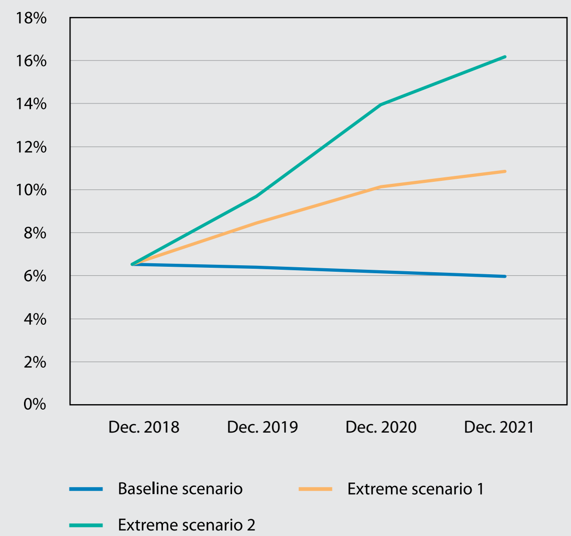
Source: CBBIH

Graph TO5.12: Share of Non-performing Loans in the Total Loans to Companies



Source: CBBIH

Graph TO5.13: Share of Non-performing Loans in the Total Loans to Households



Source: CBBIH

6.2 Non-banking Financial Sector

Although the non-banking sector recorded the asset growth in all segments, the small share of non-banking financial institutions in the total assets of financial mediators remained negligible. The largest and most significant segment of the non-banking financial sector are insurance and reinsurance companies, which in 2018 recorded a modest increase in premium income and balance sheets compared to the previous year. Non-banking financial sector assets in 2018 recorded an increase of KM 277.7 million, but its share in the financial sector decreased from 11.7% to 11.5% (Table 6.1).

In 2018, the credit activity and balance sheet growth continued, and the microcredit sector profitability increased. At the end of 2018, 25 microcredit organizations (MCOs) operated in BH, namely 14 microcredit foundations and 11 microcredit companies. One new MCO was established during 2018, and one microcredit foundation lost its operating license. Total assets of the microcredit sector at the end of 2018 increased by KM 98.8 million or 12.53% compared to 2017, while loans recorded an increase of 13.8% (Table 6.3). The growth of credit activity was recorded in most MCOs, but some smaller MCOs continued to face a lack of funding sources, recording contraction in the balance sheet. Out of the total amount of microcredits, 97.6% was disbursed to natural persons, majority of which was approved for financing the agricultural sector (33.7%). Microcredits paid to natural persons account for 16% of placements for service activities, followed by housing loans (15.3%).

Table 6.2: Simplified Balance Sheet of Microcredit Organizations
million KM

Assets			Liabilities		
	2017	2018		2017	2018
Funds and placements to other banks	60,0	74,7			
Loans	624,0	710,1	Liabilities based on loans	397,8	462,3
Loan loss provisions	-5,0	-5,1	Capital	352,8	383,3
Other assets	109,6	107,8	Other liabilities	38,1	41,9
TOTAL	788,7	887,5	TOTAL	788,7	887,5

Source: FBA and BARS, calculation by the CBBH

In the MCO sector in 2018 there were no significant changes in the level of risk portfolio, and owing to the significant growth of credit placements, the share of the risk portfolio in the overall portfolio was lower than in the previous year. Of the total loan portfolio, 1.97% or KM 14 million of loans recorded a delay in repayment, which was at the level of the previous year. Loan loss provisions at the end of 2018 amounted to KM 5.1 million and recorded an increase of 2.7% compared to the end of the previous year. The loan loss provision rate at the sector level was 0.72% and decreased by 8 base points compared to the previous year. Off-balance records, consisting mainly of write-offs at the end of 2018, amounted to KM 148.9 million, i.e. 0.8% lower than in the previous year, accounting for 21% of the loan portfolio.

In the structure of liabilities, liabilities related to loans accounted for the basic source of MCO assets and amounted to KM 462.3 million, i.e. an increase of 16.2% compared to the previous year. At the end of 2018, the total capital of the sector amounted to KM 383.3 million and increased by KM 30.5 million (8.6%) compared to the previous year. The increase in the total capital of the microcredit sector was mostly affected by the increase in surplus income over expenditures of microcredit foundations (KM 11.7 million) and the increase in unallocated profit of microcredit companies (KM 15 million), based on the reported profit for the current reporting period. In addition, there was an increase in equity as a result of recapitalization of 4 microcredit companies and the payment of founder's capital with one microcredit company.

At the end of 2018, the microcredit sector achieved a positive financial result of KM 32.1 million and recorded a profit increase of KM 5.2 million compared to the previous year. Most MCOs reported a positive financial result, with the exception of two microcredit companies that reported business losses (KM 628 thousand) and three microcredit foundations that recorded deficit in revenue over expenditures (KM 696 thousand). The sector's total revenues continued to grow as a result of more significant interest income growth (KM 14.7 million or 12.9%), which was largely due to extremely high interest rates. The average weighted effective interest rate on total loans in the FBH in 2018 was 24.13%, and in the RS 24.62%. Especially high were the effective interest rates on short-term loans, which further increased in 2018 in both the FBH and the RS. At the same time, the operating revenues of the sector recorded a decrease of KM 0.6 million (5.7%) compared to the previous year.

The total expenditures of the microcredit sector amounted to KM 117 million and recorded an increase of 9.5% compared to the previous year. The increase in total expenditures was recorded as a result of the increase in operating expenditures, which mostly accounted for the costs of salaries and contributions. These costs increased by 9.8% compared to 2017, which is mainly due to the increase in the number of employees in the microcredit sector. At the same time, there was a 4.6% decrease in the cost of provisions for credit and other losses compared to the previous year.

In 2018, an increase in the balance sheet total and the volume of operations in the leasing sector were recorded as a result of stronger growth achieved by one company, while the rest of the sector recorded no significant changes in operations compared to the previous year. At the end of 2018, 7 leasing companies were licensed, and during 2018 one leasing company was licensed. Total assets of the leasing sector amounted to KM 297.2 million and increased by KM 37 million (14.2%) compared to the previous year. The increase in the balance sheet total was achieved by two leasing companies in the amount of KM 47.5 million, while four leasing companies recorded a decrease in the balance sheet amount by KM 12.3 million compared to the previous year. The financial leasing accounts for 88% of the value of the lease contracts value and the operating leasing accounts for the remaining 12%. The value of newly concluded financial and operating lease contracts in 2018 amounted to KM 192.7 million, i.e. 32.2% more than in the same period last year. The total net receivables from the financial lease amounted to KM 214.7 million, accounting for 72.2% of total assets in 2018. Established reserves for financial leasing losses at the end of 2018 amounted to KM 0.9 million, i.e. KM 1.2 million or 56.8% less compared to the previous year. The decrease in established reserves for losses indicates that in 2018 no deterioration in the quality of the loan portfolio was recorded.

At the end of 2018, the leasing sector achieved a positive financial result of KM 3.3 million. Three leasing companies reported a loss of KM 2.4 million (one of which was inactive on the market), and four companies reported a profit of KM 5.7 million. Compared to the previous year, only a company that significantly increased its market share achieved profitability growth, while other companies with positive financial results recorded a positive decrease in profitability.

The insurance market continued to record growth in premium income and balance sheet total in 2018. In the insurance market in BH in 2018, there were 26 insurance companies and one reinsurance company. In 2018, one new insurance company was formed and two companies merged with other insurance companies. The total accrued premium in 2018 amounted to KM 713.1 million, i.e. an increase of 4.4% compared to the same period last year. Although the premium growth was also recorded in 2018, the share of premiums in total GDP remained almost at the same level as in the previous year (2.18% of GDP). Of the total calculated premium, non-life insurance accounted for 79.9% or KM 569.8 million. The automobile liability insurance still holds the largest share in the total insurance premium (over 50%). The life insurance premium amounted to KM 143.3 million, i.e. an increase of 2.9% compared to the previous year, but the share in the total insurance premium decreased to 20.1%. Total gross claims amounted to KM 279.3 million and accounted for 39.2% of total accrued premiums.

According to the CBBH data, at the end of 2018, insurance companies held 32.5% 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 assets of insurance companies, the trend of increasing the share of government securities in the assets structure of this sector continued. Investments of the insurance sector in the government securities at the end of 2018 amounted to KM 326.2 million and recorded an increase of 8.4% compared to the previous year, and the share of government securities in the total assets of insurance companies at the end of the year amounted to 17%.

The slight increase in insurance premiums as well as the decrease in the share of life insurance in the total premium recorded in 2018 indicate no improvement in the general economic conditions in BH, which are still a limiting factor in the development of the BH's insurance market. Low wages and persistently high unemployment rates are key reasons for the low representation of voluntary types of insurance, which is ultimately a limiting factor in strengthening the investment potential of the insurance sector.

In 2018, there were 36 licenced investment funds, 17 of which in FBH and 19 in RS. Out of the 36 investment funds, 23 are open-end investment funds, while 13 are closed-end investment funds. In the course of 2018, the process of transforming the closed-end into open-end investment funds was completed in the RS. A total of 10 closed-end mixed/equity investment funds were transformed into open-ended equity investment with public offer. The net asset value of investment funds at the end of 2018 amounted to KM 887.3 million and recorded an increase of KM 40.4 million (4.8%) compared to the end of the previous year. A number of funds still recorded a decline in net assets as a result of the fall in the market value of securities from the fund portfolio. The largest contribution to the increase in the total value of net assets of investment funds in 2018 was due to the creation of the first bond fund[33], whose net asset value at the end of the year amounted to KM 52.1 million.

The total turnover of BH stock exchanges in 2018 continued to record a decline for the third consecutive year, with a turnover value of KM 716.4 million. Out of the total turnover on the Sarajevo Stock Exchange (SASE), KM 288.2 million or 40.2% was generated, and the Banja Luka Stock Exchange (BLSE) generated KM 428.2 million or 59.8%. The value of total turnover on BH stock markets in 2018 decreased by 29.7%, while annual SASE and BLSE turnover declined by 45.9% and 12.1%, respectively. In 2018, there was a significant decrease in stock market activity on the primary market, since the government sector, as major driver of activity in this market segment, greatly reduced the intensity of borrowing on the domestic capital market (more details provided in the Government chapter). Consequently, there was a turnover decrease on both BH stock markets. The total market capitalization in BH at the end of 2018 was lower than in the previous year, as a result of decrease in market capitalization on BLSE in the amount of KM 393.9 million (9.8%) and a decrease in market capitalization on SASE in the amount of KM 57.9 million (1.1%) compared to the end of 2017.

33 Raiffeisen EURO BOND open-end investment fund with a public offering has been granted a license to operate on 19 April 2018.

7. Financial Infrastructure

7.1. Payment Systems

In 2018, the Central Bank of BH fulfilled its legal obligation to maintain adequate payment systems. Payment operations were carried out seamlessly through the Real Time Gross Settlement systems (RTGS). The Central Registry of Credits (CRC) and the Single Registry of Accounts of Business Entities (SRABE) were maintained, and transactions through clearing of international payments were carried out smoothly.

During 2018, there was an increase in the number of transactions and the total value of transactions through the giro clearing and RTGS payment systems. The total value of interbank payment transactions increased by 6.7% but the rate of increase was lower than in 2017 when it amounted to 8.9%. The total number of transactions in 2018 increased by 3% compared to the previous year, and the increase in the number of transactions was supported by the introduction of an additional, fourth daily settlement in the giro-clearing system in 2017, which enabled more frequent realization of payment orders of legal and natural persons during the day.

The top ten banks in BH by volume of transactions participated in the total number of RTGS and giro clearing of interbank transactions with 72.69% in 2018, i.e. an increase compared to 2017 when their participation was 71.25%. The top ten banks also increased their share of total transaction value from 74.76% in 2017 to 75.67% in 2018.

Table 7.1: Transactions in Interbank Payment System

Year	The total number of transactions, millions	The total turnover, milion 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
2018	42,3	102.670	393,4	83

Sourc: CBBH, BHAS, calculation by the CBBH

The increase in the value of total payment transactions in 2018 and the faster circulation of money resulted in a decrease in the number of days required to complete transactions in the value of annual nominal GDP (Table 7.1). Although during 2018 the number of intra-bank transactions decreased by 14% and inter-bank transactions increased by 4% compared to the same period last year, the intra-banking transactions remained dominant over the total number of transactions accounting for 58% (42.3 million transactions), while the share of interbank transactions was 42%. The value of interbank transactions in 2018 amounted to KM 115.4 billion or 53%, while the value of interbank transactions amounted to KM 102.7 billion or 47%.

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

Period	All Banks		10 Banks with the Largest Shares	
	Number of Transactions	Value of Transactions	Number of Transactions	Value of Transactions
December 2008	693	908	1.271	1.381
December 2009	651	989	1.233	1.413
December 2010	651	903	1.256	1.346
December 2011	626	836	1.230	1.287
December 2012	638	844	1.278	1.295
December 2013	654	810	1.337	1.378
December 2014	660	778	1.350	1.310
December 2015	689	810	1.314	1.305
December 2016	690	822	1.307	1.322
December 2017	725	853	1.320	1.349
December 2018	738	869	1.344	1.335

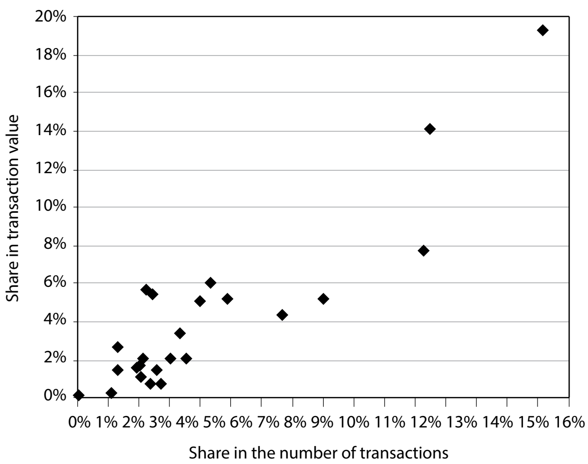
Source: CBBH, calculation by the CBBH

Table 7.2. shows the values of the Herfindahl-Hirschman Index (HHI[34]), which illustrates the concentration of the total number and value of interbank payment transactions. The presented index values are calculated for all the banks in both payment systems (giro-clearing and RTGS), based on the data on their share in the total number and value of interbank transactions. For all the participating banks, the

34 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 to 2,600 points high concentration, over 2,600 points very high concentration, and up to the maximum of 10,000 points when the concentration is considered a monopoly.

concentration measured by this index was higher than in the previous year. Although most interbank payment transactions take place between a small number of large banks, the HHI index values indicate a moderate concentration of interbank payment transactions and the absence of systemic risks in payment systems. A smaller value was observed in the HHI index, which measures the concentration of transaction values at the ten largest participating banks, indicating a slight decrease in the concentration of transaction values at large banks, although the concentration of their number of transactions is increasing.

Graph 7.1: Shares of Banks in Interbank Payment System in 2018



Source: CBBH, CBBH calculation

Graph 7.1. shows the individual participation of all banks in the total number and value of interbank transactions for 2018. The bank with the largest share in the interbank payment system in 2018 accounted for 19.26% of the total value or 15.17% of the total number of all transactions, while the top five banks with the largest share accounted for 52.89% of the total value of transactions.

The CBBH continued to maintain the CRC in 2018, updating on a daily basis the data for 26 banks (23 banks licensed, two banks still in liquidation and still having active receivables, and the Development Bank of FBH), 30 microcredit organizations, and 19 leasing companies and other institutions. Compared to 2017, the number of access points increased significantly and the change was mostly caused by the increase in the number of commercial banks, which are still by far the most significant users of the information stored in CRC.

In order to improve the payment systems, in 2018 the CBBH adopted a new Decision on the Single Registry of Accounts of Business Entities of BH (SRABE) and upgraded the existing registry of transaction accounts of business entities in BH to a new platform and with new functionalities. It is a registry of all accounts of business entities that perform payment operations in BH through accounts opened with banks and the CBBH. This registry has been in use since October 2018 and contains all the accounts of business entities, whereas so far it only contained transaction accounts. The SRABE will primarily benefit commercial banks, taxation authorities, administrative bodies, law enforcement and other levels of government to identify financial structures and transactions that companies and individuals may exploit illegally, i.e. avoid paying taxes, money laundering, etc. The registry will also provide information to all legal and natural persons who have to collect their receivables through authorized institutions.

The international clearing of payments between banks from BH and the Republic of Serbia continued in 2018 and a total of 10,853 payment orders were executed through the system, with a value of EUR 224.1 million. The value of transactions was much higher than in 2017, even by 30.20%, while the number of orders increased by 2.37%, which indicates the active use of this platform for the settlement of payment transactions.

7.2. Regulatory Framework

Following the adoption of sets of laws regulating banking operations in BH in 2017 and the reforms in the BH financial sector, as well as laws on amendments to the laws on banking agencies, their implementation and adoption of by-laws continued in 2018 and the first half of 2019.

Throughout 2018, the banking agencies continuously worked to improve the existing regulatory framework for banks and other financial organizations, and to adopt new by-laws. With the entry into force of the new banking regulations, a new reporting framework for banks (COREP) also entered into force, and the year of 2018 was a period of parallel reporting, i.e. using both the earlier regulatory framework and the new COREP reporting framework. In the first half of 2019, new decisions were adopted, i.e. on credit risk management and the determination of expected credit losses, which prescribe rules for the credit risk management, method of allocating exposures to credit risk levels and the determination of expected credit losses, and acceptable collateral for determining the expected credit losses and limits on maximum exposure in relation to the recognized capital. By issuing these decisions, which will be applicable from 1st January 2020, the key set of regulations was completed to a significant extent. Also, in order to continue harmonizing the regulatory framework, it is extremely important to adopt a new Law on Deposit Insurance in BH banks, which should ensure better protection of depositors and prescribe the obligation of membership in the deposit insurance program for each new licensed bank. The bill has been submitted to parliamentary procedure but has not yet been adopted.

In support of the fight against money laundering and the prevention of terrorist financing, the European Union is financing a three-year project for BH, valued at 2 million euros. The project provides for a comprehensive analysis of criminal law in BH using the Moneyval evaluation procedures and new methodology of the Financial Action Task Force (FATF), which promotes internationally recognized standards in the prevention of money laundering and financing of terrorist activities.

FINANCIAL STABILITY REPORT 2018

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
	25.06.2018	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
	15.03.2019	BBB	Stable	A-2

	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+
Spain	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
	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
Italy	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
	26.10.2018	BBB	Negative	A-2
	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
Cyprus	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
	14.09.2018	BBB-	Stable	A-3

Source: Standard & Poor's

Table A2: Real Estate Price Index

		Sarajevo	Mostar	Zenica	Tuzla	TOTAL
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
2018.	Q1	86	119	131	104	93
	Q2	87	128	131	105	94
	Q3	85	122	135	113	94
	Q4	88	127	132	110	94

Source: CBBH

Table A3: Survey of Largest Debtors by Standard Loans according to BH CA 2010, 31 December 2018

KM thousand

Activity	Loans, residual debt	Share in activity	Share in the total claims
A: Agriculture, forestry and fishing	**224.480**		**2,9%**
Growing of years long crops			
Growing of other years long crops	16.535	7,4%	0,2%
Plant and cattle production, hunting and related service activities, of which:			
Supporting activities in growing of crops	15.818	7,0%	0,2%
B: Mining and quarrying	**463.503**		**5,9%**
Mining of coal and lignite, of which:			
Mining of lignite	32.045	6,9%	0,4%
C: Manufacturing industry	**1.683.872**		**21,4%**
Production of beverages, of which:			
Beer production	28.356	1.7%	0,4%
Production of food, of which:			
Production of bread; fresh rolls and cakes	61.145	3,6%	0,8%
Meat manufacturing and preservation	28.361	1,7%	0,4%
Manufacture of plastic packing goods	21.283	1,3%	0,3%
Manufacture of wood and products of wood and cork, except for furniture; production of items of straw and wicker, of which:			
Sawing and planing of wood (manufacture of sawn timber); wood impregnation	55.410	3,3%	0,7%
Production of finished metal products, except for machines and equipment, of which:			
Production of metal structures and their parts	44.811	2.7%	0,6%
Electric equipment production			
Production of electricity distribution and control devices	29.526	1.8%	0,4%
D: Production and supply of electricity, gas, steam and air conditioning	**274.321**		**3,5%**
Production and supply of electricity, gas, steam and air conditioning, of which:			
Production of electricity	114.598	41,8%	1,5%
E: Water supply, sewerage, waste management and environment remedial activities	**76.963**		**1,0%**
Water collection, treatment and supply, of which:			
Water collection, treatment and supply	46.668	60,6%	0,6%
F: Construction	**529.105**		**6,7%**
Building construction, of which:			
Residential and non-residential building construction	119.004	22,5%	1,5%
G: Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles	**2.067.085**		**26,3%**
Wholesale, except for Trade in Motor Vehicles and Motorcycles, of which:			
Non-specialized Wholesale	205.424	9,9%	2,6%
Wholesale of solid, liquid and gas fuels and similar products	81.000	3,9%	1,0%
Wholesale of pharmaceutical products	59.812	2,9%	0,8%
Wholesale of wood, construction materials and sanitary equipment	46.859	2,3%	0,6%
Wholesale of other household goods	35.084	1,7%	0,4%
Non-specialized wholesale trade in food, beverages and tobacco products	30.791	1,5%	0,4%
Wholesale in metal goods, installation materials, devices and equipment for water supply and heating	33.094	1,6%	0,4%
Retail trade, except for trade in motor vehicles and motorcycles, of which:			
Retail trade in non-specialized stores mainly in food, beverages and tobacco products	218.953	10,6%	2,8%
Retail trade in motor fuels in specialized stores	95.078	4,6%	1,2%
Other retail trade in non-specialized stores	74.176	3,6%	0,9%
H: Transportation and warehousing	**297.602**		**3,8%**
Land transport and transport via pipelines			
Transport of goods by road	95.713	32,2%	1,2%
Railway transport of passengers and goods	18.359	6,2%	0,2%

I: Accommodation and food service activities (hotels and catering)	**287.297**		**3,6%**
Accommodation, of which:			
Hotels and similar	77.455	27,0%	1,0%
J: Information and communications	**178.196**		**2,3%**
Publishing, of which:			
Book publishing	35.957	20,2%	0,5%
K: Financial activities and insurance activities	**356.935**		**4,5%**
Other financial service activities, except for insurance and pension funds, of which:			
Other lending mediation	52.773	14,8%	0,7%
L: Real estate business	**149.027**		**1,9%**
Real estate business, of which:			
Renting and management of own or leased real estate	75.667	50,8%	1,0%
Agency for real estate business	30.920	20,7%	0,4%
M: Professional, scientific and technical activities	**208.087**		**2,6%**
Architecture and engineering activities; technical testing and analysis, of which:			
Architecture and engineering activities and the related technical consulting	36.739	17,7%	0,5%
N: Administrative and support service activities	**49.520**		**0,6%**
Travel agencies, travel organizers, tour operators and other booking services and related activities, of which:			
Activities of travel agencies	11.081	22,4%	0,1%
Protection and investigation activities			
Private protection activities	9.210	18,6%	0,1%
O: Public administration and defence; compulsory social insurance	**745.993**		**9,5%**
Public administration, and economic and social policy of community, of which:			
General activities of public administration	536.004	71,9%	6,8%
Activities of compulsory social insurance, of which:			
Activities of compulsory social insurance	137.848	18,5%	1,8%
P: Education	**17.273**		**0,2%**
University education			
University education	5.974	34,6%	0,1%
Q: Activities of health care and social care	**141.345**		**1,8%**
Health care activities			
Hospital activities	87.617	62,0%	1,1%
R: Art, entertainment and recreation	**7.055**		**0,1%**
Libraries, archives, museums and other culture activities			
Activities at historic places and buildings and similar sights for visitors	317	4,5%	0,0%
S: Other service activities	**19.837**		**0,3%**
Other personal service activities			
Funeral and similar activities	813	4,1%	0,0%
T: Activities of households as employers; activities of households producing various goods and performing various services for own needs	**675**		**0,0%**
Activities of private households producing various goods for their own needs			
Activities of private households producing various goods for their own needs	552	81,8%	0,0%
U: Activities of extraterritorial organizations and bodies	**95.251**		**1,2%**
Activities of extraterritorial organizations and bodies			
Activities of extraterritorial organizations and bodies	88.028	92,4%	1,1%

Source: CRC

Table A4: Main Positions in Foreign Trade of Goods

	Name	Value of exports, million KM 2017	Value of exports, million KM 2018	Export price index I - XII 2018 / I - XII 2017	Nominal export growth, in %	Change of export values, (in percentage points) Price effect	Exports volume effect
		1	2	3	4 = 2/1	5	6
main groups of export products	**Base metals and base metal products**	**1.975,8**	**2.290,0**		**15,9**		
	Out of it: iron and steel	519,0	631,1	112,1	21,6	13,1	8,5
	Iron and steel products	584,6	713,4	111,5	22,0	12,6	9,4
	Aluminium and aluminium products	652,3	721,7	107,1	10,6	7,4	3,3
	Machinery, appliances, mechanical and electrical equipment	**1.290,1**	**1.437,1**		**11,4**		
	Machinery, appliances, mechanical equipment, boilers and parts thereof	707,8	764,6	102,0	8,0	2,1	5,9
	Electrical machinery, equipment and parts thereof, sound recorders or reproducers, television image and sound recorders or reproducers and parts and equipment for such products	582,3	672,4	110,1	15,5	10,6	4,8
	Miscellaneous products	**1.226,7**	**1.227,1**		**0,0**		
	Of which: furniture; mattress supports, bedding and similar products; lamps and lighting fittings, not elsewhere specified or included; lighting signs, lighting name-plates ; prefabricated buildings	1.149,6	1.118,8	97,0	-2,7	-3,0	0,3
	Mineral origin products	**1.051,1**	**1.298,9**		**23,6**		
	Of which: mineral fuels, mineral oils and products of their distillation, electric energy, bituminous substances and mineral waxes	924,7	1.162,7	115,2	25,7	16,6	9,2
	Products of chemical industry or related industries	**958,3**	**991,9**		**3,5**		
	Inorganic chemical products, organic and inorganic compounds of precious metals, rare metals, radioactive elements and isotopes	604,0	635,0	101,4	5,1	1,5	3,6
	Wood and wood products	**783,8**	**801,7**		**2,3**		
	Wood and wood products; charcoal	779,5	797,6	109,4	2,3	8,8	-6,5

	Naziv	Value of imports, million KM	Value of imports, million KM	Import price index	Nominal import growth, in %	Change of import values, (in percentage points)	
		2017	2018	I - XII 2018 / I - XII 2017		Price effect	Imports volume effect
		1	2	3	4 = 2/1	5	6
main groups of import products	**Mineral origin products**	**2.749,0**	**2.974,5**		**8,2**		
	Of which: mineral fuels, mineral oils and products of their distillation, electric energy, bituminous substances and mineral waxes	2.641,7	2.845,1	108,2	7,7	8,2	-0,5
	Machinery, appliances, mechanical and electrical equipment	**2.526,1**	**2.664,1**		**5,5**		
	Machinery, appliances, mechanical equipment, boilers and parts thereof	1.409,3	1.545,4	110,7	9,7	10,6	-0,9
	Electrical machinery, equipment and parts thereof, sound recorders or reproducers, television image and sound recorders or reproducers and parts and equipment for such products	1.116,9	1.118,7	100,6	0,2	0,6	-0,4
	Base metals and base metal products	**1.955,0**	**2.203,4**		**12,7**		
	Out of it: iron and steel	559,7	702,3	103,2	25,5	3,9	21,6
	Iron and steel products	515,9	530,2	104,3	2,8	4,2	-1,4
	Aluminium and aluminium products	295,1	368,4	103,5	24,8	4,2	20,6
	Chemical industry or related industry products	**1.680,9**	**1.787,0**	107,7	**0,1**	**7,6**	**-1,3**
	Inorganic chemical products, organic and inorganic compounds of precious metals, rare metals, radioactive elements and isotopes	210,6	252,9	123,7	0,2	23,0	-2,9
	Of which: pharmaceutical products	544,7	570,6	101,5	0,0	1,6	3,2
	Essential oils and resins, perfumery, cosmetic or toilet products	220,7	235,2	102,4	0,1	2,5	4,1
	Miscellaneous chemical industry products	162,9	169,6	73,7	0,0	-37,2	41,4
	Food products	**1.536,8**	**1.576,1**		**2,6**		
	Cereal, flour, starch or milk products; pastries	196,9	212,8	101,1	8,1	1,2	6,9
	Miscellaneous food products	249,1	262,4	99,5	5,3	-0,6	5,9
	Beverages, alcohols and vinegar	327,6	346,0	103,9	5,6	3,9	1,6
	Food industry waste and scraps; prepared animal food	179,7	191,7	104,2	6,6	4,3	2,4

Source: BHAS, CBBH calculation

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

2018	Loans		Commission loans	Revolving loans	Letters of credit	Factoring	Guarantees	Potential debt		
		of which overall loans						Guaran-tees	Revolving loans	Overall loans
A	224.480	90.586	16.304	56.409	102	0	592	5.183	16.223	19.392
B	463.503	273.726	5.117	64.573	35	0	7.257	69.897	8.331	77.719
C	1.683.872	1.309.570	119.753	667.509	25.853	302	11.136	233.896	244.698	490.050
D	274.321	28.990	0	20.042	260	0	0	24.627	17.686	16.054
E	76.963	87.482	187	28.489	143	0	1	7.290	5.699	29.965
F	529.105	586.519	46.724	184.263	3.297	942	13.816	342.828	88.965	289.024
G	2.067.085	2.152.749	17.935	1.150.588	33.467	1.560	36.499	591.845	511.309	611.888
H	297.602	290.493	2.117	92.490	0	0	7.101	207.314	42.172	90.245
I	287.297	97.043	11.960	10.730	0	0	399	840	11.181	24.200
J	178.196	77.809	1.512	35.897	892	0	1.480	31.520	24.304	49.518
K	356.935	33.581	5.961	33.113	0	0	5.042	72.523	23.109	18.331
L	149.027	41.235	2.711	8.579	0	0	214	220	1.825	9.850
M	208.087	176.647	7.171	113.383	0	0	2.945	74.487	39.486	71.031
N	49.520	23.824	99	9.466	0	0	90	11.185	4.413	13.142
O	745.993	3.556	1.381	2.138	0	0	438	6.270	18.420	5.931
P	17.273	1.508	48	1.957	0	0	63	1.007	1.788	2.416
Q	141.345	30.005	123	10.573	0	110	42	455	5.429	2.366
R	7.055	6.127	340	2.150	0	0	0	9.573	1.486	1.824
S	19.837	18.732	8.469	6.447	0	0	353	3.071	4.156	4.396
T	675	0	0	136	0	0	638	655	213	0
U	95.251	2.018	1.391	556	0	0	0	0	1.781	1.446
TOTAL	**7.873.421**	**5.332.199**	**249.304**	**2.499.486**	**64.048**	**2.915**	**88.107**	**1.694.685**	**1.072.676**	**1.828.789**
									Actual debt:	**10.777.280**
									Potential debt:	**4.596.149**

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 2018

KM thousand

Activity	Residual debt and due uncollected principal				
	BAM	Foreign currency loans and foreign currency indexed loans			
		EUR	CHF	USD	KWD
A	71.465	151.971	208	1.101	0
B	330.404	124.897	0	0	0
C	626.330	1.053.300	301	0	367
D	34.081	242.780	0	0	0
E	36.195	39.844	383	0	0
F	229.994	296.017	0	0	431
G	768.550	1.293.580	483	0	118
H	92.584	204.799	275	0	117
I	83.089	204.697	0	0	0
J	57.270	120.966	0	0	0
K	70.062	205.306	0	102.548	0
L	31.125	118.704	0	0	0
M	70.437	137.535	0	0	0
N	18.789	30.610	0	0	0
O	416.723	321.337	0	0	0
P	5.920	11.340	0	0	0
Q	44.137	97.300	0	0	0
R	1.580	5.507	0	0	0
S	4.924	14.984	0	0	0
T	141	537	0	0	0
U	2.526	90.853	0	3.896	0
UKUPNO	**2.996.327**	**4.766.865**	**1.650**	**107.546**	**1.033**

Source: CRC

Table A7: Status Changes in Banks in the Period 2001-2018

	Number of Banks	Type of Change	Date of Change
1.	Sparkasse Bank d.d. Bosna i Hercegovina Sarajevo	Sparkasse Bank d.d. Sarajevo changed its name into Sparkasse Bank d.d. BiH Sarajevo	Q3 2014
	Sparkasse Bank d.d. Sarajevo	ABS banka d.d. Sarajevo changed its name into Sparkasse Bank d.d. Sarajevo	Q3 2009
	ABS banka d.d. Sarajevo	Became a member of Steiermaerkische Bank und Sparkassen AG, Erste Group	Q4 2006
	Šeh-in banka dd Zenica	Merged to ABS banka d.d. Sarajevo	Q2 2002
2.	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
	Prviredna 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 banka a.d. Banja Luka	Nova Banjalučka banka a.d. Banja Luka changed its name	Q2 2008
	Nova Banjalučka banka a.d. Banja Luka	Merged to HVB group, continued its operations as a separate legal person	Q4 2005
	Banjalučka banka a.d. Banja Luka	Privatised and changed its name into Nova Banjalučka banka a.d. Banja Luka	Q1 2002
6.	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 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. Doboj	Merged to Pavlović International banka	Q2 2003
	Privredna banka a.d. Brčko	Merged to Pavlović International banka	Q4 2002
	Semberska banka a.d. Bijeljina	Merged to Pavlović International banka	Q4 2001
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: CBBH