FINANCIAL MARKETS IN BOSNIA AND HERZEGOVINA: CURRENT SITUATION AND TRENDS

Igor Živko, Josipa Grbavac, Anela Čolak

Faculty of Economics, University of Mostar, Bosnia and Herzegovina

Abstract

The financial system of Bosnia and Herzegovina is a bank-dominated system. In the financial system there are two stock exchanges together with banks. Financial markets in Bosnia and Herzegovina are thin and illiquid. Authors in this paper will analyse the situation in financial markets through value of stock exchanges index on time series in the period 2005-2015. Changes in the economic and financial environment have an impact on trends in financial markets. So, the second aim of this paper is to examine the correlation between changes in economic measured by indicators (GDP, unemployment rate, inflation, monetary aggregates and interest rate on loans and deposits) and trends in financial markets.

Key words: *financial markets, state, trends, financial crisis, Bosnia and Herzegovina*

1. INTRODUCTION

The financial system of Bosnia and Herzegovina is "bank dominated", which means that banks (credit institutions) are dominant financial institutions in the financial system. Banks have a major role in the financial intermediation process between deficit and surplus money units. However, in the last few years there is an increasing role of financial markets and other non-banking financial institutions in the intermediation process between savers and investors. Bosnia and Herzegovina's financial sector includes: banks, investment funds, leasing companies and micro-credit organisations. Financial markets have an important role in transferring saving income to deficit units (Mishkin, 2005, 16). Modern financial literatures recognize: money and capital markets, financial derivatives markets and foreign markets. Efficiency of financial markets represents the degree in which the price of financial assets reflects and represents the real image of the market. Efficient capital markets are those where information has an impact on stocks prices. Public disclosure and supervisor's information are aimed to promote safety and soundness of the financial system and consumer protection.

Availability of information and regulation accompany development of national financial markets and modern changes in those markets make the essence of efficiency of the financial markets. Exact development of these elements of financial markets depends on the regulation and institutional framework. Efficient, transparent and developed financial markets ensure enterprises' access to funding resources and make an element of business environment in analyses of national competitiveness. Existing capital market is not a sufficient reason for increasing economic development. We cannot conceive a good managed economic growth without a developed financial market, precisely financial infrastructure.

2. FINANCIAL MARKETS IN BOSNIA AND HERZEGOVINA: CURRENT SITUATION

The established institutional framework from 1999 and the created institutions of capital markets (Securities Commission and Registry of Securities in the Federation of Bosnia and Herzegovina and the Republic of Srpska) are the bases of the capital market in Bosnia and Herzegovina. The capital markets are established at entity levels and there are two parallel markets and two stock exchanges – the Sarajevo Stock Exchange (SASE) and the Banja Luka Stock Exchange (BLSE).

First transactions on SASE and BLSE were made in 2002. In the period 2002-2007, B&H stock markets, as other stocks markets in the region, have recorded an increase in all indicators (total turnover, number of trade stocks, stock price and market capitalization). Capital markets in Bosnia and

Herzegovina are small markets in comparison with markets in the region measured through market turnover, amount of financial instruments, and number of investors in markets. Also, B&H market is characterized by absence of different types of financial instruments, insufficient number of quality issuers of stocks and high price volatility. Based on all these characteristics, it can be concluded that we talk about emerging markets.

Development of other sub-sectors of the financial sector is recorded in Bosnia and Herzegovina in recent years. In the first place, we talk about financial markets, investment funds, and leasing, insurance and micro-credit organizations. According to trading volume and market capitalization, as well as number of participants, financial markets in Bosnia and Herzegovina are weak and undeveloped capital markets. Their development problems are: insufficient offer of financial instruments, existing entities borders, illiquidity and the weak economic situation in B&H. Turnover measures the capacity of a stock market to liquidity provision function. Stock market capitalization is a measure of both the stock market's ability to allocate capital to investment projects and its ability to provide significant opportunities for risk diversification for investors.

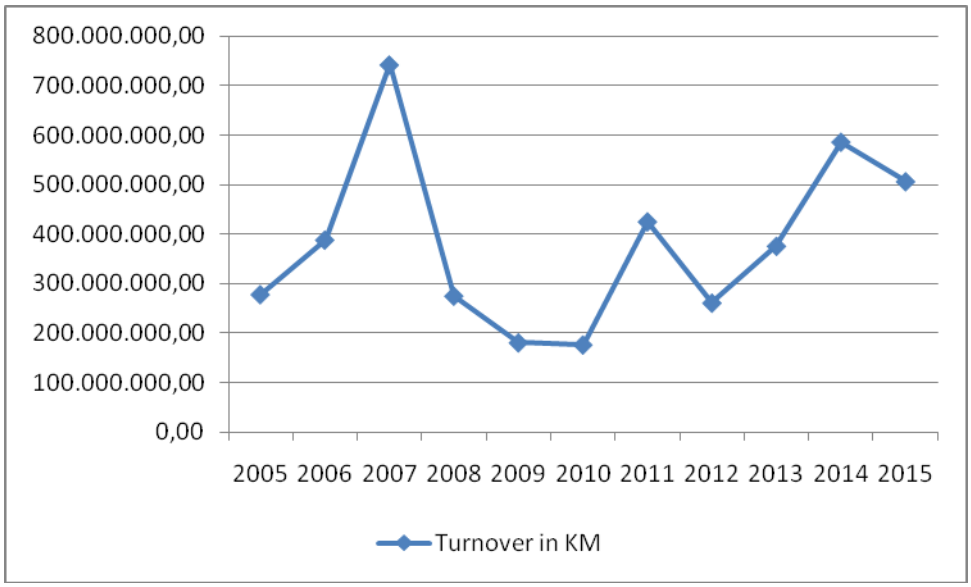
Capitalisation of the Banja Luka Stock Exchange is presented in Figure 1, turnover in Figure 2, market trades on the market in Figure 3 and BIRS index on the Banja Luka Stock Exchange in Figure 4.

Figure 1. Capitalisation on the Banja Luka Stock Exchange in the period 2005-2015



Source: Banja Luka Stock Exchange, Annual report, different years

Figure 2. Turnover on the Banja Luka Stock Exchange in the period 2005-2015



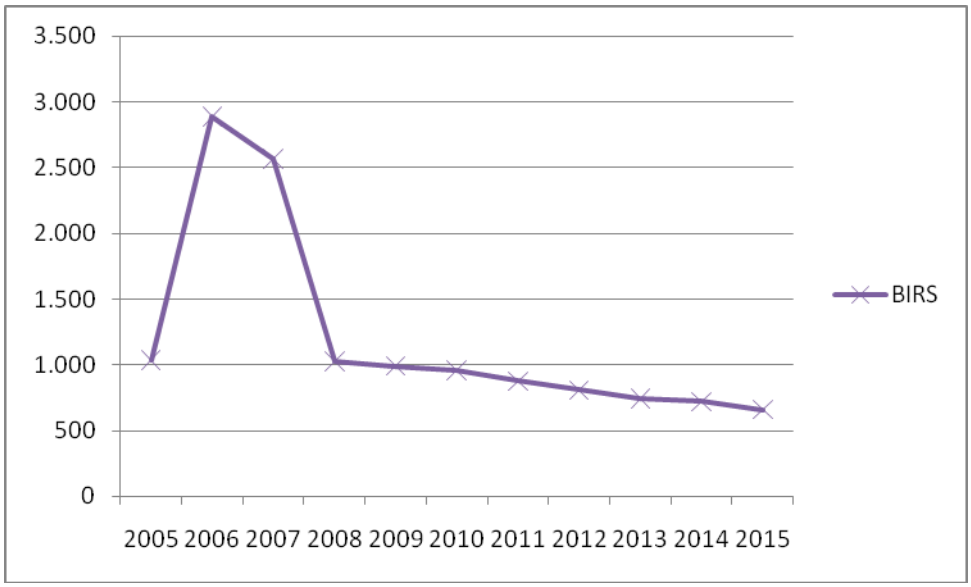
Source: Banja Luka Stock Exchange, Annual report, different years

Figure 3. Trades on the Banja Luka Stock Exchange in the period 2005-2015



Source: Banja Luka Stock Exchange, Annual report, different years

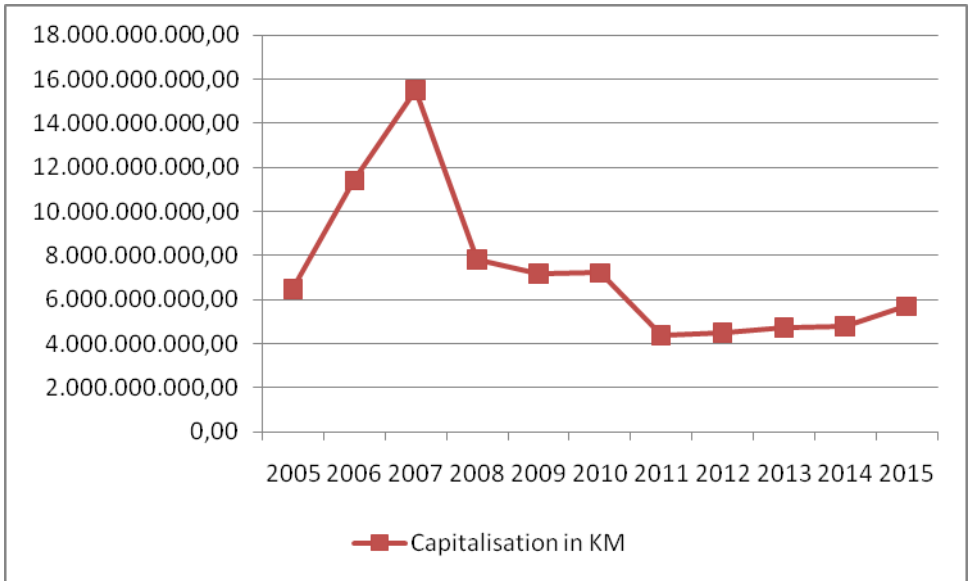
Figure 4. Stock Exchange Index of the Republic of Srpska in the period 2005-2015



Source: Banja Luka Stock Exchange, Annual report, different years.

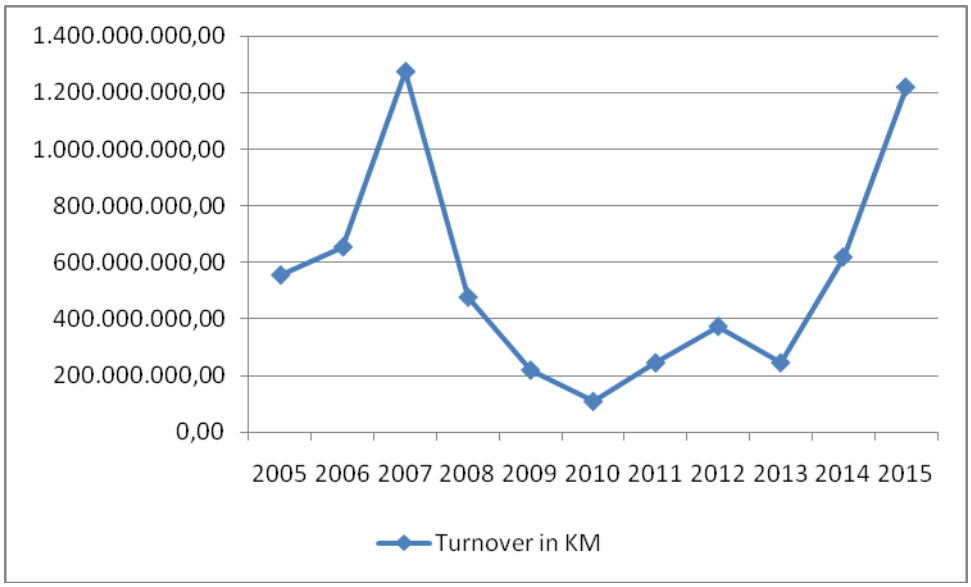
Capitalisation on the Sarajevo Stock Exchange is presented in Figure 5, turnover in Figure 6, trades on the market in Figure 7 and SASX-10 index on the Sarajevo Stock Exchange in Figure 8.

Figure 5. Capitalisation on the Sarajevo Stock Exchange in the period 2005-2015



Source: Sarajevo Stock Exchange, Annual report, different years

Figure 6. Turnover on the Sarajevo Stock Exchange in the period 2005-2015



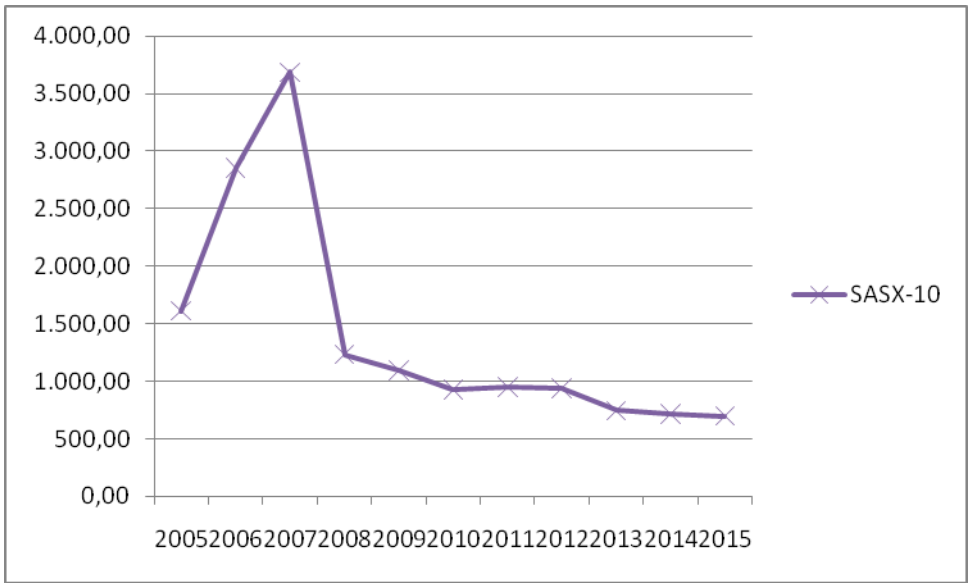
Source: Sarajevo Stock Exchange, Annual report, different years

Figure 7. Trades on the Sarajevo Stock Exchange in the period 2005-2015



Source: Sarajevo Stock Exchange, Annual report, different years

Figure 8. Sarajevo Stock Exchange Index – SASX-10 in the period 2005-2015



Source: Sarajevo Stock Exchange, Annual report, different years.

Primary stock markets have not recorded a satisfactory level of development yet and have not been used as a funding resource for business and development of issuers. In B&H, the only issued and trade financial instruments are stocks, while other types of financial instruments do not exist. Secondary, capital markets in F B&H represent a more developed part of the capital market and record increased activities on it, firstly in market turnover on SASE.

Total market capitalization on both capital markets in Bosnia and Herzegovina in previous years shows a slow increase after 2008 and the financial crisis which had an impact on markets. In the period before 2008, a rise in share prices and turnover volumes on the Sarajevo and Banja Luka stock exchanges were recorded. The reason for this trend is a general loss of interest on both markets by foreign investors in the region. Financial markets show no activity due to the financial crisis and fears of investors.

Only the government securities market on both markets has recently begun to grow but it is still relatively small in both absolute and relative terms and also highly illiquid. In the beginning of 2008, two entities' capital markets signed an agreement on regional cooperation with capital markets in other countries of ex-Yugoslavia.

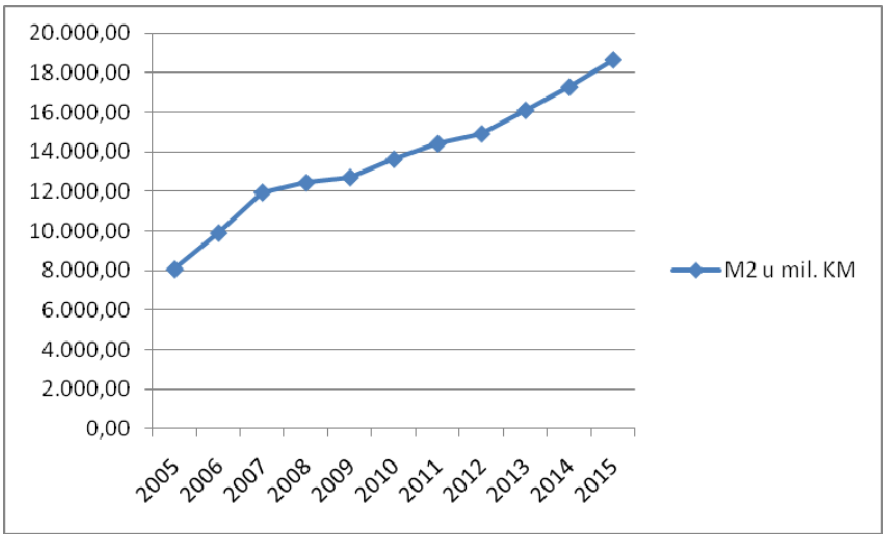
3. TRENDS IN FINANCIAL MARKETS IN BOSNIA AND HERZEGOVINA

The correlation between stock market and macroeconomic variables is specially analysed in industrialized economies. The illustrative list of studies for developed economies includes Schumpeter (1912), Cheung and Ng (1998), Darrat and Dickens (1999). These studies identify such factors as industrial production, inflation, interest rate, money supply and so forth as being important in explaining stock prices. We will use elements of fundamental analysis to analyze the possibility of future development in financial markets in Bosnia and Herzegovina. Fundamental analysis is a method of evaluating a security by attempting to measure its intrinsic value by examining related economic, financial and other qualitative and quantitative factors. Fundamental analysts attempt to study everything that can affect the security's value, including macroeconomic factors (like the overall economy and industry conditions) and individual specific factors (like the financial condition and management of companies). Macroeconomic stability may be an important factor for the development of the stock market. We expect that the higher the macroeconomic stability is, the more incentive

firms and investors have to participate in the stock market. Furthermore, corporate profitability can be affected by changes in monetary, fiscal, and exchange rate policies. Therefore, we expect the stock market in countries with stable macroeconomic environment to be more developed.

In the paper, we present selected macroeconomic indicators in B&H: monetary supply measured by monetary aggregate M2, economic activity presented in GDP growth rate and rate of inflation as measure of price stability. In figures 9, 10 and 11, we will present major macroeconomic indicators which we often use in fundamental economic analyses.

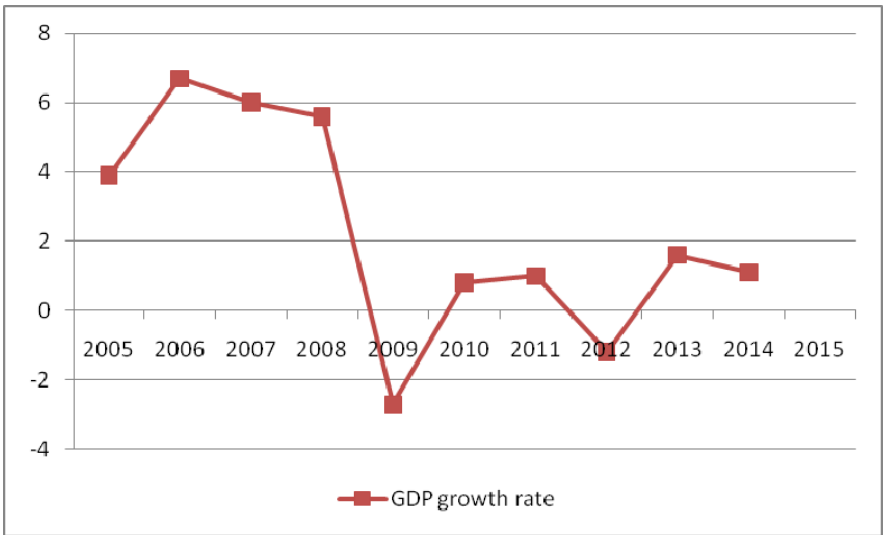
Figure 9. Monetary supply – M2 in the period 2005-2015



Source: Central bank of Bosnia and Herzegovina, Annual report, different years

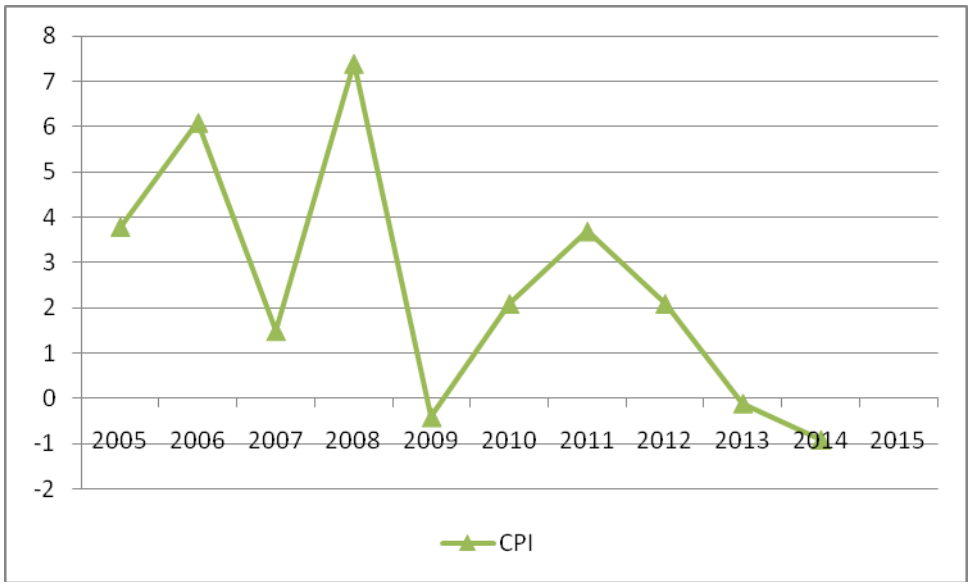
We can see how money supply has increased in Bosnia and Herzegovina as a result of foreign direct investment, capital transfer in balance of payment and through monetary policy decreasing requirement reserve rate.

Figure 10. GDP growth rate in the period 2005-2015



Source: Central bank of Bosnia and Herzegovina, Annual report, different years

Figure 11. GDP growth rate in the period 2005-2015



Source: Central bank of Bosnia and Herzegovina, Annual report, different years

We made simple regression analyses of macroeconomics indicators and indicators of stock exchange in Bosnia and Herzegovina.

Table 1. Correlation between macroeconomic indicators and market indicators on the Banja Luka Stock Exchange

		Turnover	Capitalisation	BIRS
M2 in mil. KM	Pearson Correlation	,180	-,218	-,543
	Sig. (2-tailed)	,619	,545	,105
	N	10	10	10
GDP growth rate	Pearson Correlation	,446	,607	,708*
	Sig. (2-tailed)	,196	,063	,022
	N	10	10	10
CPI	Pearson Correlation	-,203	,138	,357
	Sig. (2-tailed)	,574	,703	,312
	N	10	10	10

Source: authors

Table 2. Correlation between macroeconomic indicators and market indicators on the Sarajevo Stock Exchange

		Turnover	Capitalisation	Trades	SASX-10
M2 in mil. KM	Pearson Correlation	-,333	-,752*	-,648	-,728*
	Sig. (2-tailed)	,382	,019	,059	,026
	N	9	9	9	9
GDP growth rate	Pearson Correlation	,665	,703*	,692*	,722*
	Sig. (2-tailed)	,051	,035	,039	,028
	N	9	9	9	9
CPI	Pearson Correlation	,075	,259	,210	,285
	Sig. (2-tailed)	,848	,500	,588	,458
	N	9	9	9	9

Source: authors

As we look at the results of the correlation, we can see that we do not have a significant correlation between macroeconomic indicators and indicators on capital market in Bosnia and Herzegovina. We can identify some of the reasons:

- slow development of capital market,
- unstable economic situation and downturn in economic growth,
- continuing sense of political uncertainty,
- small financial power of enterprises,
- financial instability.

Markets are still small, relatively less liquid, in particular bond markets, with a weak risk management practice and inadequate information disclosure. Transparency, efficiency and integration of the financial market can encourage development of the internal market and its highest growth and creation of new jobs through better capital allocation as results of decreasing transaction costs. Transparency guarantees investiture's safety and allows simplified evaluation of performance and assets of all participants in financial markets. Transparency has two goals: investiture protection and market efficiency insurance.

CONCLUSION

Financial markets in countries in transition must have an important role in financing the economy. The paper examines the relationships between stock market capitalization, turnover and stock market index and domestic macroeconomic variables of B&H economy. In the paper, simple correlation between three macroeconomic variables – GDP, M2 and CPI and indicators on capital markets is used. It should be noted that capital markets are not in correlation with the changes in macroeconomic variables. So, it can be concluded that the low level of development of the financial market in B&H is not the result only of the macroeconomic situation. Development of financial markets requires other measures and activities: business development, institutional and regulatory framework, developed education infrastructure as support to financial markets and transparency in financial markets.

REFERENCES

Banja Luka Stock Exchange, Annual report, different years.

Sarajevo Stock Exchange, Annual report, different years.

CBBH, Report of financial stability 2014, Sarajevo, 2015.

CBBH, Anuual report, different years.

Cheung, Y.W., Ng, L.K., International evidence on the stock exchange and aggregate economic activity, Journal of Empirical Finanace 5(3). 1999.

Darrat A. F., Dichens R. N., On the inter-relationship among real monetary and financial indicators, Applied Finance Economics, 9(3), 1999.

Orsag, S., Poslovne financije, Avantis, Zagreb, 2015.

Schumpeter, J. A., The theory of economic development. New York: Oxford University Press, 1912.