COMPARATIVE ANALYSIS OF OPERATIONS OF INVESTMENT FUNDS IN SELECTED COUNTRIES OF THE WESTERN BALKANS

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ARTICLE INFO

Review Scientific Paper
Received: 26.02.2022
Revised: 17.04.2022
Accepted: 19.04.2022

doi 10.7251/ACE2236113B
UDC
336.76:338.124.4

Keywords: *financial market, investment funds, savings, economic development, correlation analysis, comparative analysis*

JEL Classification: E20, E44

ABSTRACT

Investment funds are gaining importance in recent times, since they allow small investors to reduce risk, use financial expertise, facilitate access to the international capital market and achieve a higher rate of return on investments compared to banks. The aim of this research is to show, in accordance with the available data and using comparative analysis, the similarities and differences in the operations of investment funds in Bosnia and Herzegovina, Serbia, Croatia and Montenegro, and to prove that these financial institutions, although they have potential, do not contribute to the economic development of these countries to the extent that they could. The object of the comparison is the nature of the origin, the number, the type, the net asset value and the percentage of the participation of investment funds in the GDP of the observed countries. The main hypothesis is that investment funds in analyzed countries do not represent a significant part of the financial system and, due to the nature of their creation, do not make a significant contribution to economic development. Two auxiliary hypotheses arise from the main hypothesis: investment funds, created in the process of privatization, due to the absence of essential market conditions for their establishment, are not able to achieve a significant impact on economic growth; the growth of the value of the investment funds assets does not affect the growth of the volume of investments in the country. In addition to the comparative analysis methods, the method of simple correlation analysis, as well as other scientific methods, will be used to prove these hypotheses. The results of the survey confirmed the hypothesis that investment funds do not represent an important part of the financial system in the analyzed countries today and, due to the nature of their creation, and do not make a significant contribution to the economic development.

1. INTRODUCTION

Financial markets are one of the most important parts of the financial and total economic system of every country. They enable the unobstructed functioning of the national economy. There is great interdependence between the financial market and the economic development of the country, because economic development leads to a rise in the income of citizens, which increases savings, and therefore the financial market. On the other hand, if there are no savings, there are no investments and no economic growth and development. The basic task of the financial system is to raise the savings and focus on investments in the most effective and efficient way.

The function of intermediation was first performed by banks and the development of the financial system also brought the development of other financial institutions, which directed the savings collected towards investors. This process is called financial intermediation. The growth of financial mediation stimulates economic development in three ways: it enables new sources of financing and thus fosters new investment opportunities; it increases the productivity of investments due to the selection of projects to be financed; it contributes to attracting savers from other countries and reduces the outflow of domestic savings (Plakalović, 2004).

In the well-known Solow macroeconomic model, savings will affect the level, but not the steady-state growth rate of production. Hence, the growth of savings will lead to an increase in output in the short term, but once stability is achieved, there will be no growth, which means that in the long run, savings will not affect the growth rate. As equity capital increases, the depreciation will increase, and hence the need to replace the capital. Thus, in order to maintain a constant stock of capital, more and more investments will be needed. On the other hand, the marginal productivity of capital is declining, so investment has no place to grow. The principle of declining marginal productivity means that more investments will become less and less payable (Plakalović, 2004).

Investment funds are among the financial institutions that have the character of a financial intermediary and enable the channeling of investment savings. When it comes to investment funds in less developed countries, such as former SFRY members, they are considered to be mostly underdeveloped, regardless of the fact that, after the break-up of this socialist country, there has been a significant increase in the volume of operations compared to the previous period. The different pace of growth in this part of the financial system has led to differences in the degree of development achieved by individual countries.

It is evident that for the structural changes in the BiH economy, which should provide sustainable and continuous growth, it would be necessary to change the structure of the financial system. Banks did not realize this role, as well as corporations and insurance companies. Increasing the number and activities of investment funds could bring a concrete development benefit to this plan as well (Mayer et al., 2003).

Investment funds have played an important role in the mass privatization process in many transition economies. Mass voucher privatization (MVP) survey conducted in Russia and the Czech Republic, the countries where this process first took place, showed that investment funds did not meet expectations. They were not able to increase the value of assets and make profits for investors, and the main reasons were asymmetric information, poor property relations and lack of an adequate institutional framework to regulate the operations of these financial institutions. The only success was the privatization of a large number of companies in a short period of time (Pistor & Spicer, 1997).

2. LITERATURE REVIEW

Investment funds have played an important role in the mass privatization process in many transition economies. Mass voucher privatization (MVP) survey conducted in Russia and the Czech Republic, where this process first took place, showed that investment funds did not meet expectations. They were not able to increase the value of assets and make profits for investors, and the main reasons were asymmetric information, poor property relations and lack of an adequate institutional framework to regulate the operations of these financial institutions. The only success was the privatization of a large number of companies in a short period of time (Pistor & Spicer, 1997).

Different authors have defined investment funds in different ways. According to Šoškić (2001), an investment fund is a financial institution that withdraws funds from smaller individual investors and emits shares or stakes in return. According to the Croatian author Leko (2012), investment funds are institutional investors who collect cash from the general public and place them on long-term and short-term financial instruments. According to American authors, investment funds are financial intermediaries that collect individual investor assets and invest in a potentially wide range of securities or other assets. Pooling of the funds is the key to the idea which investment funds are based on. Each investor has a portfolio receivable in proportion to the amount he has invested. This offers small investors the opportunity to combine and draw on the benefits of largescale investments (Bodie, Kane & Marcus, 2009). Taking into account all the above definitions, it can be said that the concept of an investment fund always refers to raising funds from smaller investors and investing them in different types of financial instruments.

Open-ended funds are specific because they invest in liquid securities, whose market value is determined on a daily basis, and investors are allowed to invest and withdraw funds on a daily basis. The market value of all securities constituting the investment portfolio is called the net asset value (NAV), which is determined according to the following formula:

$$NAV_t = \frac{TVA_t - P_t}{N_t}$$

where:

TVA_t – the market value of the assets of the fund at time *t*, which is determined as the sum of the prices of each individual security multiplied by the total number of the securities in the fund plus the amount of cash the fund holds;

P_t – the amount of liabilities that must be deducted from the total market value of asset;

N_t – the number of issued shares of the fund at the moment *t*.

The shares prices of open investment fund are quoted on the stock exchange, with the necessary price and the required price. At the offered (bid) price, the fund is ready to purchase the securities from investors. At the asking price, the fund offers its securities to the public for sale and it is equal to the net asset value increased by the amount of commission charged by the fund. Some open-end funds do not charge this commission and then they are called unencumbered funds (Erić, 2003, p. 217). Closed-end investment funds operate as well as all the other stock companies, raising funds by selling shares through a public offering.

The second criterion of division is the investment objectives, by which they differ: investment funds that invest in shares, those that invest in debt securities and those that invest in short-term financial instruments of the money market. Funds that invest in debt instruments aim to preserve the value of capital and generate returns in the future.

Money market funds invest in short-term money market instruments, such as treasury bills, deposit certificates, etc. They are different from other types of funds in exceptional liquidity and the ability to issue checks and credit cards to shareholders. Funds can also be managed or unmanaged. For managed funds, shares are constantly bought and sold, while for unmanaged fund, cash assets are merged and invested in a portfolio of securities that is constant for the duration of the fund (Bodie, Kane & Marcus, 2009).

Country fund is a special type of closed-end investment fund, which is predetermined for investment in security-specific countries. A special type of closed-end fund is a fund that invests in various types of real estate or mortgage loans (REITs - real estate investment trusts). Hedge funds are not legally regulated as other investment funds (Mishkin & Eakins, 2018).

The economy of each country consists of two key sectors - real and financial. They are in an interdependent position, so without a strong first - there is no strong second sector. Investment funds are becoming increasingly important participants in the global financial market. This is proved by the fact that the total global assets they managed at the end of 2017 amounted to 49.3 trillion US dollars, which is 18.25% more than in the previous year. As can be seen in Figure 1, in this property the share of USA funds is 45%, European 36%, while investment funds of the rest of the world account for 19% of total assets. Considering that in 2014 this ratio was 59%:29%:12%, it can easily be concluded that there has been progress in the operations of investment funds in the rest of the world, which has increased their significance (ICI, 2018).

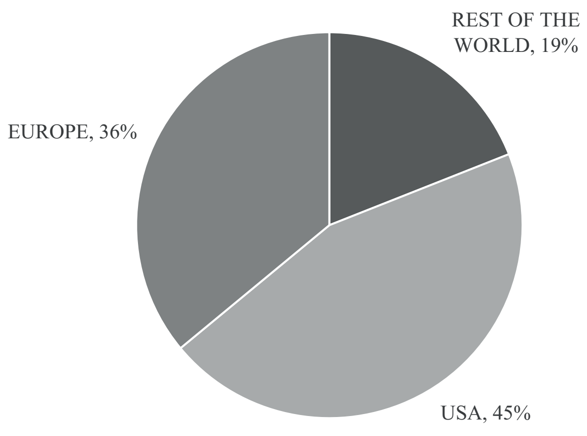

Figure 1: Percentage of total net assets managed by investment funds in 2017

Source: Adapted from (ICI, 2018)

After the establishment of efficient portfolio, it should be periodically monitored and reviewed, because incorrectly selecting investments can sometimes give worse results than keeping the money “under the mattress”. Investment funds help to overcome this problem (Šoškić, 2001, p. 228).

Investment funds are favorable for smaller investors as well as for all other companies. Since they are mainly minority shareholders, they are not interested in management, but most often only in capital gains or dividends. It is investing in profitable projects that, by increasing the value of the company's shares, will ultimately lead to capital gain. That is why companies need to represent their projects to investment funds as one of the possible financiers in the best possible way, but also to strive to become as profitable as possible in order to be attractive for investment in the future.

2.1. Savings in investment funds as a generator of economic growth and development

Savings, as an economic phenomenon, is the basis of investment and development, which is why all owners of income (households, enterprises, the state) need to be economical. Analysis of national savings, as a key source of financing economic development, must take into account differences in the development of countries. For example, developed market economies have a favorable savings structure, because the domestic currency is convertible and there is practically no difference between domestic savings and foreign currency savings. In these countries, there is a network of financial institutions capable of efficient allocation of domestic savings in the country and abroad. On the other hand, developing countries are characterized by extremely low savings, non-convertible domestic currency and underdeveloped financial markets (Dragutinović, Filipović & Cvetanović, 2004, p. 517). The marginal propensity to save is higher in developed than in underdeveloped economies. The lower a country's national income per capita, the lower its savings potential (Marsenić, 1996, p. 112).

As a form of deferred consumption, savings can be influenced by different motives. One group consists of material motives, such as increasing property value, improving life in the future, meeting certain economic goals. Intangible motives, which make up the second group, relate to the providing social security, education of children, etc. (Erić, 2003, p. 434).

Table 1: Changes in savings and investments in the target countries for the period 2008-2017

Year	Bosnia and Herzegovina		Serbia		Croatia		Montenegro	
	Gross savings (% of GDP)	Gross investment (% of GDP)	Gross savings (% of GDP)	Gross investment (% of GDP)	Gross savings (% of GDP)	Gross investment (% of GDP)	Gross savings (% of GDP)	Gross investment (% of GDP)
2008	10.73	27.07	10.11	30.34	22.90	31.45	-8.30	41.18
2009	8.69	19.78	13.42	19.42	20.44	25.13	-0.75	26.95
2010	7.66	16.34	12.48	18.47	20.55	21.42	1.16	21.76
2011	6.95	18.74	11.60	20.10	20.13	20.67	4.27	19.33
2012	5.46	19.22	10.19	21.01	19.43	19.18	5.15	20.59
2013	7.40	18.17	12.04	17.65	20.44	19.42	8.21	19.60
2014	8.14	19.12	11.62	17.49	20.76	18.77	7.80	20.21
2015	9.33	18.66	14.16	18.85	24.56	20.01	9.13	20.08
2016	11.14	19.62	14.91	19.08	23.28	20.76	9.85	26.10
2017	12.87	21.07	14.84	21.00	25.01	20.93	14.45	29.03

Source: Adapted from (WB, retrieved 20/01/2020, https://databank.worldbank.org/data/source/world-development-indicators/preview/on#)

Based on the data presented in Table 1 it can be concluded that there is no consistent relationship between the level of savings and investments, measured by their share in the GDP of the observed countries - the savings growth is not accompanied by investments growth. This conclusion points to the problem of conversion of savings into investments, through which the transfer to economic growth would be achieved. One of the reasons for disparities between savings and investment, which in macroeconomic terms is one of the basic relations for the establishment of macroeconomic balance, shows that savings-investment complex containing inhibiting factors.

The negative effects of this imbalance are manifested in the form of potential factors of economic stagnation and recession. If investments are absent, the volume of production activity will decrease, with the potential recession threatening. For these reasons, it is crucial for economic development to identify key factors that hinder the transformation of savings into investment.

Financial institutions that directly link the savings and investment process through their work are investment funds. Therefore, their formation and participation in the financial market is important from the point of view of economic growth and economic development. Unlike banks, they have competent staffing base that analyzes investment opportunities and, thanks to the achieved returns on investments, provides income to its shareholders. With the growth of their business volume and the growth of their participation in the financial market, the speed and scope of the transforming savings into investments increases.

2.2. Comparison with other financial institutions

An individual investment in the capital market implies that every individual investing in securities must have a good knowledge of the market and monitor market trends to make a profit. When the capital is invested in an investment fund, all liabilities are borne by the management of the fund. Management is composed of experts who create a diversified portfolio of investments, continuously monitor market developments and thus minimize risk. Achieving the diversification effect is, in fact, a key asset of investment funds in relation to other financial institutions, available to small shareholders, not just large investors.

Another significant advantage is the transparency of investment. This is achieved by daily disclosure of the value of the shares, which makes it easier to decide if securities will be sold immediately or whether to wait for a more appropriate moment for the action.

An important advantage of investment funds compared to other financial institutions are the transaction costs of investment, which are generally lower than in other institutions.

One of the main drawbacks of investment funds in relation to banks is the absence of state guarantees. Namely, in the banking sector there is a state-owned institution that provides certain guarantees on deposits of individuals and legal entities, while there are no such guarantees in the investment fund sector. This means that the collapse of the fund on the market automatically means the collapse of money invested in investment funds. In particular, there is an institution in Bosnia and Herzegovina that guarantees deposits by individuals and legal entities under the name of The State Deposit Insurance Agency. For individuals, the guarantee is up to the amount of BAM 50,000, which proved to be extremely important in the event of the collapse of Bobar bank, when The State Deposit Insurance Agency paid all depositors' amounts up to the aforementioned limit. In the case of investment funds, the entire loss would be borne by the investor.

Even though investment funds also have the stated shortcomings, they represent an important segment of the financial market, primarily because they enable the placement of small investors' savings and thus contribute to its faster and easier transformation into investments.

3. MATERIALS AND METHODS

After detailed analysis of the operations of investment funds in Bosnia and Herzegovina (RS and FBiH), Serbia, Croatia and Montenegro, in accordance with the available data, it is necessary to compare them. For this purpose, a comparative method will be used first and then a simple correlation analysis method.

According to Zelenika (2000), a comparative method is a process of comparing the same or related facts, phenomena, processes and relationships that determine their similarity in behavior and intensity and the difference between them.

3.1. Simple linear correlation

Unlike regression, in simple correlation both observed phenomena have the same status and are treated as random variables, i.e. no distinction is made between the dependent and the independent variable. Pearson simple linear correlation coefficient was used to test the hypothesis that the growth in the value of investment fund assets does not affect the growth of investment volume in the country. Pearson simple linear correlation coefficient “r“ shows the degree of linear agreement of variations between two numeric variables. The following formula is used to calculate this coefficient:

$$r_{yx} = \frac{C_{xy}}{\sigma_x \sigma_y}$$

where:

C_{xy} – covariance (average deviation of the values of two characteristics from their arithmetic means);

σ_x, σ_y – standard deviations of variables x and y (positive value of square root from variance) (Dragović, 2008, p. 384).

The correlation coefficient measures whether the values of some variables are moving in the same direction (positive correlation, both phenomena show dichotomies), opposite direction (negative correlation, one phenomenon increases, the other decreases and vice versa) or move independently. It ranges $-1 \le r \le 1$. The closer, by absolute value, coefficient is to one, the stronger the correlation between observed phenomena. The closer coefficient is to zero, the weaker linear connection.

4. RESULTS

In Table no. 2, a comparison was made according to the number and type of investment funds operating in 2017 in the observed countries. As can be seen, Croatia has many more funds than other countries, exactly three times as much as BiH, seven times as much as Serbia and as much as thirteen times more than Montenegro. The reason for this is certainly the more developed capital market in Croatia and the earlier establishment of the investment funds sector.

Table 2: Comparison of the number and structure of the IF in 2017

TYPE	Number of IF			
	BiH	Serbia	Croatia	Montenegro
Closed IF	25	1	3	5
Open-ended IF	12	16	97	5
Private IF	0	2	34	0
TOTAL	37	19	134	10

Source: Author's research results

In terms of structure, BiH is dominated by closed funds, Serbia and Croatia by opened funds, while in Montenegro both types are equally represented. The dominance of open-ended funds shows that investors in these two countries place great importance on the liquidity of securities. In recent years, the number of open-ended funds has increased in other countries.

Another object of comparison is the value of IF assets over a 10-year period. As can be seen in Table 3, Croatian investment funds had a higher value over the whole observed period than other countries. Thus, e.g. in 2017, according to this indicator, the IF sector was almost seven times larger than in BiH, 14 times in comparison with Serbia and 55 times in comparison with Montenegro. However, in the last few years, the value of IF Croatia's assets has grown at a relatively lower rate compared to Serbia, where in the last five years this parameter has achieved an average upward trend of 62.25% annually, which is a positive indicator of the development of this part of the financial market, regardless of the still small absolute value of the property. When it comes to Bosnia and Herzegovina, regardless of the increase in the number of funds, the value of the assets is fairly constant.

Table 3: Comparison of the value of IF assets in the period 2008-2017

YEAR	VALUE OF IF ASSETS (million EUR)			
	BiH	Serbia	Croatia	Montenegro
2008	626.33	19.38	1,603.51	130.34
2009	445.34	11.84	1,900.78	280.49
2010	454.03	11.24	2,115.58	268.07
2011	414.15	16.35	1,808.47	196.60
2012	406.48	21.42	1,930.63	123.70
2013	389.60	47.11	1,980.48	108.83
2014	401.87	76.80	2,033.05	135.64
2015	421.30	140.65	2,192.25	106.66
2016	410.06	169.90	2,910.24	73.93
2017	433.06	211.30	2,951.83	52.87

Source: Author's research results

Due to the lack of data on the participation of the investment funds sector in the structure of the total turnover realized on the stock exchanges, a comparison of the participation of the investment funds sector in the gross domestic product (GDP) of the countries was made. This gives a clear picture of the significance of this sector for the economies of the analyzed countries.

Table 4: Comparison of the share of investment funds in the GDP of the observed countries in the period 2008-2017

	Bosnia and Herzegovina			Serbia			Croatia			Montenegro		
Y	GDP (m. EUR)	Value of IF assets (m. EUR)	Share of IF in GDP (%)	GDP (m. EUR)	Value of IF assets (m. EUR)	Share of IF in GDP (%)	GDP (m. EUR)	Value of IF assets (m. EUR)	Share of IF in GDP (%)	GDP (m. EUR)	Value of IF assets (m. EUR)	Share of IF in GDP (%)
08	13,039.99	626.33	4.80	30,980.61	19.38	0.06	48,135.00	1,603.51	3.33	3,085.60	130.34	4.22
09	12,669.81	445.34	3.51	30,035.41	11.84	0.04	45,093.00	1,900.78	4.21	2,981.00	280.49	9.41
10	12,959.20	454.03	3.50	29,073.58	11.24	0.04	45,022.00	2,115.58	4.70	3,125.10	268.07	8.58
11	13,400.96	414.15	3.09	32,564.35	16.35	0.05	44,737.00	1,808.47	4.04	3,264.80	196.60	6.02
12	13,392.27	406.48	3.04	31,518.55	21.42	0.07	43,959.00	1,930.63	4.39	3,181.50	123.70	3.89
13	13,673.48	389.60	2.85	33,813.08	47.11	0.14	43,516.00	1,980.48	4.55	3,362.50	108.83	3.24
14	13,960.31	401.87	2.88	32,312.54	76.80	0.24	43,002.00	2,033.05	4.73	3,457.90	135.64	3.92
15	14,391.84	409.54	2.85	33,245.07	140.65	0.42	43,870.00	2,192.25	5.00	3,624.70	106.66	2.94
16	15,289.66	410.06	2.68	36,723.05	169.90	0.46	46,640.00	2,910.24	6.24	3,954.21	73.93	1.87
17	16,042.28	433.06	2.70	39,183.27	211.30	0.54	49,118.00	2,951.83	6.01	4,299.09	52.87	1.23

Source: Author's analysis according to data by the Central Bank of BiH, National Bank of Serbia, Croatian National Bank, Central Bank of Montenegro

The table above shows that the investment funds sector is of the highest importance for the economy of Croatia and Montenegro, since it has the highest share in GDP in these countries (4.72% and 4.53% on average respectively). In

Montenegro, this indicator tends to decline. This result was logical to expect, given that the whole comparative analysis indicated a better position for Croatia. In the case of BiH, the share of IF in GDP is fairly constant, at about 3%. Serbia's investment funds have the convincingly lowest share (0.21% on average), but it should not be overlooked that this share, although small, is increasing year by year.

Table 5: Simple linear correlation - the relation between the growth in the value of IF and growth in investment volume

Year	Bosnia and Herzegovina		Serbia		Croatia		Montenegro	
	The value of assets (million EUR)	Gross investment (% of GDP)	The value of assets (million EUR)	Gross investment (% of GDP)	The value of assets (million EUR)	Gross investment (% of GDP)	The value of assets (million EUR)	Gross investment (% of GDP)
2008	626.33	26.66	19.38	30.33	1,603.51	31.43	130.34	40.67
2009	445.34	19.35	11.84	19.42	1,900.78	25.04	280.49	27.12
2010	454.03	15.91	11.24	18.47	2,115.58	21.35	268.07	21.77
2011	414.15	18.35	16.35	20.10	1,808.47	20.63	196.60	19.33
2012	406.48	18.83	21.42	21.01	1,930.63	19.27	123.70	20.59
2013	389.60	17.84	47.11	17.65	1,980.48	19.10	108.83	19.61
2014	401.87	18.38	76.80	17.49	2,033.05	18.19	135.64	20.22
2015	409.54	18.65	140.65	18.56	2,192.25	20.62	106.66	20.09
2016	410.06	19.62	169.90	17.91	2,910.24	21.03	73.93	26.10
2017	433.06	21.04	211.30	19.59	2,951.83	21.77	52.87	30.22

Source: Author's research results

In accordance with the available data, Table 5 gives an overview of the evolution of the value of investment fund assets in the observed countries over a ten year period, as well as the movement of gross investment in those countries, expressed as a percentage of gross domestic product. Using this data, a simple linear correlation analysis was made, the result of which is a simple linear correlation coefficient between the two observed variables at the level:

$$rxy = -0.0148.$$

It is a very weak correlation, or there is no connection between the observed variables. The analysis statistically confirmed what was assumed – the growth in the value of investment fund assets is not correlated with the growth in investment volume in any country.

5. DISCUSSIONS

There are two key sectors in the economic development of the whole country, including investment funds – the financial and real sectors. Within the financial sector, state action is needed. The state should create adequate legal regulation for the functioning of all financial institutions, where there are no privileged and where the market is the only measure of success. Consequently, it will increase competitiveness in the financial sector, which will have positive effects on the economy.

Regardless of the sophistication of the financial sector, if there are problems in the real sector and there are no strong firms - there is no investment in the financial sector. The key role in bringing the real sector to a satisfactory level is played by the state that creates the business environment. When there is a favorable business environment, a favorable investment climate will also be created. Investment funds, that include investing in company shares in the investment structure, would have more expedient effect in terms of stimulating economic activity.

From the current situation on the financial market of the observed countries, it is possible to draw some basic recommendations for the development of investment funds in the future:

- increasing investor confidence in the financial system in general by preserving general monetary stability;
- improving the legal framework in this area and adjusting operations of investment funds to the standards applicable in the European Union, which would attract more foreign capital and encourage domestic investors;
- education of individual investors and companies through seminars, courses and various publications about investment opportunities;
- economic growth and development of the country that would lead to lower energy and food prices, and then increase the disposable income for investment.

Given that investment funds play an important role in the financial markets of developed countries, it is expected that, given the above assumptions, the growth of their share in the total turnover on the observed stock exchanges could give a significant boost to the development of capital market.

Investment funds represent a stable financial institution that can provide quick and easy access to liquid assets, on the one hand, and fairly secure savings with a satisfactory rate of return, on the other hand.

Nothing is universal, even investment funds cannot be observed in the same way in different environments. In the case of developed countries, such as the USA, it is clear that they operate on a well-established system and therefore play an important role in the financial sector, but in general in the economy of those countries. According to the latest available OECD data, the value of USA investment fund assets in 2017 was 110.7% of GDP (OECD, 2018, p. 14). There is a clear separation between commercial and investment banking. The stock market is organized so that, in the event of a fall in the share price of a company, shareholders can change the management team of the company. This ability to take over a company in the market causes management teams to strive for the best possible financial performance.

In other countries, investment funds operate, but they are not at the very top of the financial sector - a typical example is Germany and Japan. According to the German model, the importance of banks in comparison to the American model is emphasized and they are the main institutional investors of companies. The so-called universal banks, which represent a combination of commercial and investment bank, can participate in the equity capital of companies in the real sector of economy. The role of stock exchanges has traditionally been limited, with the aim of limiting the impact of stock market oscillations on the functioning of companies (Ćirović, 2001, p. 279-280). More recently, there has been a more intense development of with 61.1% (OECD, 2018). The Japanese model is close to German, with differences in state control of the financial sector and bank specialization. Namely, commercial banks deal with short-term deposit-credit operations, while specialized financial institutions approve long-term loans from long-term deposit certificates, not from deposits. Relations between companies and financial institutions highlight confidence in the forefront. The financial institution provides financing, with a guarantee from the funded company that it will achieve a certain level of return. If this guarantee is not respected, the financial institution is in a position to replace the company's management. Today banks play an increasingly smaller role in the Japanese market, because part of the savings is diverted to the capital market (Ćirović, 2001, pp. 281-283). The share of investment funds sector in GDP in 2008 was 16.6%, while today it is 38% (OECD, 2018).

When it comes to developing countries and countries in transition, they rely on banks, because there are not enough companies that qualify for the issue of securities on the stock exchange. Countries that have undergone the transition process, such as Slovakia, the Czech Republic or Hungary, have used investment funds in the best possible way. The Czechoslovakia started the process of mass privatization in 1991, when the Government's primary goal was to take over the state-owned companies. In just four years, 70% of enterprises were privatized in two waves. Given that 80% of citizens had vouchers, the problem of ownership dispersion arose. Therefore, the Government allowed privatization investment funds to participate in privatization, with the main goal of restructuring firms and creating an active capital market. This makes the funds a major actor in the privatization process. They could not hold more than 20% of an individual company's shares, and one company's shares could not account for more than 10% of the portfolio's value. The number of registered PIFs increased from 437 in the first wave of privatization to 633 in the second. PIFs collected 72% of the total vouchers. At the time of privatization, the rates of return on securities under investment funds were between 20% and 40% annually. Due to such a scenario, the companies did not borrow on the foreign market and domestic investors in the securities made acceptable profits. In the end, the Czech privatization program proved successful because of its speed of implementation, mass character, establishment of capital markets and the revival of the stock exchange. The final results were the development of the domestic economy, successful privatization and the increase in the number of jobs (Jovović, 2015, p. 137-144).

Relevant research on investment fund management best practices has shown that the European Union, through certain regulations, seeks to channel foreign investment outside strategic sectors, such as energy. This would, through the regulatory framework, direct foreign investment beyond the natural resource based sectors (Mitchell, Piggott & Kumru, 2008).

The basic conclusion of the analysis of the above models, as well as the models considered in empirical research, is that they are determined by the financial system existing in the country. The more developed the capital market in the country - the smaller role of the banking system. The main role of the state is, through regulation and control, to mobilize savings for productive purposes and thus to accelerate economic growth. Development strategy, as well as the country's economic policies, should move in this direction (Vladušić, 2010, p. 244).

The remaining countries that are stuck "halfway" through the transition process should learn on the example of the mentioned countries. These countries include Bosnia and Herzegovina, which is characterized by unsatisfactory privatization process, low economic growth rate, high unemployment rate and low standard of living. Investment funds exist in this country, but their capacities have not been adequately used. Such a thing requires the complete synchronization of all sectors in order to stimulate the economic development of the country, which can lead to the final goal, which is a better standard of living.

6. CONCLUSIONS

Regarding the general picture of the investment funds market, it can be said that all four analyzed countries are significantly behind the developed countries, which is confirmed by the low participation of this sector in the gross domestic product of the countries. The main reasons for this are: underdeveloped capital market, a bank-centric market that shifts investment into securities, aversion of potential investors to risk, poor awareness of the investment public about the possibility of placing surplus funds, etc.

These financial institutions in all observed countries, except for Serbia, were not created due to the needs of the market, but because of the need to complete the privatization process quickly, as they are transition countries. Thus, privatization investment funds were formed, whose primary role was to channel citizens' vouchers into the shares of privatized companies. The absence of the essential preconditions of establishing investment funds – raising the funds of smaller investors and investing them in securities - from the very beginning complicates their proper functioning.

The study used the simple correlation analysis method, which statistically confirmed the hypothesis that the growth of the value of investment funds assets in any observed country is not correlated with the growth of investment volume. In other words, investing in investment funds is not channeled in the best way to investments that would contribute to GDP growth. In order to achieve this effect, more activities to develop the IF sector are needed.

Based on the comparative analysis, it can be concluded that, although underdeveloped, the Croatian investment funds sector is the most developed in comparison to other countries. There are several basic indicators that confirm this:

- the early establishment of this sector in the financial market (10 years before Serbia and about five years before Montenegro and BiH) and a more developed capital market, given that it is a member state of the European Union;
- a larger number of investment funds (134:37:19:10);
- the diversity of the investment fund structure, which provides a wider choice to potential investors;
- higher value of IF assets than other countries;
- significantly higher share of the net asset value in the country's GDP.

Judging by the most relevant indicators, it could be said that the worst position among the observed countries is achieved by Serbia. The reason is the global financial crisis that plagued the country's investment fund market in the first years of its existence. However, since the funds were created solely because of the market's need to find an alternative to savings in banks, their recovery is recorded year after year. Thus, there is a constant upward trend in the number of these funds, the value of their assets, the value of shares, as well as their importance as measured by their share in GDP.

The overall results of the research confirmed the hypothesis that investment funds in the analyzed countries do not represent a significant part of the financial system and, due to the nature of their creation, they do not make a significant contribution to economic development of the country.

From the experience of other countries that have successfully undergone the transition process, such as the Czech Republic, Slovakia and Hungary, it is possible to draw lessons for the development of the investment fund sector. Based on the improvement of the aforementioned sector, these countries managed to successfully complete the privatization process, stimulate the development of the domestic economy and achieve a number of positive effects. The experience of the Czech Republic, for example, shows that the privatization process through investment funds did not initially produce the desired results. The funds did not increase the value of the assets and thus made a profit for investors. However, in the end, this privatization program proved to be successful – in a short period of time a large number of companies were privatized, the rates of return on securities within investment funds were between 20% and 40% annually, so the investor securities made acceptable profit. This led to the revival of the entire capital market, and thus the growth and development of the Czech economy.

The future of the investment fund market in Bosnia and Herzegovina, Serbia, Croatia and Montenegro is determined by the development of capital market, better information to the investment public, the development of internal regulations and, most importantly, the achievement of macroeconomic stability. The regulatory framework needs to be gradually adapted to EU legislation in this area, which firstly involves opening funds, liberalizing their operations and identifying strategic areas for their activities with state support. Only in a package with reforms of the financial and overall economic system, investment funds can make their full contribution to the prosperity of the national economies of the analyzed countries.

Conflict of interests

The author declares there is no conflict of interest.

REFERENCES

Bodie, Z., Kane, A., & Marcus, A. (2009). *Investments.* New Yoork, NY, USA: McGraw-Hill.

Centralna banka BiH. (1999-2017). *Godišnji izvještaj*. Sarajevo, Bosna i Hercegovina: autor.

Centralna banka BiH. (2008-2017). *Izvještaj o finansijskoj stabilnosti*. Sarajevo, Bosna i Hercegovina: autor.

Centralna banka Crne Gore. (2003-2017). *Godišnji izvještaj glavnog ekonomiste.* Podgorica, Crna Gora: autor.

Centralna banka Crne Gore. (2013-2017). *Godišnji makroekonomski izvještaj Centralne banke Crne Gore*. Podgorica, Crna Gora: autor.

Ćirović, M. (2001). *Bankarstvo.* Beograd, Srbija: Bridge Company.

Dragović, V. (2008). *Statistika.* Istočno Sarajevo, Bosna i Hercegovina: Zavod za udžbenike i nastavna sredstva.

Dragutinović, D., Filipović, M., & Cvetanović, S. (2004). *Teorija privrednog rasta i razvoja.* Beograd, Srbija*:* Ekonomski fakultet.

Erić, D. (2003). *Finansijska tržišta i instrumenti.* Beograd, Srbija: Čigoja štampa.

HANFA. (2019). *Broj investicijskih fondova*. Zagreb, Hrvatska. Retrieved from: https://www.hanfa.hr/publikacije/statistika/

Investment company institute. (2018). *Investment company fact book*. USA. Retrieved from: https://www.ici.org/system/files/attachments/pdf/2018_factbook.pdf

Jovović, M. (2015). *Uloga investicionih fondova u procesu tranzicije u centralnoj i istočnoj Evropi. Doktorska disertacija*. Beograd, Srbija: Fakultet za bankarstvo, osiguranje i finansije.

Leko, V. (2012). *Financijske institucije i tržišta: skripta.* Zagreb, Hrvatska: Ekonomski fakultet.

Marsenić, D. (1996). *Ekonomika Jugoslavije.* Beograd, Srbija: Ekonomski fakultet.

Mayer, C., Schoors, K., & Yafeh, Y. (2003). *Sources of funds and investment activities of venture capital funds: evidence from Germany, Israel, Japan and the UK.* NBER Working Papers. No 9645. Cambridge, MA, USA: National Bureau of Economic Research. Retrieved from: https://www.nber.org/system/files/working_papers/w9645/w9645.pdf

Mishkin, F., & Eakins, S. (2018). *Financial Markets and Institutions.* London, UK: Pearson Education.

Mitchell, O., Piggott, J., & Kumru, C. (2008). *Managing public investment funds: best practises and new challenges.* NBER. DOI:10.3386/w14078

OECD. (2018). *Institutional Investors Statistics.* Accessed December 2019. Retrieved from: https://read.oecd-ilibrary.org/finance-and-investment/oecd-institutional-investors-statistics-2018_instinv-2018-en#page1.

Pistor, K., & Spicer, A. (1997). *Investment Funds in Mass Privatization: Lessons from Russia and the Czech Republic.* World Bank Group. Viewpoint: Public Policy for the Private Sector; Note No. 110. Washington, DC: World Bank. Retrieved from:

https://openknowledge.worldbank.org/handle/10986/11591 License: CC BY 3.0 IGO

Plakalović, N. (2004). *Monetarna ekonomija*. Istočno Sarajevo, Bosna i Hercegovina: Zavod za udžbenike i nastavna sredstva.

Šoškić, D. (2001). *Hartije od vrednosti: upravljanje portfoliom i investicioni fondovi.* Beograd, Srbija: Čigoja štampa.

Vladušić, Lj. (2010). *Štednja i ekonomski rast u Bosni i Hercegovini*. Pale, Bosna i Hercegovina: Centar za izdavačku djelatnost Ekonomskog fakulteta Istočno Sarajevo.

World Bank. (2007-2018). World development indicators. Retrieved from: https://databank.worldbank.org/source/world-development-indicators

Zelenika, R. (2000). *Metodologija i tehnologija izrade znanstvenog i stručnog djela.* Rijeka, Hrvatska*:* Ekonomski fakultet.

КОМПАРАТИВНА АНАЛИЗА ПОСЛОВАЊА ИНВЕСТИЦИОНИХ ФОНДОВА У ОДАБРАНИМ ЗЕМЉАМА ЗАПАДНОГ БАЛКАНА

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САЖЕТАК

Инвестициони фондови у посљедње вријеме све више добијају на значају, јер мањим инвеститорима омогућавају смањење ризика, коришћење знања финансијских стручњака, олакшан приступ међународном тржишту капитала и већу стопу приноса на уложена средства у односу на банке. Циљ овог истраживања јесте да се у складу са доступним подацима, кроз компаративну анализу, укаже на сличности и разлике у пословању инвестиционих фондова Босне и Херцеговине, Србије, Хрватске и Црне Горе, те да се на основу тога докаже да ове финансијске институције, иако имају потенцијал, не дају допринос привредном развоју поменутих земаља у мјери у којој би требало. Предмет компарације су природа настанка, број, врсте, нето вриједност имовине, као и проценат учешћа инвестиционих фондова у БДП-у посматраних земаља. Главна хипотеза гласи да инвестициони фондови у анализираним земљама не представљају значајан дио финансијског система, те због природе њиховог настанка, не дају значајан допринос привредном развоју. Из главне хипотезе произлазе и двије помоћне хипотезе: инвестициони фондови настали у процесу приватизације, усљед одсуства суштинских тржишних претпоставки

њиховог оснивања, нису у стању да остваре значајнији утицај на привредни раст; раст вриједности имовине инвестиционих фондова не утиче на раст обима инвестиција у земљи. Поред метода компаративне анализе, за доказивање наведених хипотеза користила се метода просте корелационе анализе, као и друге научне методе. Резултати истраживања потврдили су постављену хипотезу да инвестициони фондови данас у анализираним земљама не представљају значајан дио финансијског система и да, због природе њиховог настанка, не дају значајан допринос привредном развоју.

Кључне ријечи: *финансијско тржиште, инвестициони фондови, штедња, привредни развој, корелациона анализа, компаративна анализа*.