KNOWLEDGE OF THE POPULATION IN THE PURPOSE OF DEVELOPING INVESTMENT FUNDS IN REPUBLIC OF MACEDONIA

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Abstract

Investment funds are young and efficient non-bank institutions in developed financial markets. These institutions are direct intermediaries between the holders of free financial resources on one hand and the economy i.e. companies as beneficiaries and claimants of free capital on the other. They allow investors diversification of invested assets, minimizing the potential risk and opportunity their securities to convert into cash. These funds are attractive for holders of free financial resources since through them one can achieve a higher rate of return compared to conventional investments of financial resources in banks. There are ten investment funds in the Republic of Macedonia but still they are not significant participants in the capital market.
The subject of the research in this paper will be the state of the investment funds in Republic of Macedonia with special emphasis on informing the population about their advantages and the ways of their promotion as a significant factor in the development and greater establishment in the financial market in the country.

Keywords: investment funds, financial markets, promotion, population.
JEL Classification: G23

1. Introduction

Investment companies are financial intermediaries that collect assets from individual investors and in turn sell shares or certificates of participation in the financial assets of the fund. Such received revenues, investment companies invest in various types of financial instruments in the domestic or international financial market, while achieving portfolio diversification. Investment companies appeared as a result of the rapid development of capital markets in industrialized countries, because the existing banking system was a barrier to further development of financial markets and overall market relations.

Its real investment upsurge companies experienced in the U.S. and UK in the 80s and the 90s. of 19th century, and also in France, Germany, Japan and other countries. Today, however, investment companies represent some of the most important financial institutions in the financial markets. They managed assets of over $26 trillion at the end of 2012, worldwide. In the U.S., however, the investment companies managed with assets of $14.7 trillion at the end of 2012, which represented an increasing of about $7 trillion compared to 2011. [14] The number of investment companies in the United States at the end of 2012 was 16.380, which are about 3.000 investment companies less than in 1995. The total number of investment companies in the U.S. significantly began to decrease after 2000 (although the size of the assets which was managed by investment companies grows), primarily due to the association of certain investment companies.

In Republic of Macedonia, however, investment funds in 2012 have little importance within the Macedonian financial system. Namely, their share in total assets of the financial system is only 0.1%.

2. Advantages of investment funds

The dynamic development of investment companies and their huge popularity among small investors is a result of their advantages which can be noticed in that:

- Investment companies provide a ***high degree of liquidity***. Open-end investment companies are ready at any time to purchase their shares from investors at NAV (net asset value per share of the fund), possibly increased by the entry fee. So if the developer gives an order, then the investment company shall send the check in the amount of NAV on the date of issuance of the order, not later than seven days from the given order. Liquidity in closed-end investment companies is very similar to the liquidity of shares of business entities and it depends on their size, efficiency and investment objectives [11];
- investment companies are ***diversifying the portfolio*** by investing resources in different types of securities in domestic and international financial markets and thus allow reducing the risk and increasing the rate of return [1] ;
- Investment companies realize transaction with ***lower costs*** compared to individual investors. The large volume of transactions allows investment companies to take advantage of lower brokerage fees and low transaction costs. Low transaction costs can lead to an increase in investment performance [9];
- ***Competent management*** allows investment companies to timely and efficiently perform placement of funds entrusted by investors. The fact that the management of the fund has been entrusted to professional portfolio managers, significantly reduces the risk of making the wrong investment decisions and increases the attractiveness of buying shares by the population [5];
- functioning of investment funds enriches the institutional structure of banking and financial sector, increases competitiveness, ***promotes the development of capital market*** and provides a contemporary approach in carrying out market transactions [2];
- Investment companies play a particularly important role in ***the field of financial services***. Namely, they represent a tool for individual savings for achieving basic or additional income that can be used for pensions, funding the children education, buying housing, health care and many other needs. Since investment companies offer higher yield of stocks and bonds in terms of savings thereby providing relative safety and high degree of liquidity, they become the most efficient tool for long-term savings and take the traditional markets of other financial institutions such as banks, insurance companies and pension funds [7].

3. Investment funds in Republic of Macedonia

Investment funds in Republic of Macedonia are rather new financial institutions. Despite the fact that the legislation on investment funds was passed in 2000, the first investment fund was established in 2007. One of the reasons for this was the high principal capital for the establishment of an open-end or closed-end investment fund (1.000.000 Euros). [13] Therefore , immediately after the amendments in the Law on Investment Funds (Official Gazette no. 29/2007) which foresees a reduction of basic capital required for the establishment of an investment fund of 1.000.000 Euros to 500,000 Euros, the firs investment fund in Macedonia was established. Also, these changes caused reducing the need for basic funds required for establishment of a Company for managing investment funds, which is 100,000 Euros. In 2009, according to the changes in legislation there was another reduction of funds performed required for the establishment of an investment fund of 300.000 Euros.

At the end of 2013 there are a total of 10 open-end investment funds in the Republic of Macedonia, which were handled by 4 companies managing investment funds. However, open-ended investment funds participate with only 329 million denars, i.e. 0.1 % of the total assets of the financial sector. In fact, banking institutions still dominate in the total assets of the financial sector, i.e. participate with 355.713 million denars (89.2 %). [17] Participation of individual financial institutions in total assets of the financial sector is presented in Table 1.

Table 1						
Structure of total assets in financial sector in Republic Macedonia						
Type of financial institutions	**Total assets (million denars)**					
	2007	**2008**	**2009**	**2010**	**2011**	**2012**
Depository financial institutions	**226.546**	**254.153**	**271.825**	**308276**	**334.339**	**355.713**

Banks	223.659	250.704	268.543	305,290	331.176	352.886
Savings house	2.887	3.449	3.283	2.986	3.163	2.827
Non-depository financial institutions	**20.593**	**26.754**	**30.821**	**34.586**	**40.058**	**43.118**
Insurance companies	11.075	11,920	12.202	12.518	12.934	13.067
Insurance brokerage companies	-	-	-	-	-	-
Insurance agencies	-	-	-	-	-	-
Leasing companies	4,980	8.623	8.588	8.509	9.278	6.952
Pension funds	3.124	5.037	**8.752**	**12.494**	**16.131**	**21.315**

*mandatory pension funds	-	-	8746	12.449	16.019	21.124
*Voluntary pension funds	-	-	6	44	112	191
Companies for managing pension funds	202	258	333	401	452	508
Brokerage houses	1.088	804	754	468	411	310
Open-end investment fund	66	84	152	170	257	329
Private investment fund	-	-	-	-	-	-
Companies for managing investment funds	15	28	40	26	16	14
Companies for managing private funds	43	-	-	-	-	-
Financial companies	-	-	-	-	579	624
TOTAL:	**247.139**	**280.907**	**302646**	**342.862**	**374.397**	**398.831**

Source: www.nbrm.mk

Such insignificant participation of investment funds in the financial market is due primarily to the impact of the following factors:
- Underdeveloped capital market;
- Economic and political situation in the country;
- A low standard of living;
- Lost trust in financial institutions;
- Lack of information about the benefits of investing in investment funds.

4. Statistical methodology of research

The purpose of this paper will be to identify the relevant factors that influence the development of investment funds in Republic of Macedonia.

Defining the plan of statistical research:

- Identification of the primary sources of statistical data on how to invest free financial assets with a particular emphasis on investment funds in Republic of Macedonia.
- Defining the manner, time and place of collecting statistical data on investment funds in Republic of Macedonia.
- Defining the basic hypothesis, and its performed single hypotheses.
- Creating questions in the questionnaire.
- Designing plans of the sample and selection of the appropriate class of the sample to meet the requirements of objectivity, coincidence, presentation and documentation.
-Distribution of the questionnaire in print and electronic form to the respondents to predetermined sample.
- Designing and development of a database of questionnaires and processing of statistical data with appropriate software support. (Computerized Business Statistics)
- Obtaining information on statistical analyses and statistical conclusion of data from the questionnaire, based on which the relevant factors that influence on the development of investment funds in Republic of Macedonia are identified.

Empirical research was conducted through a questionnaire containing 10 questions. The survey covered 230 respondents from the cities in Pelagonia, statistical area in Republic of Macedonia, selected on the basis of a more staged plan of the sample. First questions relate to the basic characteristics of the respondents (gender, age, education level, employment status and monthly income of the household where they belong). The other five questions require answers pertaining the status, opportunities and prospects of investment funds in Republic of Macedonia.

The survey defined an appropriate and meaningful assessment of the reliability of the results, i.e. the risk of 5 % or the safety threshold of 95% statistical lock. Statistical lock or rather testing hypotheses will be realized with appropriate software support.

The survey used a random excerpt, applying more stages, whereas all grades for the parameters of the population have the properties of fairness and impartiality.

When testing statistical hypothesis, the test on contingency is applied (χ^2).

The implementation of statistical research allows *identification of relevant factors* that influence the development of investment funds in Republic of Macedonia as well as *quantitative and qualitative analysis from the results* of the empirical research with appropriate conclusions and recommendations.

5. Descriptive statistic analysis

Based on the realized descriptive statistical analysis of the data the following conclusions can be drawn:

- There is almost balanced gender structure of the population. The survey covered about 8 % more respondents-females.
- Most of them i.e. 38 % of the respondents are 19-24 years old. Least of them, i.e. only 2 % of the respondents are over 64 years old. Three of five respondents are 40 years old. The average age of respondents was 36.12 years old, or half of the respondents are up to 34.56 years and half of the respondents are over 34.56 years old.
- More than half of respondents have a high school diploma (i.e. 58 % of respondents). In terms of education of respondents the survey covered 3 % of primary and 6 % with a master's degree or doctorate.
- According to the employment status, 42 % of respondents are employed and the remaining 58 % are unemployed, students and pensioners.
- Nearly 55 % of the respondents live in households with monthly income of 10 000 to 30 000 denars. Every 5th respondent belongs to a family that has a monthly income below 10 000 denars. The average monthly income of families where the respondents belong accounted for 23.445 denars, or half of the respondents belong to families with monthly income up to 21.156 denars and other respondents belong to families with an average monthly income over 21.156 denars.
- Most of them or 64 % of the respondents invest free funds in the banks and significant 30 % of respondents do not invest free funds or they keep them at home. Only 6 % of respondents invest free funds in private pension funds or in an investment fund.
- A significant number (65%) of respondents are not informed about opportunities to invest in investment funds in RM or haven't heard of promotional activities.
- The substantial majority of the respondents or 91 % of respondents want to be informed about the possibility of investing in investment funds in the country.
- 25 % of respondents want to be informed about the possibility of investing in investment funds in Macedonia through lectures by experts, 31 % want to be informed by e- mail, 19 % want to realize communication by attending seminars and the rest of 25 % of respondents want to be informed about the possibility of investing in investment funds in Macedonia through print media (newspapers, magazines).

6. Statistical processing of data obtained with the research

Based on the subject, goals and objectives of the research in this paper the following general hypothesis can be defined: different characteristics of the respondents (population) affect their attitude towards investment of free financial funds and way of informing about the investment funds. Based on the above-defined general hypothesis the following individual hypotheses can differentiate:

Hypothesis 1: The attitude towards the way of informing about the investment funds does not depend on the education of the respondents.

Table 1.1. Empirical (theoretical) frequency variables: education of respondents (in rows) and attitude towards the way of informing about the investment companies (in columns).

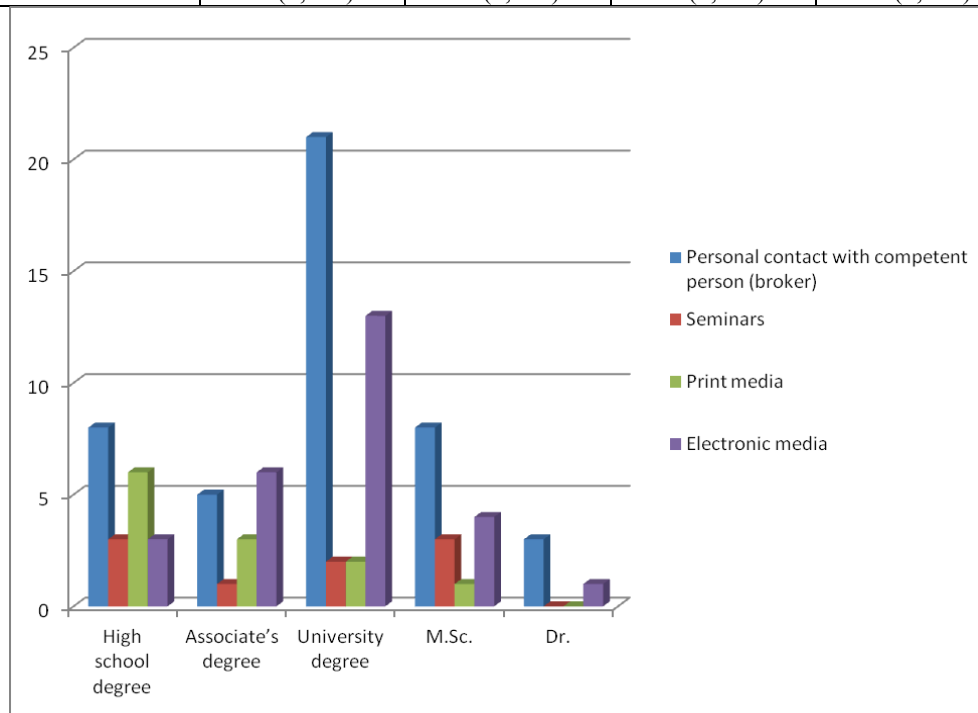|	Personal contact with competent person (broker)	Seminars	Print media	Electronic media
High school degree	8 (9,677)	3 (1,935)	6 (2,581)	3 (5,806)
Associate's degree	5 (7,258)	1 (1,452)	3 (1,935)	6 (4,355)
University degree	21 (18,387)	2 (3,677)	2 (4,903)	13 (11,032)
M.Sc.	8 (7,742)	3 (1,548)	1 (2,065)	4 (4,645)
Dr.	3 (1,935)	0 (0,387)	0 (0,516)	1 (1,161)

Figure 1.1. Attitude towards the way of informing about investment funds according to the respondents' education

Results of the application of χ^2 - test

CBS-Chi-Square Analysis

Critical chi-square: 21.0261

Computed chi-square: 15.5389

p value: 0.2128

Conclusion: Do not Reject Hypothesis

The calculated value of the test is $\chi^2_{pr} = 15,5389$. For the risk of error of 0.05% and the number of degrees of freedom $r = (m-1)(n-1) = (5-1)(4-1) = 12$ the theoretical (critical) value of the test is: $\chi^2_{(0,05;12)} = 21,0261$.

Since the calculated value of the test ($\chi^2_{pr} = 15,5389$) is lower than the theoretical value ($\chi^2_{(0,05;12)} = 21,0261$) the hypothesis is accepted and we can conclude that the attitude towards the way of informing about investment funds does not depend on the education of the respondents. This is confirmed by the fact that the defined risk of error is $1 - \alpha$, i.e. p = 0,05 is lower than the value of the realized level of risk of error, which equals p = 0,2128.

Hypothesis 2: The attitude towards the way of informing about the investment funds does not depend on the age structure of the population.

Table 2.1. Empirical (theoretical) frequency variables: age of the respondents (in rows) and the attitude towards the way of informing about the investment funds (in columns).

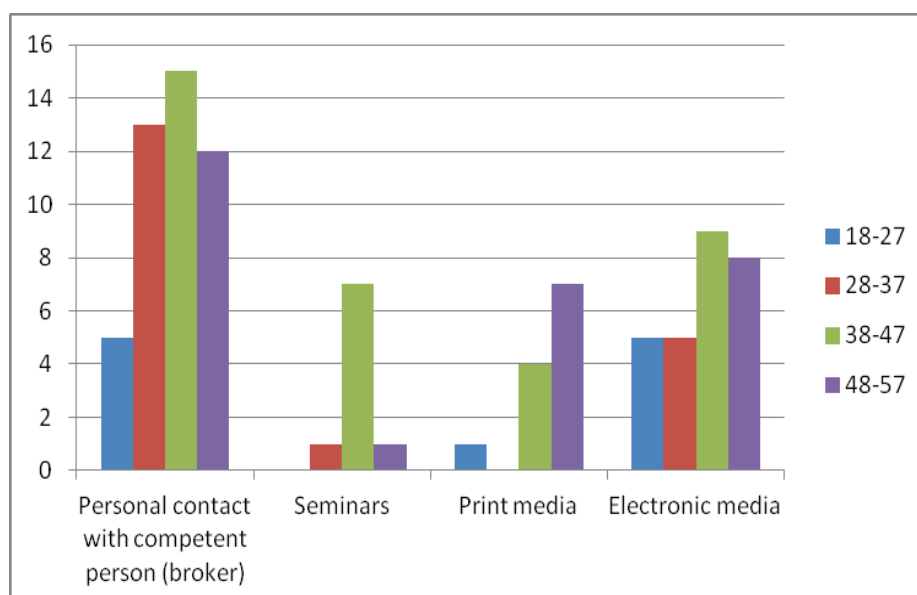|	Personal contact with competent person (broker)	Seminars	Print media	Electronic media
18-27	5 (5,323)	0 (1,065)	1 (1,419)	5 (3,194)
28-37	13 (9,194)	1 (1,839)	0 (2,452)	5 (5,516)
38-47	15 (16,935)	7 (3,387)	4 (4,516)	9 (10,161)
48-57	12 (13,548)	1 (2,710)	7 (3,613)	8 (8,129)

Figure 2.1. Attitude towards the way of informing about investment funds depending on the age structure of respondents

Results of the application of χ^2 - test

CBS-Chi-Square Analysis

Critical chi-square: 16.9190
       Computed chi-square: 15.3881
       p value: 0.0805

       Conclusion: Do not Reject Hypothesis

The calculated value of the test is $\chi^2_{pr} = 15,3881$.. For the risk of error of 0.05% and the number of degrees of freedom $r = (m-1)(n-1) = (4-1)(4-1) = 9$ the theoretical (critical) value of the test is: $\chi^2_{(0,05;9)} = 16,9190$.

Since the calculated value of the test ($\chi^2_{pr} = 15,3881$) is lower than the theoretical value ($\chi^2_{(0,05;9)} = 16,9190$) the hypothesis is accepted and we can conclude that the attitude towards the way of informing about investment funds does not depend on the age structure of the respondents. This is confirmed by the fact that the defined risk of error is $1 - \alpha$, i.e. p = 0,05 is lower than the value of the realized level of risk of error, which equals p=0,0805.

Hypothesis 3: Attitude towards the way of investing in free financial funds does not depend on the monthly incomes of respondents

Table 3.1. Empirical (theoretical) frequency variables: monthly income of the respondents (in rows) and attitude towards the way of investing in free financial funds (in columns).

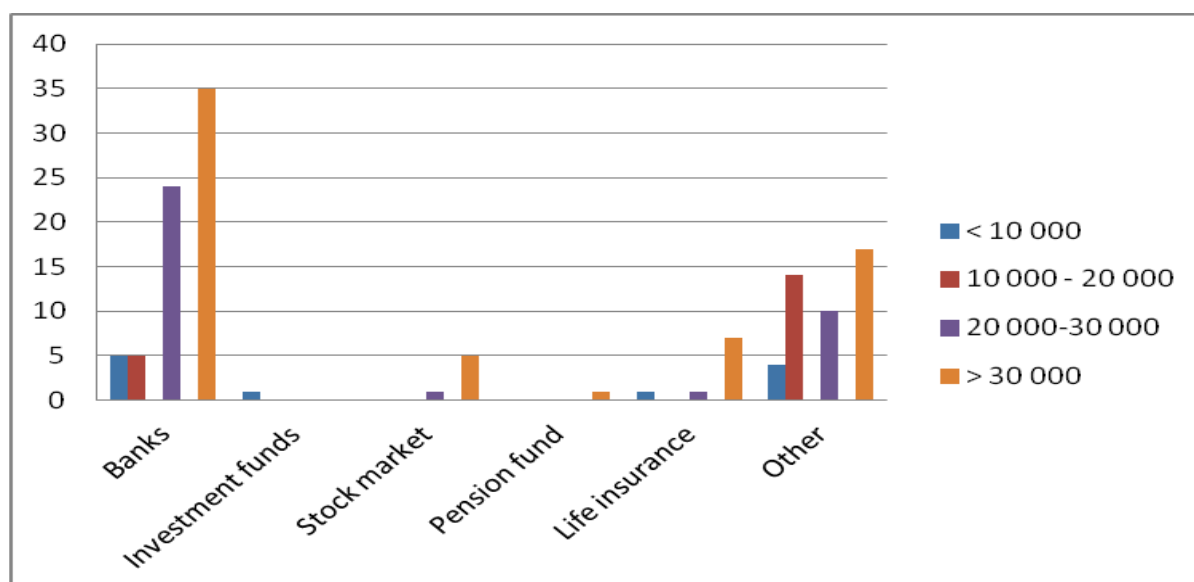|	Banks	Investment funds	Stock market	Pension fund	Life insurance	Other
Up to 10 000 den	5(5,79)	1(0,08)	0(0,50)	0 (0,08)	1(0,76)	4(3,78)
From 10 000 to 20 000 den	5(10,01)	0(0,14)	0(0,87)	0(0,14)	0(1,30)	14(6,53)
From 20 000 to 30 000 den	24(18,96)	0(0,27)	1(1,65)	0(0,27)	1(2,47)	10(12,36)
More than 30 000 den	35(34,24)	0(0,50)	5(2,98)	1(0,50)	7(4,47)	17(22,33)

Figure 3.1. : Attitude towards the way of investing in free financial funds depending on monthly income of the respondents.

Results from the application of χ^2-test
CBS-Chi-Square Analysis

Critical chi-square: 24.9958
Computed chi-square: 32.8932
p value: 0.0048

Conclusion: Reject Hypothesis

The calculated value of the test is $\chi^2_{pr} = 32,8932$. For the risk of error of 0.05% and the number of degrees of freedom $r = (m-1)(n-1) = (4-1)(6-1) = 15$ the theoretical (critical) value of the test is: $\chi^2_{(0,05;15)} = 24,9958$.

Since the calculated value of the test ($\chi^2_{pr} = 32,8932$) is higher than the theoretical value ($\chi^2_{(0,05;15)} = 24,9958$) the hypothesis is rejected and we can conclude that the attitude towards the way of investing in free financial funds depends on monthly incomes of the respondents.

This is confirmed by the fact that the defined risk of error is $1-\alpha$, i.e. p = 0,05 is higher than the value of the realized level of risk of error, which equals p=0,0048.

7. Conclusions

Despite the fact that the investment funds are significant participants in capital market in highly developed market economies, there are still in initial phase of development. The results from the conducted survey show that the biggest part of the respondents (64%) invests free funds in the banks, 30% keep the cash at home and only 6% invest in private pension or investment fund. 65% of the respondents are not informed about the opportunities of investing in investment funds. The survey also shows that 91% of the respondents want to be informed about the possibility of investing in investment funds in RM. Namely, 25% of the respondents stated that they want to be informed about the benefits from investing in investment funds through lectures by experts, 31 % want to be informed by e- mail, 19 % want to realize communication by attending seminars and the rest of 25 % of respondents want to be informed through print media (newspapers, magazines).

Considering the results of the survey, the following measures should be taken in terms of development of investment funds in Republic of Macedonia:

- More aggressive advertisement and promotion in terms of education the population regarding the benefits of investing in investment funds;

- Organizing seminars and workshops;

- Higher education level of young population during the educational process regarding the benefits and the significance of investment funds;

- Organizing debates in media regarding the advantages and risks of investing in investment funds.

Next research that would enrich this issue is a comparative analysis of investment funds in the region.

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