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NON-BANK FINANCIAL INSTITUTIONS AND ECONOMIC GROWTH. CASE OF REPUBLIC OF NORTH MACEDONIA

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Abstract

Financial system of a country is a complex system which has so many parts that can affect the economy. Looking in general it can be divided into two main groups: banks and non-bank financial institutions. Non-bank financial institutions are financial institutions that give the same services as banks, but aren't allowed to save deposits. The purpose of this paper is to empirically measure the impact of the growth of the non-bank financial institutions in the Republic of North Macedonia on economic growth. Non-bank financial institutions will be analyzed in six main categories: insurance companies, pension funds, investment funds, financial companies, financial leasing companies and mutual funds and pension funds management companies. The data will be analyzed with quarterly data for a period of seven years from the first quarter of 2012 till the last quarter of 2018, taking into consideration in total 28 observations. Method that will be used for data processing is regression analysis, where the dependent variable will be GDP as the main element of measuring economic growth, and the independent variables will be the growth on assets of non-bank financial institutions. From data processing, we came to conclusion that pension funds, investment funds and financial companies are in positive relationship with the economic growth. On the other side pension funds, financial leasing companies and mutual funds and pension funds management companies are in negative correlation with economic growth.

Keywords: Non-banking financial institutions, economic growth, linear regression

INTRODUCTION

The financial system transfers free funds from those who have surplus to those who lack financial resources. It does this in two ways: through direct financing and through indirect financing. Direct financing is done through the financial market with the help of securities such as shares, bonds, etc. Indirect financing is done with the help of financial intermediaries such as banks, saving companies, non-bank financial institutions etc.

In developing countries banks as a part of financial system have the crucial impact on economic growth. Non-bank financial institutions have grown up as a part of the system but they don't have such importance yet. Noticing that there is a little number of scientific researches on the impact of non-bank financial institutions on economic growth on the Republic of North Macedonia, we decided to write the paper on this thesis.

International Monetary Fund refers to non-bank financial institutions as other financial institutions (OFI) and it defines those institutions as follows: OFIs refer to those financial corporations that channel funds from lenders to borrowers through their own account or in auxiliary financial activities that are closely related to financial intermediation- but are not classified as deposit takers (IMF, 2004a).

World Bank refers to non-bank financial institutions as financial institution that does not have a full banking license and cannot accept deposits from the public. However, NBFIs do facilitate alternative financial services, such as investment (both collective and individual), risk pooling, financial consulting, brokering, money transmission, and check cashing. NBFIs are a source of consumer credit (along with licensed banks).

So, non-bank financial institutions have their positive role when increasing the competition on the financial markets. But, on the other hand if they aren't right regulated they may have negative impact on financial market. Due to the convenience of researchers and readers the purpose this paper is to measure the impact of the growth of the non-bank financial institutions in the Republic of North Macedonia on economic growth.

LITERATURE REVIEW

Because the participation of non-bank financial institutions in financing is growing also are growing the rules for their regulation with the aim of financial stability. Non-bank financing provides a valuable alternative to bank financing and helps support real economic activity. For many corporate and households, it is also a welcome source of diversification of credit supply from the banking system, and provides competition for banks (Financial Stability Board, 2018). Which means that and in case of financial crisis non-bank financial institutions have also their importance.

There is a study made by Cheng and Degryse where they measure the financial development of banks and non- banks financial institutions and their impact on economic growth for 27 provinces of China, for the period 1995-2003. From their research they find that banks had higher impact on economic growth comparing to non-bank financial institutions. They also find that provinces with a more developed non-bank financial sector show no different growth rate than provinces with a little developed non-bank financial sector.

Islam and Osman (2005) have measured empirically the impact of the development of non-bank financial institutions on economic growth in Malaysia for a period of thirty years starting from 1974 to 2004. From their work they came to conclusion that there is long term positive and significant relationship between these two variables. The NBFI contribute to higher economic growth with financing small and medium sized enterprises that can't have so much possibility to meet their financial needs from the stock market or from the banks.

Gupta, Yesmin & Khan (2013) measure the contribution of non-bank financial institution on economic growth in Bangladesh for the period of eleven years from 2000-2010. They come to conclusion that there is positive correlation between total assets and total assets to GDP. They also conclude that the change in NBF has partial impact on the future change of the per capita real GDP in Bangladesh.

Rateiwa & Aziakpono (2015) analyzed selected African countries for the period from 1971-2013. They tested the long run equilibrium relationship between economic growth and non-bank financial institutions with the help of Johansen co-integration model and vector error correction model. They concluded that in countries with more developed financial system the importance of non-bank financial institutions and their impact on GDP is higher than in countries with less developed financial system.

Anwar, Zahir & Tabassum (2016) have made their study for these variables in Bangladesh where the importance of the NBFI has been grown for a period of the last 11 years and they are dominant market players of the financial sector. The role of NBFI is highly important in the moments of economic distress. They also came to conclusion that there is positive and significant relationship between the NBFI as a part of the financial system and economic growth of the country.

Rizvan & Semenog (2017) who analyzed the impact of NBFI in Ukraine, they concluded that NBFI had lower impact on growth of GDP in Ukraine that banks which have the crucial role on the growth on GDP. There is proved that there is a close connection between the degree of the development of NFI and economic growth.

TREND OF NBFI IN REPUBLIC OF NORTH MACEDONIA

From the Report of Financial stability of Republic of North Macedonia for 2018 we can highlight that banks have greater participation on the financial system. Banking system contributed the most to the annual growth of the net profit of the financial system with 95.2% (NBRS.M, pg. 94). The other part is result of other financial institutions.

Because our focus is in Republic of North Macedonia on the graphic below will be presented the trend of assets of banks and the assets of non-bank financial institutions in this country:

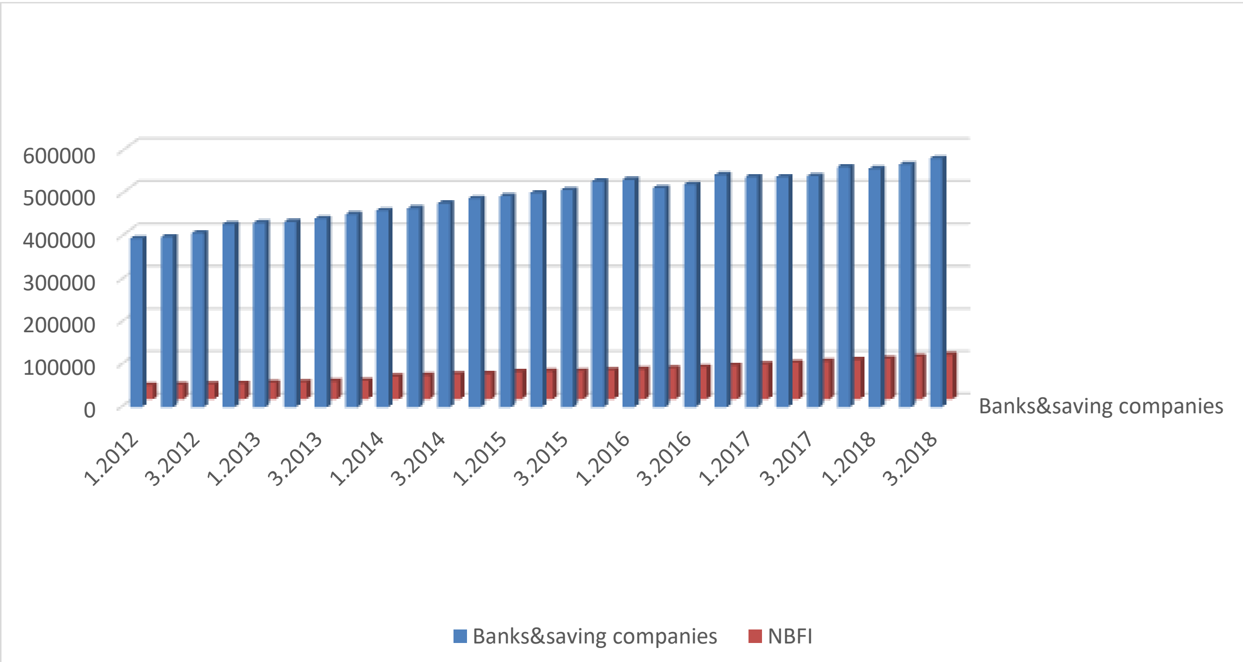

Figure 1: Movement of the assets of banks& saving companies compared to assets of NBFI for the period from 2012- 2018.
Source: Authors calculation

From the figure above we can see that the level of assets of NBFI is very small compared to the assets of banks. We can also see that there is always a growing trend for assets of NBFI from the beginning period till the end. The level of banks assets had its up and downs. If we analyze the level of the assets of NBFI for this period we can see also that their level has grown for three times compared to the beginning of the period.

At the figure 2 will be presented the level of assets for different types of non-bank financial institutions.

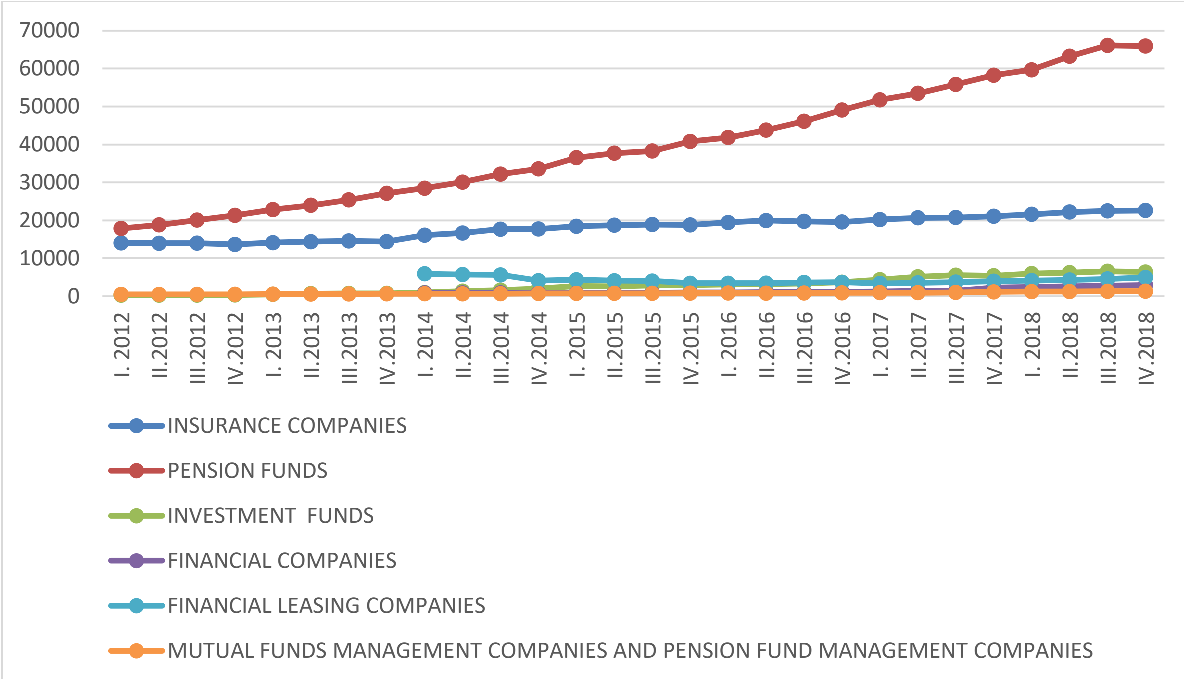

Figure 2: Movement of the assets for different types of NBFI

From the figure 2, we can see better the growing trend of NBFI. At the beginning of the period there were four types of NBFI: insurance companies, pension funds, investment funds and mutual funds management companies and pension fund management companies. From 2014 there are also two other types of NBFI: financial companies and financial leasing companies. If we analyze better the assets of different types of NBFI we can see that pension funds have higher levels of assets compared to other NBFIs. They reach their maximum at the second quarter of 2018. They also have sharper growth compared to others. After pension funds, insurance companies are the second type of NBFI with higher level of assets. On the end of the analyzed period their assets are below the value of the half assets of pension funds. Mutual funds management companies and pension fund management companies have the lowest value of the assets. All types of NBFIs show growing trend during the whole period, except financial leasing companies.

METHODOLOGY

The data analyzed in this study are quarterly and cover a period of seven years, from quarter Q1, Q2, Q3 and Q4 of 2012, from quarter Q1, Q2, Q3 and Q4 of 2013, from quarter Q1, Q2, Q3 and Q4 of 2014, from quarter Q1, Q2, Q3 and Q4 of 2015, from quarter Q1, Q2, Q3 and Q4 of 2016, from quarter Q1, Q2, Q3 and Q4 of 2017 and the last one, from quarter Q1, Q2, Q3 and Q4 of 2018. So the study contains a total of 27 observations.

For the realization of the statistical model, linear regression is used. The dependent variable is GDP, while the independent variables are the assets of banks and non-bank financial institutions.

Calculation of linear regression is done with the help of formula:

$Y_i = \beta_1 + \beta_2 X_i + u_i$…………………………………………………………………….. (1)

Source: Gujarati,pg. 66

Where;

Y_i is the dependent variable. In this case GDP.

X_i are the independent variables in this case the assets of banks and saving companies and the assets of non-bank financial institutions.

Data calculation is done with the help of statistical program SPSS.

ANALYSIS AND FINDINGS

The linear regression results for dependent variable GDP, while the independent variables viz. the assets of banks and non-bank financial institutions are presented in the table 1 below.

Table 1 Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	26279.898	37623.388		.698	.492
	Banks & saving companies	.202	.112	.672	1.810	.083
	NBFI	.195	.286	.253	.682	.502

a. Dependent Variable: GDP

If we make substitution of these data in the formula we will have the equation as follows:

GDP = 26279.898+ $0.202X_1 + 0.195X_2 + u_i$

Because the two independent variables had positive coefficients we can say that they both have a positive impact on economic growth. The value of the R coefficient which is the residual is 0.92, so we can conclude that there is high positive correlation between variables. The value of R^2 is 0.849. But there we can see that there is no statistical significance in the model.

If we calculate the impact of different types of non-bank financial institutions in economic growth, we have the following results:

Table 2 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	333855.804	183871.691		1.816	.093
	MUTUAL FUNDS MANAGEMENT COMPANIES AND PENSION FUND MANAGEMENT COMPANIES	-119.984	146.002	-1.888	-.822	.426
	FINANCIAL LEASING COMPANIES	-9.457	8.228	-.545	-1.149	.271
	FINANCIAL COMPANIES	18.193	33.715	.945	.540	.599
	INVESTMENT FUNDS	4.001	11.654	.518	.343	.737
	PENSION FUNDS	2.464	2.006	2.174	1.228	.241
	INSURANCE COMPANIES	-9.810	8.723	-1.320	-1.125	.281

a. Dependent Variable: GDP

If we analyze the relationship between different types of non-bank financial institutions and economic growth we can see that there is positive coefficient for pension funds, investment funds and financial companies. On the other hand there is negative relationship between mutual funds management companies and pension funds management companies, financial leasing companies and what is very important is the negative relationship between economic growth and insurance companies which by size of their assets are the second type of non-bank financial institutions.

CONCLUSION

Financial system has a crucial impact on economic growth of every country. The difference is that in developed countries all participants of financial system with low levels of differences have their importance on economic growth. At developing countries banks are the most important part of financial system.

This is the case and for Republic of North Macedonia. But, and non-bank financial institutions have also their impact on economic growth. Started in 2002, the size of non-bank financial institutions has increased. From the data analyze on this paper we can see that is growing trend at the level of assets at non-bank financial institutions. Pension funds followed by the insurance companies are the most relevant non-financial institutions in Macedonia.

The calculation of data with the help of linear regression model shows us that there is a positive coefficient, which means a positive relationship between the non-bank financial institutions and economic growth. But, their significance isn't very high. When, taking into consideration different types of non-bank financial institutions we can conclude that there is positive relationship between economic growth and some types of non-bank financial institutions as pension funds, financial companies and investment funds. But, on the other hand there is negative relationship between economic growth and insurance companies, financial leasing companies and mutual fund management companies and pension fund management companies.

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