

The relationship between Investment Portfolio and Financial Performance in Albanian Insurance Companies

Lorena Bezo (Balili)^{1*}

Ardi Bezo²

^{1*}Department of Finance, Faculty of Economy,
University of Tirana, Albania

²Department of Finance, Faculty of Economy,
University College of Business, Albania

*Email: lorenabalili@feut.edu.al

Abstract

The insurance sector plays an important role in the Albanian financial system. This industry represents a key and advanced position of the non-banking financial sector due to the features and dynamics that characterize it. In Albania, it is guided and standardized according to the Directives of the European Union Organizations and supervised by the Financial Supervisory Authority. The objective of this study is to determine the relationship that exists between investment portfolio and financial performance for the entire insurance sector in Albania. The study used secondary data provided by the annual reports of insurance companies and the official reports published by the Financial Supervisory Authority in Albania. The main analysis of the paper is based on the descriptive interpretation of secondary data for the period 2017-2022. The representative parameters of the investment portfolio of insurance companies used in the analysis are: the ratio of Government Securities to total assets; the ratio of Bank Deposits to total assets; the ratio of Land and Buildings to total assets and the ratio of Investments in Subordinated Undertakings to total assets. The representative variables of financial performance are ROA and ROE. In order to have a comparative analysis between companies, the study internally investigates the structure of investments in the portfolio of Life and Non-Life insurance companies.

Keywords: insurance companies, investment portfolio, financial performance, government securities, bank deposits

Introduction

Investments constitute a very important dimension of the existence and longevity of various companies and institutions. Measuring the performance of an investment portfolio is a key aspect for all stakeholders in an economic entity, especially nowadays where financial markets represent the headline of developments all over the world. As for any industry, also for the insurance industry investments represent

a very important and delicate element of the financial performance of the companies that operate within it.

Insurance plays a large and very important role in developed and modern economies. Everywhere in every economy in the world, the insurance sector is essential to ensure a stable economy as its presence contributes to economic growth in one aspect but also in taking risks that can potentially lead to financial ruin (Geneva, 2009).

The insurance industry is important for the stability of the financial system because of the important role they play in three main aspects: first, because they are large institutional investors in the financial markets; secondly, they provide risk protection through insurance for market actor such as households and businesses; thirdly, the increased connections they have with banks and other financial institutions cause their problems to spread to other sectors as well (Financial Stability Review, 2009).

Due to the nature of the activity that insurance companies carry out, the sources of funding are relatively stable and therefore their liquidity risk is lower than for banking activity, giving them more space for investing these funds. Carrying out a very specific activity in the financial system and not being involved in complex activities as banks do, the insurance sector is not considered an important source that can damage the stability of the financial system. But in the current trend of interaction that markets and institutions have with each other, a problem or uncertainty of this market can be transmitted to other markets with a greater systemic importance, undermining the stability of the entire financial system.

Insurance companies raise funds through the collection of insurance policies they offer to their customers. In order to guarantee financial stability, an important aspect is related to the investment of these free funds which would enable their value to increase, thus facilitating the payment at the time of maturity in the future. For this reason, a delicate aspect is related to the investment decision of these funds. According to (Omarkhanova, Amerzhanova, Mardenova, Zayakina, & Sartova, 2019), insurers collect funds from their policyholders and invest mainly in financial institutions such as banking and in alternatives that capital markets offer.

One of the most developed and largest insurance markets is located in the European Union where insurance companies as the largest institutional investors contribute to the growth and financial stability of these countries (Focarelli, 2017).

Regarding the insurance industry in Albania, this market has evolved relatively late, after the 90s, therefore its history is limited. Currently, 12 insurance companies operate, which hold 2% of the financial system and 23% of the non-banking sector in Albania. (Stability Report of Bank of Albania , 2022).

The insurance market in Albania throughout the beginning of 2023 is focused on Non-Life insurance, maintaining the traditional trend over the years, accumulating 91.88% of the total volume of premiums from the entire sector, while life insurance brought 8.09% and reinsurance 0.028% of premiums . Meanwhile, according to the type of

insurance, for voluntary insurance the gross written premiums hold 46.58% and for mandatory insurance they hold 53.42% of the total market. (Statistical Report, January-March 2023)

This study investigates the investment portfolios of insurance companies for the entire market in Albania, to identify if there is a relationship between the forms of investment and their financial performance. More specifically, how does their investment decision-making appear against the financial performance of these institutions. In more detail, the study seeks to achieve the following objectives:

- To identify the type of investments held in the investment portfolios of insurance companies in Albania;
- To analyze ROA and ROE profitability indicators of insurance companies;
- To interpret statistical data on the weight that investments have on total assets for the entire aggregate insurance market in Albania;
- To compare the weight that specific categories of investments hold to the total assets for Life insurance companies and for Non-Life insurance companies;
- To identify the nature of the relationship that exists between investment representative indicators and profitability indicators ROA and ROE through the correlation coefficients analysis.

Literature Review

Throughout 2021, the main assets of insurance companies are mainly invested in traditional forms of investment, mainly bonds. Rising inflation caused interest rates to rise, causing losses on some bonds. In 27 out of 43 jurisdictions, life insurers invest directly in bonds. The first place is held by Life insurers in Mexico with 95%. While Non-Life insurance companies have 50% of their assets in bills and bonds, less than life insurers (57%). The first place among non-life insurers that invest more in bonds is occupied by Hungary (82%), in government bonds. (OECD, 2023)

It is noted that there are other forms of instruments and vehicles in the investment portfolios of Non-life insurers. Throughout 2021, in the investment portfolios of non-life insurers in Switzerland, the weight of participations is almost 29% of assets, in land and buildings with 5% and 10% in loans in 2021. (FINMA, 2022)

According to (Erel, Rose, & Michael, 2012) insurance companies especially in difficult financial conditions orient their investment portfolio towards safer assets, even more so during the financial crisis. In some studies regarding the risk assumed by insurance companies, it has been proven that this is related to high-risk investments, such as in the capital markets. The potential role played mainly by life insurance companies and pension funds, especially as large institutional investors, has become a central topic of discussion in many studies in recent years (Gal, 2016).

Studies related to financial performance and its influencing factors in the insurance industry have generated different results, influenced by the economic context, the study period, the number of companies in the study, the selected variables, the structure of the investment portfolio taken into analysis. etc. The selected factors can serve the macroeconomic context and specific factors related to the internal activity of the companies.

In their study, (Akitoye & Felix, 2008) they concluded that the investment decision-making of companies has a positive relationship with profitability ratios.

(Majali, 2012) carried out a study related to the investigation of the factors that most affect the financial performance of insurance companies in Jordan. The study included 25 insurance companies during the period 2002-2007 and the representative performance indicator was ROA. The paper concluded that the increase in the company's assets would lead to a good financial performance.

(Kripa & Ajasllari, 2016) in their study of the insurance market in Albania during the period 2008-2013, concluded that the growth rate is positively associated with profitability ROA. While fixed assets, liabilities and liquidity are negatively correlated.

(Moro & Anderloni, 2014) in their study they analyzed 198 European insurance companies for the period 2004-2012. The results showed that reserves dimension and asset turnover affect positively profitability ROA, while diversification and asset size affect it negatively.

(Abera & Abede, 2019) studied the determinants of financial performance in Ethiopian insurance companies during the period 2010 - 2015. The findings showed that liquidity, size, loss, leverage and capital adequacy were the main determinants of financial performance ROA and ROE.

Data and Methodology

The study used official secondary data extracted from the annual reports of insurance companies, the annual and statistical reports published by the Financial Supervisory Authority. The information is collected from the official websites of the companies and the Financial Supervisory Authority. The target group of the population under study were all Life and Non-Life insurance companies operating in Albania. The study applies a descriptive research design. The main analysis of this study is based on the qualitative interpretation of secondary data for the period 2017-2022.

Table 1 presents the research variables measurements of the study:

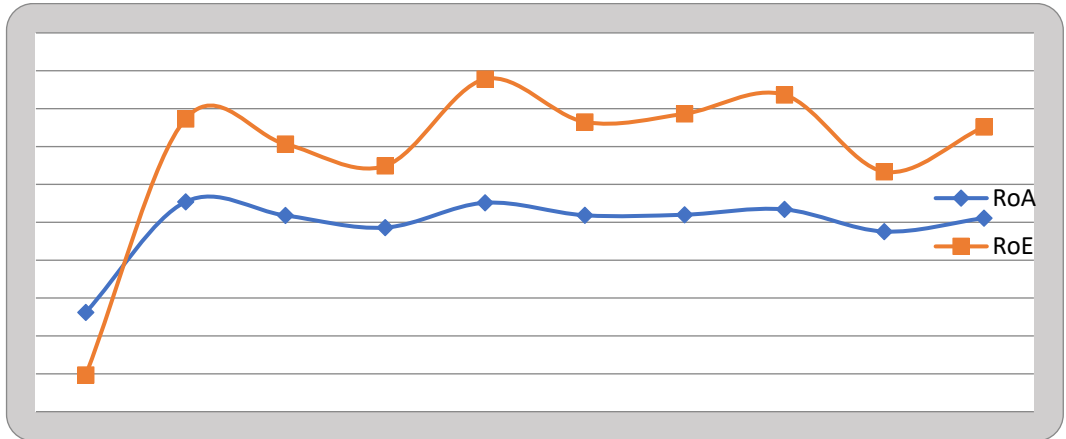
Table 3: Research variables measurement

Variable	Symbol	Measurements
Return on assets	ROA	Net income/ Total Assets
Return on Equity	ROE	Net income / Total Equity
Government Securities Ratio	GSR	Government securities/Total Asset
Bank Deposits Ratio	BDR	Bank Deposits/Total Asset
Real Estate Ratio	RER	Land and buildings/Total Asset
Investments in Subordinated undertakings Ratio	ISR	Investments in subordinated undertakings/Total Asset

Results

To see the trend that the indicators of the financial performance of insurance companies in Albania have had over the years, figure 1 is presented. As can be seen, the performance of the indicators is similar, despite the fact that the dominance in value is provided by the ROE indicator. A delicate moment where both indicators showed a negative level is the year 2013, when ROE again had the lowest value. In the last decade, it can be seen that the financial performance has been positive, with more pronounced decreases or increases in the return on equity. After the dark period of 2013, the lowest value for both indicators during this decade was in 2021 with 4.67% for ROE and 1.51% for ROA. The effect of the Covid-19 pandemic has also negatively affected the insurance industry, shrinking the profitability of these companies. The decline began gradually from the moment of the spread of Covid-19 in Albania in March 2020 and subsequently culminated in 2021.

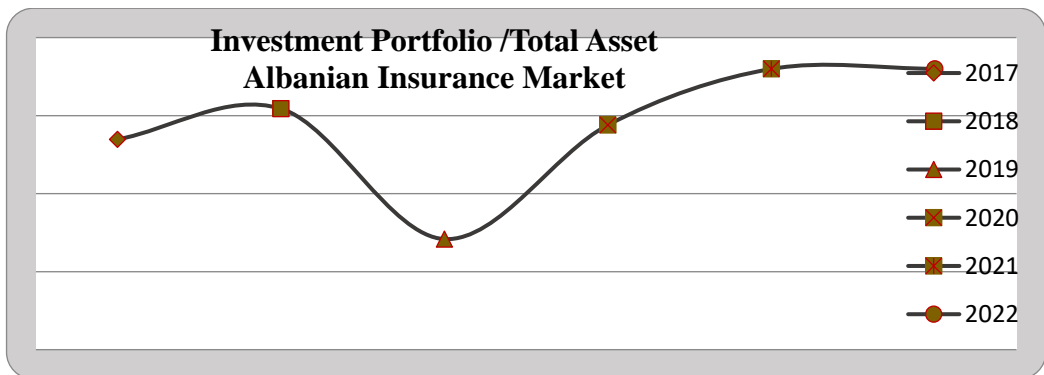
Figure 2: ROA and ROE (Albanian Insurance Market)



Source: Financial Supervisory Authority

Figure 2 presents the weight that the investment portfolio has to the total asset for the entire aggregate insurance market. We see those investments in Government securities, Real Estate, Bank deposits and Investments in subordinated undertaking occupy a dominant weight in the total assets of this sector, where the average values fluctuate between 64%-68%. Except for the year 2019 where was recorded the lowest level of 57.09%. This proves the high importance that decision-making in these investments has for the insurance activity.

Figure 3: Investment Portfolio/ Total Asset (Albanian Insurance Market)



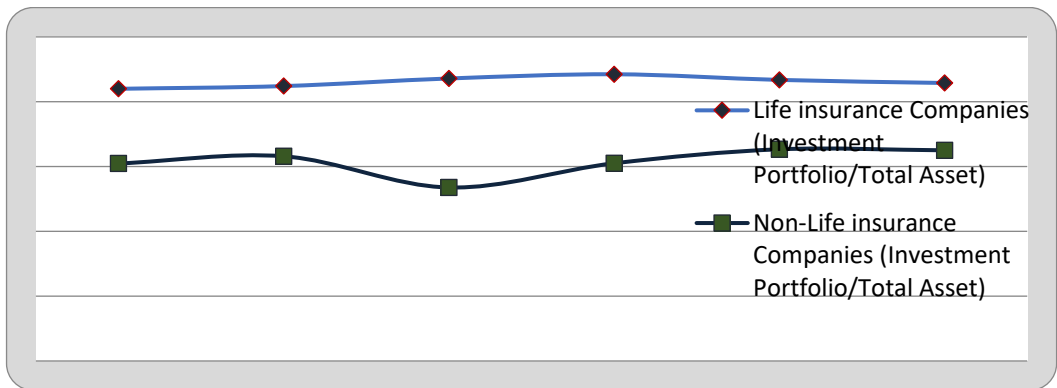
Source: Author's calculation (Financial Supervisory Authority data)

To analyze in more detail the share of investment portfolio to the total assets of Life and Non-Life insurance companies, is presented figure 3. Given that Life insurance companies have more stable funds than Non-life insurance companies, this is also reflected in a higher weight that investments occupy in their total assets. As shown, the investment portfolio appears stable for life insurers with values fluctuating

between 83.98% in 2017 and 85.78% in 2022. The highest value was recorded in 2020 with 88.46%.

While for non-life insurers, the weight of the investment portfolio has a minimum value of 53.53% in 2019, a maximum value of 65.31% in 2021 and 65% in 2022. It is noted that the progress of the investment portfolio for non-insurers over the years matches the progress that the portfolio of investments had for the entire aggregate insurance market in Albania. This is justified by the high weight that the assets of non-life insurers have to the total assets of the entire insurance market in Albania, with about 87.61%. While life insurance with about 12.39%.

Figure 4: Investment Portfolio/ Total Asset (Life and Non-Life Insurance Companies)



Source: Author's calculation (Financial Supervisory Authority data)

Figures 4 and 5 present the weights that different types of investment had to total assets for Life and Non-Life Insurance Companies. In both types of companies, is noticeable the dominance that Bank Deposits have in the respective investment portfolios. The highest weight is evident in life insurers compared to non-life insurers, where the maximum value was reached in 2020 with 58%. In life insurers, in second place are investments in government securities, the weight of which peaked in 2017 with 45% and the minimum in 2020 with 19%. The uncertainty of the Covid-19 period was reflected in the reduction of investment exposure to public securities and the orientation towards safer assets, such as real estate. Investments in real estate and in subordinated undertaking are at low values. While for non-life insurers, in second place are investments in real estate with about 16.1% in 2022, which also marks the highest value. While investments in government securities and subordinated undertaking hold an almost similar weight to the total assets of these companies.

Figure 5: Types of Investment/Total Assets (Life Insurance Companies)

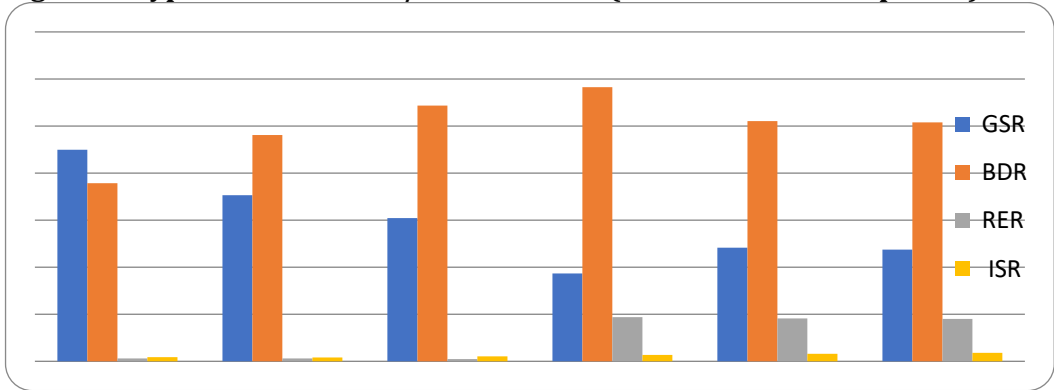
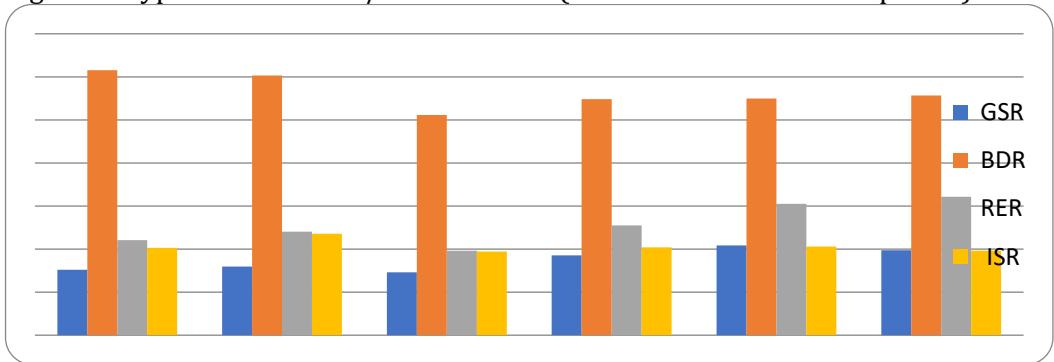


Figure 6: Type of Investment/Total Assets (Non-Life Insurance Companies)



Source: Author's calculation

In order to evaluate the degree of correlation between the indicators selected in a study, is presented table 2. According to (Pallant, 2011), the analysis of the correlation between the variables is very important to evaluate the strength and direction of the connection that the variables have with each other.

Table 4: Correlation Matrix

	<i>GSR</i>	<i>BDR</i>	<i>RER</i>	<i>ISR</i>	<i>ROA</i>	<i>ROE</i>
GSR	1					
BDR	0.442196	1				
RER	0.622476	0.172828	1			
ISR	-0.10707	0.525829	-0.27181	1		
ROA	-0.34737	0.293928	-0.61851	-0.02223	1	
ROE	-0.3898	0.240223	-0.60616	-0.08339	0.995921	1

Source: Author's calculation

The correlation coefficient indicates the bi-variable relationship between two variables. According to the results presented in table 2, it is observed that between the two profitability indicators ROA and ROE the relationship is strong positive with a coefficient of 0.9959, which was expected. So both indicators move in the same direction. ROA and ROE present a negative relationship with Government Securities Ratio (GSR), Real Estate Ratio (RER) and Investments in Subordinated undertakings Ratio (ISR). The only indicator that has a slight positive relationship is the Bank Deposits Ratio (BDR) with a coefficient of 0.2939 for ROA and 0.2402 for ROE.

Based on the analysis of the relationship strength of the variables, we see that the strongest negative relationship between ROA and ROE is with the Real Estate Ratio (RER). The relationship appears with coefficients of -0.6185 and -0.6061 for ROA and ROE respectively. So the investments that insurance companies make in Land and Buildings turns out to have a negative relationship with profitability indicators. As discussed above, for the type of activity they perform, insurance companies have more stable funds to invest in longer durations than banks. The contribution that these investments give in the short term is negative, since they bring positive returns for longer periods of time. This is the main reason for this negative relationship between RER and performance indicators. A negative relationship is also observed between the Government Securities Ratio (GSR) and ROA and ROE profitability indicators, with coefficients of -0.3473 and -0.3898, respectively. The portfolio of financial investments in government securities is dominated by long-term investments in government bonds and less in treasury bonds. Throughout the period under consideration, the contribution of investments in government securities has been negative in the performance of insurance companies.

Discussion

Studies related to financial performance and its influencing factors in the insurance industry have generated different results, influenced by the economic context, the study period, the number of companies in the study, the selected variables, the structure of the investment portfolio taken into analysis. etc.

The first part was focused on the descriptive analysis of the weight that the investments have to the total assets both for the entire insurance market in Albania and for each of the types of insurance companies, Life and Non-life.

While the second part was focused on the investment portfolio structure analysis of insurance companies in Albania. Different investment categories within the portfolio of Life and Non-life insurance companies served as the main variables to study their relationship with profitability indicators ROA and ROE. The results showed that the indicator that exhibited the strongest relationship with the financial performance of insurance companies was the real estate ratio (RER), with a negative nature. Meanwhile, other variables show slightly weaker relationships.

Referring to the literature review, we can say that the results are contradictory in different studies, since the selected variables are different. We can say that in the study conducted by (Kripa & Ajasllari), the findings are similar regarding the relationship between fixed assets and profitability.

Conclusions

This study investigated the investment portfolios of insurance companies for the entire market in Albania, to see if there is a relationship between the forms of investment and their financial performance. The study applies a descriptive research design. The target group of the population under study were all Life and Non-Life insurance companies operating in Albania. The main analysis of this study is based on the qualitative interpretation of secondary data for the period 2017-2022.

In the last decade, it was seen that the financial performance of insurance companies has been positive, with more pronounced decreases or increases in the return on capital. The effect of the Covid-19 pandemic had also its negative effects on the insurance industry, shrinking the profitability of these companies. The decline began gradually from the moment Covid-19 spread during March 2020 in Albania and subsequently culminated in 2021, with the lowest values at 4.67% for ROE and 1.51% for ROA.

Investments in Government securities, Real Estate, Bank deposits and Investments in subordinated undertaking occupy a dominant weight in the total assets of this sector, where the average values fluctuate between 64%-68%. Except for the year 2019 where was recorded the lowest level of 57.09%. This proves the high importance that decision-making in these investments has for the insurance activity.

The high weight that the assets of non-life insurers have to the total assets of the entire insurance market in Albania is about 87.61%, while life insurance about 12.39%. The investment portfolio for life insurers has values that fluctuate between 83.98% in 2017 and 85.78% in 2022. The highest value was recorded in 2020 with 88.46%. While for non-life insurers, the weight of the investment portfolio has a minimum value of 53.53% in 2019, a maximum value of 65.31% in 2021 and 65% in 2022.

In both types of companies, is noticeable the dominance that Bank Deposits have in the respective investment portfolios. The highest weight is evident in life insurers compared to non-life insurers, where the maximum value was reached in 2020 with 58%.

ROA and ROE present a negative relationship with Government Securities Ratio (GSR), Real Estate Ratio (RER) and Investments in Subordinated undertakings Ratio (ISR). The only indicator that has a slight positive relationship is the Bank Deposits Ratio (BDR) with a coefficient of 0.2939 for ROA and 0.2402 for ROE.

The study has a mainly descriptive analysis, focusing only on the representative factors of the investment portfolio. It is suggested that in the future studies of this field, to be included more representative variables and to be compiled on an econometric model. The selected variables are suggested to be both of the internal environment of the insurance companies' activity and representative of the external macroeconomic environment.

References:

- [1] Abera, M., & Abede, A. (2019). Determinants of Financial Performance; Evidence from Ethiopia Insurance Companies. *ournal of accounting finance and auditing studies (JAFAS)* , 5 (1), 155-172.
- [2] Akitoye, I. R., & Felix, A. A. (2008). Investment Decisions in a Developing Economy:A case study of Insurance Business in Nigeria. *International Research Journal of Finance and Economics* .
- [3] Erel, I, Rose, C., & Michael, S. (2012). Determinants of Cross-Border Mergers and Acquisitions. *The Journal of Finance* , 67 (3), 1045-1082. (December 2009). *Financial Stability Review*. European Central Bank.
- [4] FINMA. (2022). Insurance market report 2021.
- [5] Focarelli, D. (2017). Why Insurance Regulation Is Crucial for Long-Term Investment and Economic Growth. In P. Marano, & M. Siri, *Insurance Regulation in the European Union: Solvency II and Beyond* (pp. 339-59).
- [6] Gal, J. (2016). The evolution of insurer portfolio investment strategies for long-term investing. . *OECD Journal: Financial Market Trends*.
- [7] Geneva, A. (2009). *The insurance industry and climate change - contribution to the global debate*. Geneva: The Geneva Association.
- [8] González. (2020). Pension fund equity performance. *Journal of Banking and Finance* .
- [9] Kripa, D., & Ajasllari, D. (2016). Factors Affecting the Profitability of Insurance Companies in Albania.
- [10] *European Journal of Multidisciplinary Studies* , 1 (1), 352-360.
- [11] MacMinn, 1. a. (2016). The evolution of insurer portfolio investment strategies for long-term investing.
- [12] *OECD Journal: Financial Market Trends* .
- [13] Majali, A. (2012). Factors Affecting the Financial Performance of Jordanian Insurance Companies Listed at Amman Stock Exchange. *Journal of Management Research* .

- [14] Moro, O., & Anderloni, L. (2014). Non-Life Insurance Economic Performances: An Empirical Investigation. *Journal of Economics and Management*, 18, 2014 .
- [15] OECD. (2023). Global insurance market trends.
- [16] Omarkhanova, Z., Amerzhanova, D., Mardenova, L., Zayakina, A., & Sartova, R. (2019). Statistical methods in investment insurance. *Entrepreneurship and Sustainability Issues* , 7 (2), 1582-1598.
- [17] Pallant, J. (2011). *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS*. Fourth Edition, Allen and Unwin, Australia.
- [18] Pasiouras. (2013). Regulations and soundness of insurance firms: International evidence. *Journal of Business Research* , 632-642.
- [19] (2022). Stability Report of Bank of Albania .
- [20] (January-March 2023). Statistical Report. Financial Supervision Authority.

List of Tables:

Table 1: Research variables measurement

Table 2: Correlation Matrix

List of Figures:

Figure 1: ROA and ROE (Albanian Insurance Market)

Figure 2: Investment Portfolio/ Total Asset (Albanian Insurance Market)

Figure 3: Investment Portfolio/ Total Asset (Life and Non-Life Insurance Companies)

Figure 4: Types of Investment/Total Assets (Life Insurance Companies)

Figure 5: Type of Investment/Total Assets (Non-Life Insurance Companies)