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Impact of Financial Factors on Financial Performance Evidence from Insurance Companies in Ethiopia

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Abstract: The main purpose of the study was to assess the influence of financial factors on the financial performance of 11 insurance businesses in Ethiopia that were deliberately selected. The researcher employed an explanatory research design with a quantitative research approach using panel data in this study. Secondary data was acquired from Ethiopia's national bank for this investigation. In terms of sampling, the researcher employed a purposive sampling strategy based on the availability of data, the year of establishment, and the insurances' operational life. Finally, using the EView10 software suite, the data was evaluated. As a result, the regression was done using a random effect regression model. The results of random effect regression analysis revealed that liquidity ratio, premium growth, and gross domestic product have positive and statistically significant effects on Ethiopian insurance companies' financial performance, while other variables such as leverage, underwriting risk, and inflation rate have negative and statistically significant effects. Finally, the researcher advised Ethiopian insurance company executives to prepare for macroeconomic changes by developing financial plans, developing new product lines, and conducting extensive advertising to increase their market share, and to place a greater emphasis on factors that increase premium and liquidity ratios, as well as factors that reduce leverage and underwriting risk, in order to improve their operational and financial performance.

Keywords: Financial Factors, Financial Performance, Insurance Company

1. Introduction

1.1. Background

In a modern economy, the importance of financial institutions such as Banks, Insurance, saving and credit unions and the likes is unarguable. These institutions play a great role in facilitating and lubricating the economy of nations [19]. Dereje, W. N. [7] stated that financial institutions serve as a medium of exchange and facilitate business activities, support mobilization of resources through savings and allocate resources to activities with highest returns, follow up investments and exert corporate governance, and offer a diversity of financial instruments. They provide various financial services to the community. According to [1] current business world without financial institutions such as insurance is unsustainable, in practice some economic units are in surplus whereas the others remain in deficit, in other way risky businesses do not have capacity to retain all types of risk in the uncertain environment.

According to [19], the insurance industry plays an important role in the economy of most developed and developing countries contributing to economic growth, efficient resource allocation, reduction of transaction costs, creation of liquidity, facilitation of economics of scale in investment, and spread of financial losses.

According to [11] Profitability is one of the major objectives of business companies. Besides, profit attracts investors and improves the level of solvency, and thus, strengthens consumers' confidence. It is the measure of an organization's earnings, profits, appreciations in value as evidenced by the rise in the entity's share price.

In Ethiopia, there were a few research conducted focusing on factors affecting the profitability of insurance company. The results of many of the researchers regarding to the factors, such as liquidity, leverage, loss ratio, company size, premium growth, Inflation and GDP were not consistent and still controversial in that they have a negative and positive

relationship with performance of insurance companies. Therefore, clearing this ambiguity was the aim of this study. Additionally, most of the studies were conducted on non-life insurances sector whereas this study incorporates both the life and non-life insurance companies that operating in Ethiopia in order to enhance the overall economic wellbeing of the nation.

1.2. Objectives of the Study

1. To examine the effect of company specific variable on financial performance of insurance companies in Ethiopia.
2. To evaluate the impact of macro-economic variables on the financial performance of insurance companies in Ethiopia.

2. Literature Review

2.1. Theoretical Literatures

Insurance is the pooling of fortuitous losses by transfer of such risks to insures, who agree to indemnify insured for such losses, to provide other pecuniary benefits on their occurrence, or to render services connected with the risk [10]. According to the author concepts within the definitions are explained as follows. Pooling is the spread of losses incurred by the few over the entire group, so that in the process, average loss is substituted for actual loss, fortuitous loss is one that is unforeseen and unexpected and occurs as a result of chance. Risk transfer on the other hand means that the pure risk is transferred from the insured to the insurer, who typically is in a stronger financial position to pay the loss than the insured. The other characteristics of insurance are indemnification for loss which means that the insured is restored to his/her approximate financial position prior to the occurrence of the loss [19].

2.2. Role of Insurance in the Economy

As Banks and Security firms, insurance companies are financial intermediaries. It is therefore appropriate to view the insurance sector simply as pass-through mechanisms for diversifying risk, under which the unfortunate few who suffer losses are compensated from funds collected from many policy holders. Insurance is an essential element in the operation of sophisticated national economies throughout the world today. Without insurance coverage, the private commercial sector would be unable to perform their function [19]. Malik, H. [17] insurance plays a crucial role in fostering commercial and infrastructural businesses. From the latter perspective, it promotes financial and social stability, mobilizes and channels savings, supports trade, commerce and entrepreneurial activity and improves the quality of the lives of individuals and the overall wellbeing in a country. Life insurance companies mobilize savings from the household's sector and channel them to corporate and public sectors. A strong insurance industry can relieve pressure on government budget to the extent that provide private insurance reduces the

demands on government social security programs and life insurance can be an important part of personal retirement planning program [19].

2.3. Theories of Insurer Profitability

2.3.1. Modern Portfolio Theory

Modern portfolio theory was developed by Harry Markowitz in 1952. The theory suggests that investors can improve the performance of their portfolios by allocating their investments into different classes of financial securities and industrial sectors that are not expected to react similarly if new information emerges. It assists in selecting the most efficient investments by analyzing various possible portfolios of the given securities. MPT emphasizes maximizing returns while minimizing risks, while giving recognition to the existence of systematic and non-systematic risks. These concepts are usually referred to when discussing financial investments

2.3.2. Arbitrage Pricing Theory

Arbitrage Pricing Theory (APT) was proposed by Stephen Ross in 1976. APT agrees that though many different specific forces can influence the return of any individual firm, these particular effects tend to cancel out in large and well diversified portfolio. Charging a price at least as high as the competitive price (reservation price) increases the market value of the company. Charging a lower price would reduce the company's market value. Thus, financial models and financial prices are among the key items of information that insurers should have at their disposal when making financial decisions about tariff schedules, reinsurance contract terms, etc.

2.3.3. Dynamic Theory

The dynamic theory of profit was developed by J. B Clark; according to this theory profit accrues because the society is dynamic in nature. When a society is said to be dynamic when there is a change in its population, change in people's life trend, change in stock of capital, change in the supply of entrepreneurs etc. since this dynamic nature of the society make future uncertain and any act result of this has to come in future, involves risk. According Clark, profit is the result of an adjustment, which is brought about by the entrepreneurs themselves. In a dynamic economy, if an entrepreneur produces a new thing and creates demand for this product, then he is likely to obtain big profit.

2.4. Financial Factors Affecting Performance of Insurance Company

According to [27] the factors that affect the financial performance of insurance companies could be divided into three groups, the firm-specific factors, industry-Related factors and macroeconomic factors. The modern portfolio theory highly insight that, the organizational performance is influenced by those internal and industry related factors those related to internal efficiencies and be controlled by management of the companies [12].

2.4.1. Leverage

Leverage is the amount of debt used to finance company's assets. A company with significantly more debt than equity is considered to be highly leveraged. Leverage (also called solvency) considers the capital structure of the firm and the evaluation of the relative risk, and return associated with liabilities especially (long term debt) and equity or ownership. most studies conducted on the effect of leverage on insurance profitability come up with different conclusion for instance, According to [18] in Zimbabwe leverage ratio and profitability of the firm have a positive relationship. Teklit, A. B & Jasmindeep, K. [28] showed leverage ratio and the profitability of the firm have no statistically significant relationship at all.

2.4.2. Liquidity

from the context of insurance company's liquidity is the probability of an insurer to pay liabilities which include operating expenses and payments for losses/benefits under insurance policies, when due then shows us that more current assets are held and idle if the ratio becomes more which could be invested in profitable investments. Empirical evidences with regard to the effect of liquidity on insurance profitability revealed almost inconsistent results. For instance, conducted by [25] concluded that the liquidity of insurance companies has a negative and significant relationship with their profitability. It is therefore expected that insurance companies with more liquid assets will outperform those with less liquid assets.

2.4.3. Underwriting Risk

Underwriting risk is a ratio of claims incurred to net earned premium. It is also expressed as loss ratio. It is the risk that the premiums collected will not be sufficient to cover the cost of coverage [1, 17]: Insurance prices are established based on estimates of expected claim costs and the costs to issue and administer the policy. Insurers that undertake risky business and the diversification of underwriting risks help to mitigate exposure to underwriting losses and improve operational profits. [27, 6, 15, 18, 20] all found out that loss ratio negatively and significantly affects profitability. The study conducted by [28, 9, 16, 26, 14] loss ratio has insignificant effect on insurance company's profitability.

2.4.4. Size of Company

It has been suggested that company size is positively related to profitability. The main reasons behind this can be summarized as follows. First, large insurance companies normally have greater capacity for dealing with adverse market fluctuations than small ones. Second, large firms usually can relatively easily recruit able employees with professional knowledge compared with small firms. Third, large insurance companies have economies of scale in terms of the labor cost, which is the most significant production factor for delivering insurance services [15, 25]. Company size is computed as decimal logarithm of total assets of the insurance company. A positive linkage between company size and its profitability is expected, since larger firms have more

resources, a better risk diversification, complex information systems and a better expenses management.

2.4.5. Premium Growth

Premium growth has been reported from related literature that premium growth is another important financial variable that influences the financial performance of insurance companies. Therefore, the growth in premium of the firm has been argued to have influenced on the financial performance of insurance companies and this has been studied frequently. Premium growth as measured by percentage change in total assets or sometimes as percentage change in premium of insurance companies [1, 21].

2.4.6. Inflation

Inflation is represented by the average annual change in the consumer price index. It plays a role in insurance and has adverse impact on many aspects of insurance operations, such as claims, other expenses and salary expenses. Inflation particularly affects the profitability of insurance products because it alters consumption patterns. Hence, insurance companies may not adequately serve the interests of individuals or business [22, 17].

2.4.7. GDP Growth

GDP growth rate is measured by the real annual GDP growth rate, is expected to impress insurance profitability positively. Economic growth can enhance the insurance companies" profitability by increasing income of the individuals i.e. GDP per capita income and then households. Increase in income of individuals, households and businesses will increases the demand for security (the need to be secured against risk in case of life, businesses and other properties in general). Fear of risk or uncertainty initiates to buy an insurance policy by paying premium according to their desire for life, non-life and health insurance to be insured. Therefore, increased in premium will lead to increase in profits of insurance companies assuming that the claims to be paid in normal condition [25, 2].

2.5. Empirical Literature Review

Bhattarai, P. [4] examined the variables that influencing profitability of Nepalese insurance companies based on 10 insurance companies panel data for 2012/13 to 2017/18 over five year period. He has been taken Return on Equity (ROE) as profitability measures and as dependent variables. The data has been processing with the help of SPSS 25 Software. The results revealed that expenses ratio other independent variables have positive relationship found. The researcher concluded that the financial leverage and size have major determinants of profitability in Nepalese insurance companies.

Kinyua, B. M. [14] examined the effect of micro-factors on financial performance of insurance companies in Kenya. He used descriptive research design. The population of the study was 6 listed insurance companies. The researcher used fixed regression model to analysis through. Results of the study revealed positive and no significant effect of liquidity on

financial performance of listed insurance companies in Kenya. Secondly, company size had inverse and significant effect on financial performance of listed insurance companies in Kenya. Moreover, retention ratio and claims ratio had inverse and non-significant effect on financial performance of listed insurance companies in Kenya. The researcher concluded that there is need for insurance companies to continuously evaluate their working capital management strategies, asset accumulation strategies, market penetration strategies and claims evaluation strategies.

Kishor, C. & Temesgen, Z. [15] examined the association between insurance specific factors and macro-economic factors with the financial performance of insurance companies in Ethiopia. Explanatory analysis with quantitative approach was applied by adopting inferential statistics with a balanced panel data of nine insurance companies for 15 years (2002–2016. They found that GDP per capital and size of the companies demonstrate a positive and significant association, whereas leverage, liquidity, and underwriting risk are negative but significant with returns of assets. They recommended that reduction of underwriting risk by transferring surplus risk to the reinsurers, managing capital structure with minimum dependence on borrowed capital, and deployment of premium earned in return fetching investments speed up the financial performance of insurance companies.

Tadese, H. W., Abiy, G. K.& Mengistu, D. D. [25] examined the factors affecting profitability of insurance companies in Ethiopia for the period of 2014-2018. They employed descriptive research design. The target populations were 17 insurance companies and they have taken all by census method. The researchers employed secondary sources of data from audited financial statement of National bank of Ethiopia. The researchers used multiple regression models which were run by using random effect model through Stata software version 14. The researchers found that the positive and significant relationship between ROA and liquidity, capital adequacy, real GDP as well as real effective exchange rate. Contrary, ROA has negative and significant relation with leverage, underwriting risk, premium growth. Besides, ROA has positive and insignificant relation with age and size whereas negative and insignificant relation with inflation. The researchers recommended as the Insurance industry should give emphasis on liquidity ratio, and capital adequacy ratio to sustain its profitability.

Tariku, A. B. [26] investigate the most important determinant of profitability in the insurance sector of Ethiopia. This study was based on entirely secondary data collected from NBE and MOFEC which covers the time period from 2003 – 2017. Explanatory research design and fixed effect model were used. The regression result reveals that company age; market share and GDP have significant impact on the profitability of Ethiopian insurance companies measured by both return on asset and return on equity in addition to those

three variables premium growth also have positive significant effect on profitability of Ethiopian insurance companies. While other variables included in the research have insignificant effect on profitability of Ethiopian insurance companies measured by both models. Finally, the study suggests the mangers of Ethiopian insurance companies to prepare themselves for macroeconomic changes by preparing financial plans and to provide new product lines and making extensive advertisement that maximizes their market share.

Mazviona, W. B., Dube, M. & Sakahuhwa, T. [18] examined factors affecting the performance of insurance companies in Zimbabwe. They utilized secondary data from twenty short-term insurance companies for the period from 2010 to 2014. Finally, they used factor analysis and multiple linear regressions. Their findings revealed that expense ratio, claims ratio and the size of a company significantly affect insurance companies' performance negatively. On the other hand, leverage and liquidity affects performance positively. They recommend that insurance companies should introduce a mechanism that reduces operational costs such as automated systems.

Behailu, K. W. [3] examined factors affecting the profitability of insurance companies in Ethiopia. The researcher used quantitative research approach with Panel data covering ten-year period from 2006–2015 for nine insurance companies. He used linear regression model. Data was analyzed with a software Eviws 8. The findings of his study showed that Size of company, Loss ratio and leverage have statistically significant relationship with insurers' profitability. However, reinsurance dependence has negative but insignificant relationship with profitability. On the other hand, variables like Motor insurance, market share have positive and statistically insignificant relationship with insurers' profitability. Motor insurance is the other most important factor affecting profitability. In addition; GDP and inflation have negative and insignificant influence on profitability. The researcher recommended that Ethiopian insurance companies should give due consideration to these factors to appropriately address profitability issues.

2.6. Conceptual Framework

A conceptual framework is a diagrammatic presentation of variables, showing the relationship between the independent variables and dependent variable. The study sought to investigate how the independent variables influence the financial performance of insurance firms in Ethiopia. Financial performance is measured using return on assets. Return on assets is the financial ratio that shows the percentage of the net profit in relation to the total assets. The study is conceptualized in a framework in explaining the relationship between the independent variables and the dependent variables as shown in the schematic diagram below
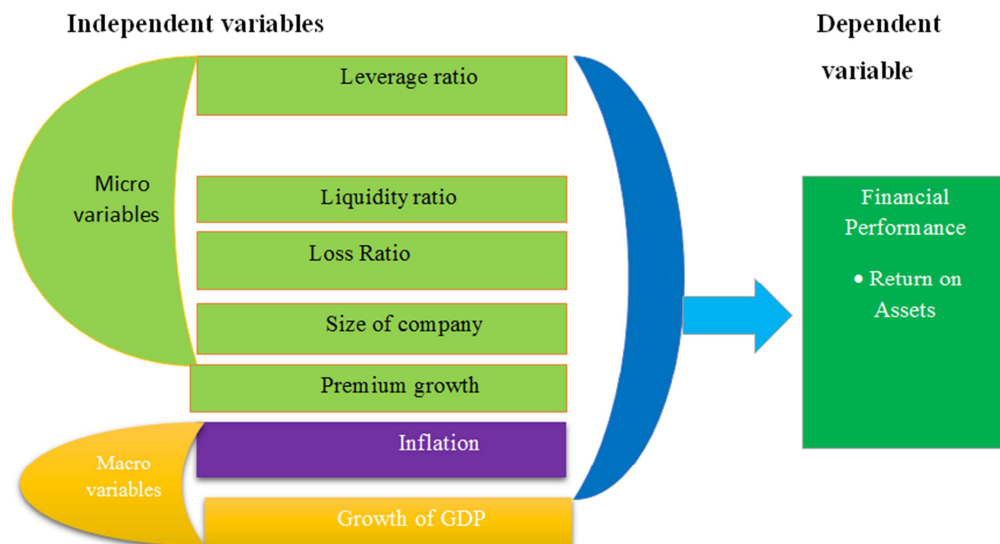
***Figure 1.** Conceptual framework.*

3. Methodology

In line with the objective of the study under this study the researcher used quantitative research approach and explanatory research design for testing objective theories by examining the relationship among variables and by constructing an empirical model and hypothesizing the linear relationship between dependent and independent variables by taking a 10 years' (2011-2020) consecutive data from national bank of Ethiopia and those selected insurance companies. According to the information obtained from National Bank of Ethiopia there are only 11 insurance companies that have enough experience and complete financial statements for the study period namely Awash, Africa, Ethiopia insurance corporation, Lion, Global, National, Nib, Nile, Nyla, Oromia and United and these 11 insurance companies were selected as a sample from the total insurance companies operating in Ethiopia since they are senior insurance companies and are expected to have more experience on the activities [23].

3.1. Types and Source of Data

For this study the researcher used a panel data type which combines both the attributes of cross sectional (inter-firm) and time series data (inter-period). The advantage of panel data analysis is that more reliable estimates of the parameters in the model can be obtained [8]. In line with the objective of the study and type of analysis techniques, the researcher used secondary source of data which is based on the audited annual financial statement of the insurances companies summited to and filed by national bank of Ethiopia from 2011-2020.

3.2. Model Specification

The multiple linear regression equation which takes into consideration seven independent variables for the 11 insurance companies from 2011 to 2020 period was presented as follows:

$$ROA_{it}=\beta_0 + \beta_1 SIZE_{it} + \beta_2 LV_{it}+ \beta_3 LOR_{it}+\beta_4 LQ_{it}+ \beta_5 PG_{it} + \beta_6 INF_{it} + \beta_7 GDP_{it}+ \varepsilon$$

Where; ROA_{it}=Performance of insurance companies

Size: company size was measured by total assets in log value

LV: is leverage ratio which was proxy by the ratio of total debt to total asset of the company

LOR=Ratio of claims incurred to net earned premium

LQ: Liquidity (Current assets divided by current liabilities)

PG: Premium growth=$(GWP(t) – GWP(t-1))/GWP(t-1)$

INF; inflation=$(I(t) − I(t − 1)) I(t-1)$

GDP: Gross domestic product=$(GDP(t) – GDP(t − 1))/GDP(t-1)$

ε; is error term, β_0 constant β_1-β_7; Parameter to be estimated

4. Result and Discussion

After the diagnostic tests has been conducted such as Normality test, Multi-collinearity test and auto correlation test proven that there was no evidence for violation of tests. Here by the researchers wants to show the model specification and regression result and analysis subsequently.

4.1. Model Selection and Specification

To achieve an overall objective of the study, the researcher employed panel data model techniques. A panel data regression model can be estimated in different ways depending on regression coefficients, and error term. Accordingly, the fixed effects model, and the random effects model were widely used models in panel data analysis.

Brooks, C. [5] noted that if the number of time series data (T) is large and the number of cross-sectional units (N) is small, there is a likely to be little difference in the values of the parameters which estimated by fixed effect model and random effect model.

Table 1. *Auto correlation test (hausman test).*

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.000000	7	1.0000

Source: E-Views 10 Output

The above Table 1 shows that, Hausman test has a P-value of 1.0000 which is more than 0.05 (5%) level of significance. The conclusion from the above Hausman test result was that the null hypothesis of the random effect would not reject. This implies that for this study random effect was more appropriate than fixed effect.

4.2. Regression Result and Analysis

The table below shows the regression analysis. In this regression analysis the dependent variable was ROA while the independent variables were company size, leverage, liquidity, premium growth, underwriting risk, growth rate of GDP and inflation. Under the following regression output, it is common to find the beta coefficient to be negative or positive. The beta value indicates that each variable's level of influence on the dependent variables. The P-value indicates at what percent or precision level of each variable is significant. The R-squared value measures how well the regression model explains the actual variations in the dependent variables [5].

Table 2. *Regression output.*

Dependent Variable: ROA				
Method: Panel EGLS (Cross-section random effects)				
Date: 05/19/21 Time: 08:10				
Sample: 2011 2020				
Periods included: 10				
Cross-sections included: 11				
Total panel (balanced) observations: 110				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LV	-0.074506	0.024645	-3.023144	0.0032
LQ	0.049660	0.010951	4.534911	0.0000
UR	-0.128201	0.021701	-5.907638	0.0000
PG	0.024332	0.006523	3.729931	0.0003
SIZE	0.000542	0.004925	0.110016	0.9126
INF	-0.109461	0.043213	-2.533059	0.0128
GDP	0.335605	0.143575	2.337493	0.0214
C	0.127543	0.060562	2.105983	0.0377
	Effects Specification			
			S.D.	Rho
Cross-section random			0.004449	0.0883
Idiosyncratic random			0.014295	0.9117
	Weighted Statistics			
R-squared	0.653035	Mean dependent var		0.053543
Adjusted R-squared	0.629223	S.D. dependent var		0.024340
S.E. of regression	0.014821	Sum squared resid		0.022406
F-statistic	27.42535	Durbin-Watson stat		1.764970
Prob (F-statistic)	0.000000			
	Unweighted Statistics			
R-squared	0.676654	Mean dependent var		0.075121
Sum squared resid	0.024888	Durbin-Watson stat		1.588970

Source: E-Views 10 Output

Significant level presented at 1% and 5% significance level respectively.

The linear function for the study regression equation is denoted as below:

$$ROA = 0.127 - 0.075*LV + 0.0497*LQ - 0.128*UR + 0.024*PG + 0.000542*SIZE - 0.1095*INF + 0.336*GDP + e$$

As indicated above from the regression output the coefficient intercept is 0.127. this implies when all explanatory variables took the value of Zero the average value of total profit of insurance companies took a value of 0.127. showing holding all independent variables constant a one-unit increase in independent variables causes a 12.7% increase in profit of insurance companies in Ethiopia.

A. Leverage and financial performance

The coefficient of leverage ratio was negative (-0.074506)

and statistically significant with p-value of 0.0032 which is lower than 0.01. The negative result showed that the inverse relationship between leverage and ROA. This means, if leverage increase by 1%, then the return on asset will decrease by 7.5% with the relationship statistically significant at lower than 1% of significance level. To support this theory of capital structure tells us that the insurance companies with lower leverage will generally report higher ROA and the reverse is true. Then based on this the researcher accepts the null hypothesis that there is negative and significant relationship between leverage and ROA. This means, there is sufficient evidence that support the negative relationship between leverage and ROA. This negative relationship is expected and consistence with some previous studies, for instance [1, 2, 26, 15, 25] Liquidity and Financial Performance

Liquidity measured by current assets to current liability was 0.049660 and its P-value is 0.0000. Holding other independent variables constant at their average value and when liquidity increased by 1%, return on asset (ROA) of sampled Ethiopian insurance companies would increase by 4.96% with the relationship statistically very significant at lower than 1% of significance level. In other words, there is significant positive relationship between liquidity and return on asset (ROA) of sampled Ethiopian insurance companies. Therefore, based on this the researcher accepts the null hypothesis that there is positive and significant relationship between liquidity and ROA. This means, there is sufficient evidence that support the positive relationship between liquidity and ROA. This positive relationship is expected and consistence with previous studies which found a positive relationship between liquidity and ROA, for instance [15, 24, 18, 25].

B. Premium growth and Financial performance

The coefficient of premium growth is 0.024332 with the p-value of 0.0003, which is lower than at 1% significance level. The results of the regression model showed that there is a positive and statistically very significant relationship between premium growth and financial performance (ROA) of sampled Ethiopian insurance companies. The positive coefficient of premium growth indicates as there is a direct relationship between growth of premium and ROA. It implies that Insurance companies underwrite more premium over the years have better chance of being profitable for the reason that they gain return from premium collected. This positive relationship is consistence with previous studies, for instance [17, 12, 26].

C. Underwriting risk and Financial performance

As indicated in table above, the coefficient of underwriting risk is -0.128201with the p-value of 0.0000, which is lower than at 1% significance level. The results of the model indicated that the negative and statistically significant relationship between underwriting risk and financial performance (ROA) of sampled insurance companies in Ethiopia. This means that when underwriting risk is increase by 1%, the return on asset will decrease by 12.8% with the relationship statistically very significant at lower than 1% of significance level. This means, there is sufficient evidence that support the negative relationship between underwriting risk

and ROA. Therefore, this result is in accordance with the result expected by the researcher and consistent with some previous studies. For instance [24-26, 15, 18, 20].

D. Company size and Financial performance

The coefficient of Company size is 0.000542 with the p-value of 0.9126, which is higher than at 10% significance level. The regression result of this study showed that the variable size is positively related to profitability and statistically insignificant at higher than 10% level of significance. This indicates that profitability of large insurance companies is better than small size companies. Profitability is likely to increase in size, because large insurance companies normally have greater capacity for dealing with adverse market fluctuations than small insurance companies and have more economies of scale in terms of the unit cost, which is the most significant production factor for delivering insurance services, complex information systems and a better expenses management. The finding of this study is consistent with [1, 21, 24, 25, 15].

E. Inflation and Financial Performance

As presented in above table the coefficient of inflation rate is -0.109461with the p-value of 0.0128, which is lower than at 5% significance level. The results of the regression model show that there is a negative and statistically significant relationship between inflation and financial performance (ROA) of sampled insurance companies. Mean that when inflation increased by one percent, the return on asset would be decreased by 10.9%. The result of this study is then in line with the finding of the previous studies conducted by [13].

F. GDP and Financial Performance

Gross Domestic Product is 0.335605 with the p-value of 0.0214, which is lower than at 5% significance level. It is interpreted as, when Gross Domestic Product increased by one percent, the return on asset of sampled insurance companies would be increased by 33.6% with the relationship statistically significant at lower than 5% of significance level. This shows that there is a positive and statistically significant relationship between Gross Domestic Product and financial performance (ROA) of sampled insurance companies in Ethiopia. The higher the growth rate of the country also the higher will be the insurance industries performance. The result of regression output in this study is then consistent with some of the previous studies. For instance [15, 25].

5. Conclusion

The purpose of this study was to examine the effect of financial factors on the financial performance of insurance companies in Ethiopia that were in operation over the periods of 2011 to 2020. To achieve this broad objective, the study used quantitative research approach. To this end, the collected data from a sample size of eleven Ethiopian insurance companies over the period of 2011 to 2020 were analyzed using multiple linear regression analysis.

The result of leverage showed a negative and statistical significant relationship with financial performance of

insurance companies and which is as expected. This implies that equity financing is better than debt financing in Ethiopian insurance companies and this indicates that highly profitable insurance companies are more likely depend on equity capital than debt capital for the source of financing the firm. In addition, Companies that are highly leveraged may be at risk of bankruptcy if they were unable to make payments on their debt and unable to find new lenders in the future.

The regression result of liquidity showed that a positive and significant effect on the financial performance of insurance companies in Ethiopia. This implies that the increment of liquidity ratio increases the profitability of insurance companies in Ethiopia and it enhances the insurer's ability to settle their current obligations without selling their long term investments or to borrow money and the reverse is true.

Based on the regression results, underwriting risk has negative and significant relationship with ROA. this indicates that, the high claim ratios indicate premium rate too low and companies" profitability will be endangered, because higher underwriting risk leads the insurers to pay higher unexpected payments or expenses, whereas the low claim ratio indicates an insurers are underwriting profitable business.

The increase in premiums collection contributes significantly to insurance companies' profitability. This indicates that the higher underwriting premium will increase the profitability of the existing insurance industry onwards in terms of premium income.

Profitability of large insurance companies is better than small size companies even though it has insignificant effect. Because large insurance companies normally have greater capacity for dealing with adverse market fluctuations than small insurance companies and have more economies of scale in terms of the unit cost. a negative and significant relationship with financial performance of insurance companies due to it has reducing effect on the demand and willingness of citizens to purchase insurance goods and service by reducing their purchasing power on luxury products and finally by reducing the solvency of the firm. The regression result of GDP showed the positive and significant relationship with financial performance of insurance companies. This indicates that, when the economy of the country increased, the society demand and wants increased towards insurance product and services which maximizes the profitability of the insurance industries and the reverse is true.

6. Recommendations

Insurance companies to improve their underwriting activity through techniques like product selections, increase claims handling practice and gathering sufficient information before agreement with the insured and reduce their underwriting risk by transferring surplus risk to the reinsurers and by adopting risk management and better risk differentiation strategy that enables the company to minimize risk and optimize their performance.

Insurers must have sufficient amount of liquidity ratio through continuously evaluating their working capital management strategies, asset accumulation strategies, market penetration strategies, claims evaluation strategies to discharge their responsibility for the time of accident and closely review their liquidity risk and to use a cash flow forecast to reduce the high liquidity risk.

Insurers should have to issue common stock and other equity shares to increase their total asset composition or set their optimum mix of debt to asset to have leverage which contributes positively to profit.

Even though, macroeconomic factors are not controlled by the management, the researcher recommended the insurance companies to prepare themselves for the change of GDP and inflation rate by preparing financial plans like cash budget, and pro-forma balance sheet and income statement. This will help Insurance companies to easily adopt the economic changes of the country.

References

[1]   Abate. G. A. (2012). Factors Affecting Profitability of Insurance Companies in Ethiopia: Panel Evidence. MSc thesis,Addis Ababa University.

[2]   Asrat, L. &Tesfahun, T. (2016). Determinants of Profitability in Private Insurance Companies in Ethiopia. Journal of Poverty, Investment and Development, Vol. 26.

[3]   Behailu, K. W. (2016). Factors Affecting Insurance Companies Profitability in Ethiopia, MSc thesis, St. Mary's University School of Graduate studies.

[4]   Bhattarai, P. (2020). Factors influencing profitability of insurance companies in Nepal. International Journal of Management (IJM), pp. 8-14. 11 (9), 8–14. https://doi.org/10.34218/IJM.11.9.2020.002.

[5]   Brooks, C. (2008). Introductory Econometrics for Finance, 2nd edn, Cambridge University Press, New York. Book.

[6]   Charumathi, B. (2012). On the Determinants of Profitability of Indian Life Insurers – An Empirical Study. Proceedings of the World Congress on Engineering. I (2003), 4–9.

[7]   Dereje, W. N. (2012). Role of Financial Institutions in the Growth of Small and Medium Enterprises in Addis Ababa A. 12–14.

[8]   Gujarat, N. (2004). Basic Econometric, 4th edition, USA: McGraw–Hill. Boston. Books.

[9]   Hailu, Z. (2009). Insurance in Ethiopia: Historical Development, Present Status and Future Challenges. 1 (1), 2007–2009.

[10] Haiss, P. and Sumegi, K. (2008). The Relationship of Insurance and Economic Growth in Europe,. A Theoretical and Empirical Analysis.

[11] Hanna, M. D. (2015). Determinants of insurance companies' profitability in Ethiopia. MSc thesis,Addis Ababa University.

[12] International Monetary Fund. (2002). Financial Soundness Indicators: Analytical Aspects and Country Practices. Occasional Paper 212, Washington.

[13] Kanbiro, O. D.& Ayneshet, A. A. (2019). Factors Affecting Financial Performance of Insurance Companies Operating in Hawassa City. Universal Journal of Accounting and Finance 7 (1): 1-10. https://doi.org/10.13189/ujaf.2019.070101.

[14] Kinyua, B. M. (2018). Effects of micro factors on the financial performance of listed insurance companies in Kenya. MSc thesis,Beatrice Muthoni Kinyua. July.

[15] Kishor, C. & Temesgen, Z. (2020). Determinants of firm's internals & macroeconomic factors on financial performance of Ethiopian insurers. DLSU Business & Economics Review 29 (2) 2020, p. 71-80.

[16] Kothari, C. R. (2011)., Research methodology (methods and techniques). (2nd edition). New Delhi, New age printing press. Book.

[17] Malik, H. (2011). Determinants of insurance companies profitability: an analysis of insurance sector of Pakistan. Academic Research International Volume 1, Issue 3. 1 (3), 315–321.

[18] Mazviona, W. B., Dube, M. & Sakahuhwa, T. (2017). An Analysis of Factors Affecting the Performance of Insurance Companies in Zimbabwe. Journal of Finance and Investment Analysis, vol. 6, no. 1, 2017, 11-30. 6 (1), 11–30.

[19] Melaku, Y. (2019). Banking and insurance sectors development in ethiopia and its effect on economic growth: MSc thesis, Saint Mary's University.

[20] Mingizem, B. (2017). Determinants of Insurance Company profitability in Ethiopia (case study on Nile Insurance, Dire Dawa Branch). International Journal of Scientific and Research Publications, Volume 7, Issue 6,SSN 2250-3153. 7 (6), 761–767.

[21] Mwangi, M. & Murigu, W. J. (2015). The determinants of financialperformance in general insurance companies in Kenya.

[22] Naveed, A., Zulfqar, A., & Ahmad, U. (2011). Determinants of Performance: A Case Of Life Insurance Sector of Pakistan,. International Research Journal of Finance and Economics, Eurojournals Publishing, Inc. 2011 Available at Http://Www.Eurojournals.Com/Finance.Htm.

[23] NBE report 2nd quarter, 2016/2017. (2018). Annual Report of National Bank of Ethiopia 2015/16. Available from www.nbe.org.et (Accessed on June, 2018).

[24] Suheyli, R. (2016). Determinants of Profitability in Private Insurance Companies in Ethiopia. Journal of Poverty, Investment and Development, 26 (0), 85–92. http://iiste.org/Journals/index.php/JPID/article/view/31775.

[25] Tadese, H. W., Abiy, G. K.& Mengistu, D. D. (2020). Factors affecting the profitability of insurance companies in Ethiopia. Journal of International Trade, Logistics and Law, Vol. 6, Num. 2, 2020, 106-118. 6, 106–118.

[26] Tariku, A. B. (2019). The Determinants of Insurance Companies Profitability in Ethiopia. MSc thesis, Addis Ababa University.

[27] Taye, T. T. (2018). Analysis of Factors Affecting Financial Performance Evidence from Selected Ethiopian Insurance Companies. International journal of science and research, volume 7 issue12. 7 (12), 834–852.

[28] Teklit, A. B & Jasmindeep, K. (2017). Determinants of insurance companies' profitability Analysis of insurance sector in Ethiopia. International Journal of Research in Finance and Marketing (IJRFM),Vol. 7 Issue 4, April - 2017, pp. 124~137. 7 (4), 124–137.

european scientific journal,vol. 11, no. 1 issn: 1857–7881. 11 (1), 288–297.