

Factors Affecting Financial Performance of Insurance Companies Operating in Hawassa City Administration, Ethiopia

Kanbiro Orkaido Deyganto*, Ayneshet Agegneu Alemu

Department of Accounting and Finance, Pharma College Hawassa Campus, Ethiopia

Copyright©2019 by authors, all rights reserved. Authors agree that this article remains permanently open access under the terms of the Creative Commons Attribution License 4.0 International License

Abstract The objective of this study was to investigate the factors affecting financial performance of insurance companies operating in Hawassa city Administration, Ethiopia. In this study, the researchers have employed causal research design with mixed research approach due to quantitative nature of data required to prepare the report of this study. The target population of the study was 17 general insurance companies operating in, Ethiopia. Out of all seventeen insurance companies in the city, the researchers selected six general insurance companies that have 10 year audited financial statements from 2008 to 2018. The secondary data were collected by reviewing of financial statements and related published and unpublished materials to achieve the objective of this study. Ordinary least square model has employed by the researchers to analysis the data through SPSS version 20.0. Then, the result of this study showed that out of eight (8) explanatory variables incorporated in the model, five (5) variables such as underwriting, premium growth, solvency ratio, growth rate of GDP, and inflation rate have significant effect on financial performance of the insurance companies operating in Hawassa city Administration. Whereas, the reinsurance dependence, company size and interest rate have no significant effect on financial performance of the insurance company of Hawassa city Administration. Finally, the findings of the study may inform policymakers about factors affecting performance of insurance companies operating in the city in particular and in Ethiopia in general, supports to formulate constructive policy to enhance financial performance goal of the insurance firms in one hand and to promote the economic development of the country in other hand.

Keywords Insurance Companies, Financial Performance, Hawassa City Administration, Ethiopia

1. Introduction

Insurance is a contract in which the insured transfers risk of potential loss to the insurer who promises to compensate the former upon suffering loss. The insured then pays an agreed fee called a premium in consideration for this promise. The promise is called the insurer and the promise is called the insured [46]. Insurance premium is the monetary consideration paid by the insured to the insurer for the cover granted by the insurance policy. The Insurer takes on a number of clients (Insured) who pay small premiums that form an aggregate fund called the premium fund [51]. The likelihood of an event or loss may be mathematically calculated or it may be based on the statistical results of experience in order to determine the amount of premiums that would be required to accumulate a common fund or pool, to meet the losses upon their arising [25].

The term insurance defined by referring two important schools of thoughts: i) transfer school and ii) pooling school. According to transfer school, "insurance is a device for the reduction of uncertainty of one party, called the insured, through the transfer of particular risks to another party; called the insurer, who offers a restoration, at least in part of economic losses suffered by the insured" [37]. On the other hand, according to pooling school "the essence of insurance lies in the elimination of uncertainty or risk of loss for the individual through the combination of large number of similarly exposed individuals" [1], cited in [58] Insurance operates on the principle of pooling risks where the people contribute to a common fund in form of premiums and where the lucky ones who do not suffer loss help the unlucky ones who suffer loss during a defined insurance period [37].

1.1. Empirical Review of Related Studies and Research Gap

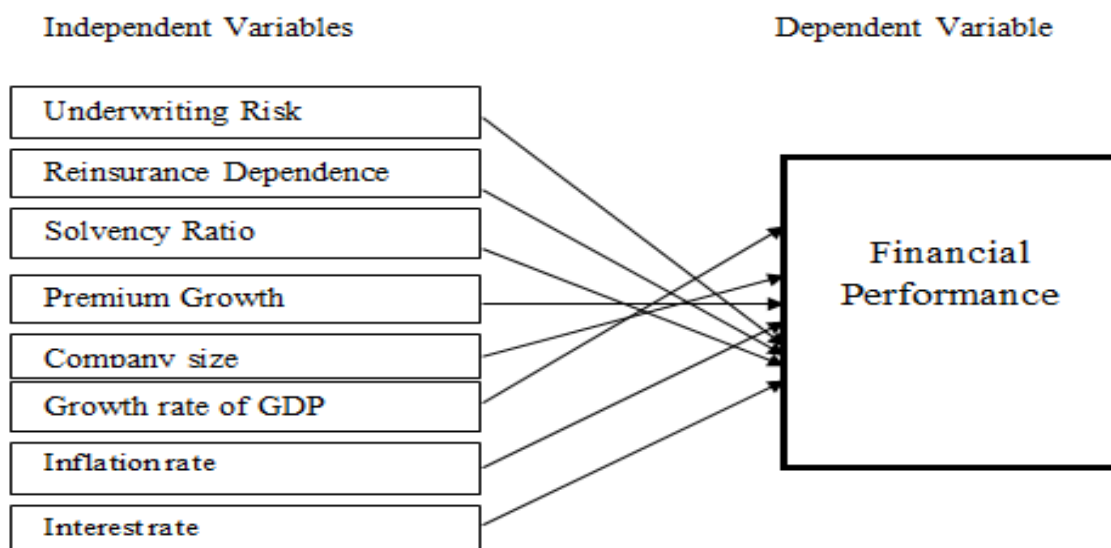
Inequality of profit among insurance companies over the years in a given country would result to suggest that internal factors or firm specific factors and macroeconomic factors play a crucial role in influencing their factors affecting financial performance. It is therefore imperative to identify what are these factors as it can help insurance companies to take action on what will increase their factors affecting financial performance and investors to forecast the factors affecting financial performance of insurance companies in Ethiopia. To do so, it is better to see what factors were considered in previous times by different individuals in different countries like [55], [54], [24], [36], [35], [58], [47], [44], [16], [17], [2], [45], [46], [53], [5] used the return on asset (ROA) as performance measurement base insurance companies different countries and concluded that performance of insurance companies was influenced variables such as underwriting, premium growth, solvency ratio, growth rate of GDP, inflation rate, the reinsurance dependence, company size and interest rate have significant effect on financial performance of the insurance business.

The research gap that have addressed in this study is that, some research findings do not appear to have transferred well to the workplace that produce dual camp of knowledge producer from knowledge user, hence, it creates research gap. The study is expected to give general enlightens on the type of problem on hand in developing countries context like in Ethiopia and Hawassa in particular. Since there was no study conducted on the same topic in

Hawassa, it will contribute to the topic as new knowledge related to the factors affecting the performance of insurance companies in the world. Besides the finding of the study will have relevance to improve understanding of particular insurance business in the city. Therefore, this study seeks to fill the above-explained gaps by providing information about the internal and external factors affecting financial performance by examining the untouched one, and replicating the existing in Hawassa city Administration by using all insurance company operating in Hawassa city Administration that have 10 years' data. To this end, the study provides insights into the financial performance determinants of insurance companies in Hawassa city Administration. There was no too much earlier study related to the topic in Ethiopia in general and in Hawassa city Administration particular. Therefore, this study was aimed to fill this gap theoretically and practically in the mentioned area.

1.2. Conceptual Framework of the Study

Different empirical evidences suggested that financial performance of financial institutions especially that of insurance companies can be affected by internal and external factors. Hence, this study used both internal and external determinants of insurance companies financial performance includes underwriting risk, reinsurance dependence, solvency ratio, premium growth, and company size, growth rate of GDP, inflation, and interest rate as independent variables and financial performance (ROA) as dependent variable. These were showed as follow:



Source: Prepared by the Researchers (2019)

Figure 1. Conceptual framework of the study

1.3. Objective the Study

The main objective of this study was to investigate factors that affect performance of insurance companies operating in Hawassa city Administration, Ethiopia.

1.4. Research Hypothesis

Based on the above empirical review, the researchers developed and tested the following research hypothesis of this study as follows:

H₁: Underwriting risk has significant impact on financial performance of insurance companies in Ethiopia.

H₂: Reinsurance dependence has significant impact on financial performance of insurance companies in Ethiopia.

H₃: Solvency ratio has significant impact on financial performance of insurance companies in Ethiopia.

H₄: There is significant effect between growths of gross written premium on financial performance in insurance companies' in Ethiopia.

H₅: Company size has significant impact on financial performance of insurance companies in Ethiopia.

H₆: Gross domestic product has significant impact on financial performance of insurance companies in Ethiopia.

H₇: Inflation has significant impact on financial performance of insurance companies in Ethiopia.

H₈: Interest rates have significant impact on financial performance of insurance companies in Ethiopia.

2. Materials and Methods

2.1. Target Population

There are 17 general insurance companies operating in Hawassa city administration, Ethiopia. Hence, researchers have considered them as target populations of this study.

2.2. Research Design and Approach

This study is a causal study because it shows the cause and effect relationships of the two variables called independent and dependent variables. For this reason, the researcher employed causal research design with mixed research approach due to quantitative nature of data required to prepare the report of this study.

2.3. Data Source and Type

For purpose of this study, secondary source of data were used. The secondary source of data were collected from all relevant documents such as books, journal articles, published and unpublished research papers, reports of financial statement, and performance measures of insurance company through the report of National Bank of Ethiopia.

2.4. Data Collection Method

The secondary sources of data were collected from all relevant documents such as books, journal articles; published and unpublished research papers and financial reports. This has done, by reviewing of financial statement of all six general insurance companies in Ethiopia from 2008 to 2018 that has selected as sample.

2.5. Sample Size

Out of the total 17 general insurance companies in Ethiopia, the researcher used only six general insurance companies, which located in Hawassa city Administration and have 10 year audited financial statements from period 2008 to 2018. The researcher believed that the selected insurance companies could represent the rest general insurance companies in Ethiopia.

2.6. Data Processing Methods

Editing and sorting of the secondary data were done to determine the completeness of the data manually. All the secondary data processing was done manually and electronically and analyzed through OLS regression model through help of SPSS version 20.0.

2.7. Econometric Model

Based on the reviewing of the both empirical and theoretical review, the following mathematical model were confirmed to predict the effect of independent variables on dependent variable (ROA). This is as follows:

$$ROA = \alpha + \beta_1 (UR) + \beta_2 (RD) + \beta_3 (SR) + \beta_4 (PG) + \beta_5 (CS) + \beta_6 (GDP) + \beta_7 (I) + \beta_8 (IR) + \epsilon$$

Where:

FP = Dependent variable which financial performance

UR = Underwriting Risk

RD = Reinsurance Dependence;

SR = Solvency Ratio; Total Liabilities/ Total Assets

PG = Premium Growth

CS = Size of companies; Natural log of Total Assets

GDP = growth rate of GDP

I = Inflation

IR = Interest Rate

ε = is the error component for company i at time t assumed to have mean zero $E[\epsilon] = 0$

α = Constant or interpretation of the parameters

β = 1, 2, 3...8 are the slope of the coefficient or parameters that will be estimated

2.7.1. Data Analysis Methods

The researchers to analysis the data through SPSS version 20.0 used descriptive and inferential statistical techniques (linear regression analysis). For data

presentation purposes, tables were used to show the analyzed data in an organized manner.

2.8. Ethical Considerations

To ensure that ethical principles in this study, the researcher upheld the highest ethical standards with regard to issues such as informed consent, confidentiality, privacy and secrecy. All the secondary data obtained from different sources were used only for this research purposes. Confidentiality were assured that data collected from National Bank of Ethiopia and size (6) insurance were not used for other purposes except for this research purposes. The researchers also acknowledged all authors' and previous researchers' work in this research.

3. Descriptive Statistics

The below table presents summary of the descriptive statistics of the dependent and independent variables for period of ten years data from 2008-2018. Key descriptive statistics analysis techniques including mean, maximum, minimum and standard deviation were used by the researchers to elaborate the finding of the study.

Table 3.1. Descriptive Statistics of the Variables incorporated in the model

Variables	Minimum	Maximum	Mean	Std. Deviation
Return on Asset	0.20	0.380	0.5745	0.53054
Under Writing	0.127	0.365	0.21565	0.56471
Company Size	5.04	9.71	7.4700	1.11666
Premium Growth	1.02	3.18	1.7739	0.58202
Reinsurance Dependence	1.10	3.12	1.6104	0.53634
Solvency Ratio	1.11	3.29	2.0372	0.59842
Gross Domestic Product	1.10	3.12	1.7771	0.70351
Inflation Rate	1.03	3.16	1.7549	0.53921
Interest Rate	1.10	3.80	2.4567	0.57353

Source: SPSS Output based on secondary data from 2008 -2018

Return on Assets was used to measure the financial performance of the insurance companies. As indicated in the above table 3.1, the financial performance measures (ROA) shows that insurance companies achieved on average a positive ROA over the last 10 years. The overall mean of ROA was 57.45% with a maximum of 38 % and a minimum of 20%. That means the most profitable insurance companies among the sampled earned 38 cents of profit after tax for a single birr invested in the assets of the firm. With regarding to the standard deviation ROA, 53.4 percent that indicates, there was variation from the mean of ROA of 53.4%.

In relation to explanatory variables arranged in table 3.1 above underwriting risk variable, as proxies by losses incurred divided by annual premium earned, the mean of

incurred claims to earned premium ratio was 21.57 percent. This implies that on average, most insurance companies from the sample paid 21.57 percent loss incurred out of the total premium earned per year. The minimum and maximum values of the under writing are 12.7 and 36.8% respectively. The mean value of underwriting risk overall deviate from its mean to both sides by 56.47 percent. This indicates that there is high variation in underwriting performance in private insurance companies operating in Hawassa during the study period.

Logarithm of total asset was used as proxy to the size of the insurance company and its mean of the logarithm of total assets over the period 2008 to 2018 was 747 percent. Size of insurance companies was highly dispersed from its mean value with the standard deviation of 111.6 percent. The maximum and minimum values of the size of the company were 97.129 percent and 50.4 percent respectively.

The average value of the growth variable as proxies by change in gross written premium was 177 percent. This implies that on average, the insurance companies' gross pre increased by 177 percent over the study period. While the maximum & minimum values of premium growth were 318 & 102 percent respectively. This high increase in premium growth for a company in a particular year indicates that unstable premium underwritings. There is 58.202 percent variation in ROA due to variation in premium.

The outputs of the descriptive statistics of the data indicate that the mean of reinsurance dependence of the total asset was 161.04%. This means that on average 161.04% of gross premium collected as percentage of total asset was divided to reinsurance, which is below the standard of around 53.63%. The maximum value of premium ceded ratio was 312 percent and a minimum value of 110 percent respectively.

The average value for solvency ratio as measured by net asset to net written premium was 20.3 percent. The standard deviation is 59.84 percent, and maximum of 32.9 and the minimum of 11.1 percent respectively.

Concerning the GDP, the mean value of real GDP growth rate was 177.7% indicating the average real growth rate of the country's eco of the economy was recorded. The standard deviation is 70.35 percent, and maximum of 312 and the minimum of 110 percent respectively.

Regarding the inflation rate, the mean score was 175.49%. This implies that the increase in inflation rate of the insurance company can decrease the financial performance of the Ethiopian insurance company. The standard deviation is 53.92 percent, and maximum of 31.6 and the minimum of 10.3 percent respectively.

Finally, other variable employed in this study, time deposit weighted average interest rate, the mean value 24.567 with the maximum of 38.0 and minimum was 11.0 percent. This indicates that the financial market in the country during the period of 2008 to 2018 (see table, 3.1).

4. Pearson Correlation

Table 4.1. Pearson Correlation between ROA and explanatory variables

Variables	Return on Asset	Under Writing	Company Size	Premium Growth	Reinsurance Dependence	Solvency Ratio	Gross Domestic Product	Inflation Rate	Interest Rate
Return on Asset	1								
Under Writing	.830**	1							
Company Size	.268*	.302*	1						
Premium Growth	.849**	.663**	.367**	1					
Reinsurance Dependence	.756**	.688**	.146	.684**	1				
Solvency Ratio	.865**	.760**	.236	.745**	.663**	1			
GDP	.865**	.760**	.236	.745**	.663**	.865**	1		
Inflation Rate	.872**	.663**	.143	.756**	.730**	.721**	.793**	1	
Interest Rate	.317*	.346**	.164	.230	.434**	.306*	.404**	.321*	1

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS Output based on Secondary Data from 2008 -2018 G.C

Table 4.1 indicates the level of correlation between the dependent variable (ROA) and independent variables such as (reinsurance dependence, solvency ratio, premium growth, company size, and growth rate of GDP, inflation rate, and interest rate). The one-person correlation coefficient of ROA of the selected insurance companies over 10 years from 2008 to 2018 and all explanatory variables are perfectly positively correlated with themselves. With regarding the relationship between ROA and explanatory variables incorporated in the model, under writing, premium growth, reinsurance dependence, solvency ratio, and inflation growth rate of GDP of this study are positively correlated with (ROA) of insurance companies in Hawassa city Administration, SNNPRS, Ethiopia since p-value less than 0.01 level of significance. However, company size and interest rate were positively correlated with (ROA) of insurance companies in Hawassa at 5% as far as their p-value is less than 0.05 level of significance.

indicates high correlation between these two variables.

Coefficient of determination (R Square) explains the extent to which changes in the dependent variable can be explained by changes in the independent variables or the percentage of variation in the dependent variable (financial performance of insurance companies in Ethiopia) that is explained by all the eight independent variables.

Therefore, the researcher found that independent variables share 83.5% of financial performance in Hawassa city Administration, Ethiopia. This means that 16.5% of the factors affecting financial performance are not explained in this study. The adjusted R² value shows the loss of predictive power. This value implies that how much variance in financial performance is accounted for if the model had been derived from the population from which the sample was taken.

The Durbin-Watson tests autocorrelation. It tests first-order autocorrelation in regression residuals. The test statistics can vary between 0 and 4. The Durbin-Watson statistics value close to 2 shows that the residuals are unrelated.

5. Results of the Study: Regression Analysis

Table 5.1. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.835	0.698	0.650	0.36686	1.737

Source: SPSS Output based on Secondary Data from 2008 -2018

From the table 5.1, R=0.835, and R square=0.698. R square (0.835) shows the power of the independent variables to predict the dependent variable. It also shows approximately 83.5% of total variation in the dependent variable is explained by the linear combination of the independent variables from sample of 60. R indicates the relationship of independents and dependent variable. This

Table 5.2. ANOVA (Analysis of Variance)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	15.595	8	1.949	98.231	0.000
Residual	1.012	51	0.020		
Total	16.607	59			

Source: SPSS Output based on Secondary Data from 2008 -2018 G.C

The highest value of "F" shows that the regression model is good fit of the data. Table 5.2 shows that the independent variable are statistically significant to predict the dependent variable, F = 98.231, $p < 0.05$. Therefore, the regression model is a good fit of the data. Since F calculated is greater than the F critical, this means that the overall model was significant, and hence, it is good for

prediction.

Table 5.3. Predicting Financial Performance (ROA) by OLS Regression Model

Model	Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.
	Beta	Std. Error	Beta		
(Constant)	0.743	0.146		5.074	0.000
Under Writing	-0.223	0.056	-0.238	-3.990	0.000
Company Size	0.004	0.019	0.009	0.221	0.826
Premium Growth	0.199	0.060	0.218	3.328	0.002
Reinsurance Dependence	0.018	0.059	0.018	0.306	0.761
Solvency Ratio	0.151	0.060	0.171	2.529	0.015
Gross Domestic Product	0.156	0.051	0.206	3.064	0.003
Inflation Rate	-0.260	0.067	0.264	-3.868	0.000
Interest Rate	-0.042	0.037	-0.046	-1.126	0.265

Source: SPSS Output based on Secondary Data from 2008 -2018 G.C

From table 5.3, β -value or the coefficient of the independent variables indicates that to what extent the independent variables affect dependent variable of this study. The above regression table 5.3 shows that there is relationship between independent variables and dependent variable. The coefficient values of these independent variables are for underwriting (-0.223), reinsurance dependence (0.018), solvency ratio (0.151), premium growth (0.199), company size (0.004), growth rate of GDP (0.156), inflation rate (-0.260) and interest rate (-0.042). This shows that under writing risks, inflation rate and interest rate have negative relationship with financial performance of the insurance company in Hawassa city Administration; Ethiopia. This implies that for example, when under writing risks of the insurance company increase, the financial performance of the insurance company decrease. The same is true for all independent variables whose have negative relationship with dependent variables. However, reinsurance dependence, solvency ratio, premium growth, company size, and growth rate of GDP have positive relationship with financial performance of the insurance company in Hawassa city Administration, Ethiopia. This implies that for example when company size of the insurance company is large, the financial performance of the insurance company increases. The same is true for all independent variables whose have positive relationship with dependent variables.

The t-test that tests whether the predictor is making a significant contribution or not to the model. The t-values of variable under consideration are as follows. These are underwriting (-3.990), reinsurance dependence (0.306), solvency ratio (0.015), premium growth (3.328), company size (0.221), growth rate of GDP (3.064), inflation rate (-3.868) and interest rate (-1.126). From this, it can be concluded that premium growth and gross domestic product have highest impact on the financial performance

of the insurance company in Ethiopia. Out of the independent variables, solvency ratio and company size have the lowest impact on the financial performance of the insurance company in Ethiopia (see table 5.3).

6. Discussion Based on Results: Hypothesis Testing

As it can be easily seen in table out of eight (8) variables addressed in this study, 3 variables such as reinsurance dependence (H2) with p-value of (0.761), insurance company size (H5) with p-value of (0.826) and interest rate (H8) with p-value of (0.265) have no significant effect on financial performance of the insurance company of Hawassa city Administration, Ethiopia for the reason that their p -value is more than 5% level of significance.

But variables includes underwriting, premium growth, solvency ratio, growth rate of GDP, inflation rate, and interest rate have significant effect on financial performance of the insurance company of Hawassa city Administration, Ethiopia (see table 5.3). Theses has discussed as follow:

Firstly, the underwriting risk emphasizes underwriting activity and the exposure to financial loss resulting from the selection and approval of risks to be insured. It is a risk of losses from underpriced products, insufficient volume of premium, improper underwriting controls, and the development of new products that are not properly priced. The coefficient of underwriting (which is measured by claim incurred to earned premium ratio was negative and statistically significant at 1% significance level due to fact that p-value of $0.000 < 0.01$ with . As the result, H4 is accepted. This finding is consistent with previous studies [11]. The results indicate that low underwriting risk produce positive effect on financial performance. It implies that higher underwriting risk increases the operating financial performance. They concluded that underwriting risk has a negative influence taking an excessive underwriting risk can affect the financial performance of insurance company.

When it comes to solvency ratio, which is one of the indicators of financial soundness and variables, addressed in this study. The regression result indicates solvency ratio has influence on financial performance of insurance companies at 5% level of significance since the p -value $0.015 < 0.05$ with positive regression coefficient of 0.151. Hence, H3 is accepted. The result indicates that insurance companies 1% increase in solvency ratio leads to 15.1% increase the insurance company profit. It follows then that the smaller the equity base in relation to the liabilities of the company, the lower the company's ability to absorb unforeseen shocks and unable to guarantee repayment to all claimants. Assuming that the company is in its first stage, the manager will choose to invest using the retained

earnings in order to increase financial performance. This means that the internal financing will continue until the retained earnings reach the amount of zero the faster the growth, the more external financing firms will use. However, this increase in external financing is mainly through an increase in the liabilities, as the increase in external equity financing was not found significant. As a company grows, the solvency ratio will thus become smaller. Therefore, one can conclude that solvency ratio was a key driver of financial performance of insurance companies in Ethiopia.

Concerning Premium growth variable of this study that measures the rate of market penetration, the regression results in this research imply that the relation between premium growth and financial performance is positive and significant at 5% significances level for the reason that p-value of $0.015 < 0.05$. Hence, H4 is accepted. The positive coefficient (0.199) of growth in writing premium indicates a positive relationship between growth in writing premium and financial performance. 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 when the excessive attention on marketing to grow premiums with a proportionate allocation of resources towards the

management of their investment portfolios is given. The result of the study supports the findings of [13], but their found is not significantly different from zero.

With regarding to the Gross domestic product which is the market value of all finished goods and services produced in a country within a specified period, mostly one year and the one of the variables incorporated in the model is statically significant at 1% since p- value $0.003 < 0.01$ with coefficient of 0.156. Therefore, H6 is accepted. The positive regression coefficient tells us 1% increase in gross domestic product results in 15.6% increase in gross demotic product. The finding of this study is consistent with [50] and [45]. In general, the current study found that economic growth is positively affecting the insurer's financial performance in Ethiopia economic growth on insurers' financial performance.

Finally, inflation as one of the factors affecting the financial performance of insurance companies, the regression result of table 6.1 shows that inflation rate in Ethiopia has significant and negative influence on financial performance of insurance companies since p-value of $0.000 < 0.01$ which statistically significant at 1%. Thus, H7 is accepted. This finding confirmed in empirical studies by [55] and [16].

Table 6.1. Summary Hypothesis Testing

Hypothesis	Types of Hypothesis	p-value	Decision
H ₁	Underwriting risk has significant impact on financial performance of insurance companies in Hawassa city Administration, Ethiopia.	$0.000 < 0.05$	Accepted
H ₂	Reinsurance dependence has significant impact on financial performance of insurance companies in Ethiopia.	$0.761 < 0.05$	Rejected
H ₃	Solvency ratio has significant impact on financial performance of insurance companies in Hawassa city Administration, Ethiopia.	$0.015 < 0.05$	Accepted
H ₄	There is significant effect between growths of gross written premium on financial performance of insurance companies in Hawassa city Administration, Ethiopia.	$0.002 < 0.05$	Accepted
H ₅	Company size has significant impact on financial performance of insurance companies in Hawassa city Administration, Ethiopia.	$0.826 < 0.05$	Rejected
H ₆	Gross domestic product has significant impact on financial performance of insurance companies in Hawassa city Administration, Ethiopia.	$0.003 < 0.05$	Accepted
H ₇	Inflation has significant impact on financial performance of insurance companies in Hawassa city Administration, Ethiopia.	$0.000 < 0.05$	Accepted
H ₈	Interest rates have significant impact on financial performance of insurance companies in Hawassa city Administration, Ethiopia.	$0.265 < 0.05$	Rejected

Source: SPSS Output based on Secondary Data from 2008 -2018 G.C

7. Conclusions

Based on the findings from the descriptive statistics analysis, the researchers have concluded that insurance companies were averagely generating positive ROA. Based on the findings from the regression analysis of the model, the researchers concluded that financial performance of insurance companies operating in Hawassa was best explained by the explanatory variables included in the model. The conclusion that can be drawn from the findings in the first hypothesis is that underwriting risk has significant impact on financial performance of insurance companies in Hawassa city Administration, Ethiopia is accepted; which means decrease on the value of underwriting risk leads to an increase on financial performance of insurance companies measured by ROA. Based on the findings related to the second hypothesis, under the summary of the findings was, Reinsurance dependence has significant impact on financial performance of insurance companies in Ethiopia is rejected; which shows that an increase on the value of this variable has no influence on financial performance of insurance companies measured by ROA. The conclusion that can be drawn from the findings of the third hypothesis is that Solvency ratio has significant impact on financial performance of insurance companies in Hawassa city Administration, Ethiopia is accepted; which means an increase on the value of this variable does leads to an increase on financial performance of insurance companies measured by ROA. Based on the findings related to the fourth hypothesis that stated, as there is significant effect between growths of gross written premium on financial performance of insurance companies in Hawassa city Administration, Ethiopia is accepted but H5: Company size has significant impact on financial performance of insurance companies in Hawassa city Administration, Ethiopia is rejected. Concerning the six (H6) hypothesis that stated as Gross domestic product has significant impact on financial performance of insurance companies in Hawassa city Administration, Ethiopia is accepted. This implies that one unit increase in GDP leads to increase in ROA of insurance companies. In addition H7: stated as Inflation has significant impact on financial performance of insurance companies is also accepted and it can be conclude that inflation rate has negative and statistically insignificant impact on ROA insurance companies. Finally, based on the findings related to 8th hypotheses that stated as interest rates have significant impact on financial performance of insurance companies is rejected., it can be conclude that insurance companies size has no statistically significant impact on ROA; which indicates that increase on the value of this variable does not leads to an increase on financial performance of companies measured by ROA.

8. Recommendations for Future Research

This study focused only on eight factors affecting financial performance of the insurance sector in Ethiopia specifically in Hawassa city Administration, Ethiopia due to the shortage of the time. By taking this study as a standing point, it could be possible to come up with a better insight and several extensions to this study are possible. Considering the available time and resource the outcome of this study can be more robust, if future researchers conduct the same topic at other cities, regional level or at national level because the variables used in the statistical analysis did not include all factors that can affect financial performance of the private insurers' company in Hawassa city administration. It only includes few firm specific and macro-economic variables. Thus, future research shall conduct on the issue like impact of government regulation policy and other directives and non-financial determinant of insurance financial performance such as management quality, efficiency and productivity, gross national product, liquidity management and risk management practice of insurance companies. Besides, other researchers can do the research on the same topic by taking evidence from other industries, increasing the number of observations using longer years of data and including primary data that will collected through questionnaire and interview.

Acknowledgements

First, we would like to give unlimited thanks for almighty God for helping us in our entire journey. Next to God, we appreciate Pharma college Hawassa Campus, which is one the top private colleges in Ethiopia that striving to serve the community by providing trainings in both undergraduate and postgraduate programs in health science and business fields and supporting problem solving researches comprehensively. In addition, we would like to express our thanks to the staff members of Pharma college especially Ato Seyoum Kebede (President of the college), Dr. Wengelawit Seyoum (Vice president of the college), Ato Teklu W/Mariam (Academic dean), Ato Degent Bunaro (Department head of accounting & Finance). Besides, we also would like to extend our heartfelt thanks to the editors and the anonymous reviewers for their guidance and constructive comments in developing this article.

REFERENCES

- [1] Al-shami H. A *Determinants. A. (2008) of insurance UAE', MS C company's thesis, Utala Malaysia University*

- [2] Ana, M. & Ghiorghe, B. (2014), *determinants of Financial Performance in the Romanian Insurance Market*, International Journal of Academic Research in Accounting, Finance and Management Sciences Vol. 4
- [3] Anderson, D. and Williams, T. (2008), *Statistics for business and economics*, Thomson South- Western
- [4] Anja Smith, Doubell *Opportunities Chamberlain and challenges for micro* (2009): insurance in "Ethiopia", an analysis of the supply, demand.
- [5] Antolin P. Schich S. & Yermo J. (2011), *The economic Impact of protracted low interest rates on pension funds and insurance company*, Journal of financial market Trends
- [6] Baltagi, Badi H., and Young-Jae Chang. (1994). "Incomplete Panels: A Comparative Study of Alternative Estimators for the Unbalanced One-way Error Component Regression Model." Journal of Econometrics, 62(2): 67-89.
- [7] Barth, M. & Eckles, L. (2009), *an empirical investigation of the effect of growth on short term changes in loss ratios*. Journal of Risk and Insurance
- [8] Bodla, B. and Garg, P. (2003), *Insurance Fundamentals, Environment and Procedures*, Deep & Deep Publications Pvt. Ltd
- [9] Breach, T. S., and A. R. Pagan. 1980. "The Lagrange Multiplier Test and its Applications to Model Specification in Econometrics." Review of Economic Studies, 47(1):239-253.
- [10] Browne, M. & Hoyt, R. (1999), *Economic and market predictors of insolvencies in the life-health insurance industry*, The Journal of Risk and Insurance
- [11] Burca and Batrinca, *The Determinants of Financial Performance, in the Romanian Insurance Market*, International Journal of Academic Research in Accounting, Finance and Management Sciences, vol. 4, no. 1, pp. 299-309
- [12] Charumathi (2013). *The determinants of solvency margin of Indian general insurers*
- [13] Chen, L. (2014), *effects of firm specific factors and macroeconomics on financial performance of property-liability insurance industry in Taiwan*, Asian Economic and Financial Review
- [14] Cooper, D., & Schlinder, P. (2001). *Business Research Methods, Business and Economic*
- [15] Cummins, J. Dionne, G., Gagne, R., & Nouira, A. (2008), *the costs and benefits of reinsurance*, Working Paper, Temple University
- [16] Curak M., Pervan, M. & Poposki, K. (2012), *how well insurance companies in Macedonia perform?* Researches in Applied Economics and Management - Volume I
- [17] Daniel M. & Tilahun A (2013), *firm specific factors that deter performance in Ethiopia*, European Scientific Journal vol.9
- [18] Das, S., Nigel D. and Richard P., (2003), *Insurance and Issues in Financial Soundness*, International Monetary Fund
- [19] Daykin, C., Pentikäinen, T. & Pesonen, M. (1994), *Practical risk theory for actuaries*, U.K
- [20] Durinck E., Laveren E. and Lybaert N. (1997), *the impact of sales growth above a sustainable level on the financing choice of Belgian Industrial*
- [21] Ernst & Young (2010), *analysis and valuation of insurance companies*
- [22] Ezirim, C. (2002), *Contending with the Challenges and Imperatives of Marketing Insurance Services in a Sub-Sahara African Country: The case of Nigeria*. Journal of Economics and Business Sciences, Vol. No
- [23] Fama, F. and Jensen, C. (1983), *Agency problems and residual claims*, Journal of Law and Economics
- [24] Greene, William H. (2008). *Econometric Analysis*, 6th ed. Upper Saddle River, NJ: Prentice Hall.
- [25] Grose, V. (1992) *Risk Management from a technical Perceptive: The Geneva Papers on Risk Insurance* Vol. 12
- [26] Gujarati, N. (2003). *Basic Econometric*, 4th edn, USA: McGraw-Hill
- [27] Hafiz Malik, (2011). *Determinants of Insurance Companies Financial performance: An Analysis of Insurance Sector of Pakistan*, Academic Research International, Volume 1, Issue 3
- [28] Hailu Zeleke, (2007). *Insurance in Ethiopia: Historical Development, Present Status and Future Challenges*. Addis Ababa: Master Printing Press
- [29] Hair, J. and Black, W. (2006). *Multivariate data analysis*, New York, Prentice Hall
- [30] Hamdan, A. (2008). *Thesis Determinants of insurance UAE. comp*
- [31] Harwick; P. and Firm Adams Size M, and (1999). *Growth, in the UK I*
- [32] Hausman, J. A. (1978). "Specification Tests in Econometrics." *Econometrica*, 46(6):1251- 1271.
- [33] Hifza, M. (2011). *Determinants of insurance companies' p insurance sector of Pakistan*, Academic Research International, Volume 1
- [34] Hifza, M. (2011). *Determinants of insurance companies' p insurance sector of Pakistan*, Academic Research International, Volume 1
- [35] Holzheu, T. (2006). *Measuring Underwriting Financial performance of the Non-Life Insurance Industry*, Swiss RE Sigma, No. 3 12.
- [36] Hoyt, R. and Powell, S. (2006). *Assessing Financial Performance in Medical Professional Liability Insurance*, Journal of Insurance Regulation
- [37] Irukwo J.O (1994). *Insurance Management in Africa* Cayton press (W.A) ltd, Ibadan, Nigeria Journal, 699-705.
- [38] Kabajeh, AL Nu'aimat *The Relationship Dahmash, between the ROA, ROE (2012).and ROI Ratios with Jordanian Insurance Public Companies Market*, Sh International Journal of Humanities and Social Science, vol. 2, no. 11, pp. 115-120
- [39] Kaguri, *Relationship* (2013) *Between firm characteristics and financial performance of life insurance companies in*

Kenya", MS C esis, University of Nairobi

- [40] Khan, S, Bilal, J. and Tufail, S. (2013). *Determinants of financial performance panel data evidence from insurance sector of Pakistan*, Elixir Fin. Mgmt. (Elixir International Journal)
- [41] Kihara, M. (2012). *The Importance of Insurance its challenges and solutions*
- [42] Kim, A. (1995). *The use of event history Analysis to examine insurers insolvencies*, *journal of risk and Insurance*
- [43] Kothari C.R., (2004). *Research methodology methods and techniques*, se. ed, college of commerce university of Rajasthan, Jaipur (India).
- [44] Kozak (2011). *Determinants of financial performance of nonlife insurance companies in Poland during integration with the european financial system*
- [45] Lee, .H. (2012). *An analysis of reinsurance and firm performance, Evidence from the Taiwan property-liability insurance industry*, The Geneva Papers on Risk and Insurance-Issues and Practice
- [46] Lowe (1999). *Management Research, An introduction*, Sage publications Ltd London Malhotra, N. (2007), *Marketing research; an applied orientation*, 5th edition,
- [47] Malik H *Determinants*. (2011). *Performance of insurance companies' p sector of Pakistan*", Academic Research International, vol. 1, no. 3, p. 315-321.
- [48] NAIC (2001). *Insurance Regulatory Information System*, Property/casualty
- [49] National Bank of Ethiopia, Annual Report of National Bank of Ethiopia. Available from: www.nbe.org.et (Accessed 12 Jan 2016)
- [50] 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
- [51] Norman J. (2000). *Insurance Theory Concepts*, University of Caroline. Arnold School of Public Health Administration
- [52] Oshinloye, M. O. (2009). *The impact of Insurance Activities on Economic* Outreville, F. (1990), *the economic significance of insurance markets in developing countries* *Risk Insurer*
- [53] Rebao Chen and Ann Wong (2004). *Determinants of Financial Health of Asian Insurance*
- [54] Rudolf, E. (2001). *Financial performance of the Non-Life Insurance Industry, its Back-to-Basics Time*, Swiss RE, Sigma, No.5
- [55] Shiu, Y. (2004). *Determinants of United Kingdom general insurance company performance*. British Actuarial Journal, 10 (5), 1079-1110.
- [56] Skipper, Jr., Harold D., (2001). *Insurance in the General Agreement on Trade in Services*, AEI Press Washington USA P 1-84.
- [57] Stenbacka, C. (2001). *Qualitative Research Requires Quality Concepts of its Own*, *Management Decision*, 39(7), 551-555.
- [58] Swiss, R. (2008). *Financial performance of Non-Life Insurance Industry*, Egypt,
- [59] Ward, D. and Ralf Z. (2000). *Does insurance promote economic growth? Evidence from OECD countries*". *Journal of risk and insurance*.
- [60] William H. Greene and Dan Segal (2004). *Financial performance and Efficiency in the U.S Life Insurance Industry*, *Journal of Productivity Analysis*, Kluwer Academic Publisher, Netherlands.
- [61] Winter, G. (2001). *A Comparative Discussion of the Notion of Validity in Qualitative and Quantitative Research*, the Qualitative Report, 665-770. www.nbe.org.et [Accessed 12 Feb 2016]
- [62] Wright K. M. (1992). *The Life Insurance Industry in the United States an Analysis of Economic and Regulatory Issues*". Country Economics Department Research Working Paper (wps 857) SHIU (2004). *Determinants of UK general "insurance company performance"* British. Actuarial Journal, 10 (5), 1079-1110.
- [63] Yuvaraj & Abate G. (2013). *Performance of insurance companies in Ethiopia*, International Journal of Marketing, Financial Services & Management Research vol.2011 –issue 1