

Determinants of Financial performance of Insurance Companies- Evidence from selected Ethiopian insurance companies

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Abstract

Financial performance (Profitability) is One of the elements for examining financial statements and overall company performance. This study was conducted to discover the main determinants of financial performance of insurance companies operating in Ethiopia. The study used Secondary data collected from 8 insurance companies out of 17 and from National Bank of Ethiopia (NBE) from 2010 to 2019 and attempted to model the determinants impacting the profitability of insurers operating in Ethiopia Using return on asset as a dependent variable. To this end, the key firm specific characteristics including liquidity, leverage, size, retention ratio, expense ratio underwriting risk, GDP growth rate and inflation rate are regressed against Return on Assets. According to the study's findings, financial leverage and underwriting risk have a negative and statistically significant influence on profitability (ROA) in Ethiopia, whereas the company's size and GDP growth rate have a positive and statistically significant impact on return on assets. Risk retention ratio and inflation, on the other hand, were found to have a positive but insignificant effect on profitability. However, the liquidity and expense ratios showed a negative and insignificant relationship with profitability (ROA). Even though inflation was found to be statistically insignificant, its signs may have important policy implications, and thus require the attention of policy makers.

Key words: 1.Financial performance, 2.determinants, 3.Liquidity, 4.Leverage, 5.GDP growth rate, 6.company size

1. Introduction

The insurance business plays a critical role in attaining sustainable economic growth through facilitating financial stability, capital formation, and funding development efforts, as well as fostering trade and commerce. The current business world is unsuited without insurance companies because hazardous businesses lack the ability to retain all sorts of risk that they confront throughout operations Ahmed et al., (2010). It is a crucial component of any country's financial system and if this vital sector was missed, the

economic effects would be disastrous. According to Charumathi (2012), a well-developed insurance industry is a boon for economic development since it offers long-run funds for the development of key infrastructure facilities in every country; this is because it allows firms to continue operations without disturbances caused by an extraordinary incident that limits the capacity of their production. In order for insurance firms to survive in today's competitive environment, they need to make a profit. Insurers can't recruit outside capital to accomplish their goals if they don't make a profit Teklit & Jasmindeep (2017). Insurance companies' profitability may be impacted by certain factors. From controllability perspective, some of these factors that influence insurers' profitability may be under the control of the Insurance companies' management, while others may be beyond their control. Such factors may be related to the firms' internal conditions or microeconomic factors or to the macroeconomic factors. A clear knowledge most of the variables that affect the insurance business is essential not only for the institution itself, but also for public policymakers involved in the financial system, such as financial sector supervisory institutions, the government and central banks as the primary stakeholder in economic growth.

2. Review of Related literatures

In her study article, Hifza (2011) examined the major factors affecting insurance company profitability in Pakistan from 2004-05 to 2008-09. The study looked at the effects of firm-specific parameters such as company age, leverage ratio, size of company, volume of capital, and loss ratio on profitability, using a sample of 35 listed life and non-life insurance companies. The study's findings revealed that while there was no relation between profitability and firm age, there was a positive relation between company size and profitability. The study also discovered that capital volume was positively connected to profitability, whereas loss ratio and leverage ratio were negatively related to profitability.

Over a ten-year period, Vatavu (2014) investigated the factors of financial performance in 126 Romanian companies registered on the Bucharest Stock Exchange (2003-2012). Performance was measured by return on assets (ROA), with debt, liquidity, asset tangibility, size, inflation, taxation and risk as independent factors. The results of regression analysis show that profitable businesses run with a little amount of debt. Return on assets is negatively influenced by tangibility, company risk, and taxation levels. Despite the fact that high levels of liquidity support earnings, they have a negative impact on performance.

Ulfana Nisa (2015) conducted a study that looked at the characteristics that affected profitability during the financial crisis. Size, liquidity, leverage, sales growth, and gross domestic product were investigated as independent factors, while the ROA was employed as a measure of corporate profitability. Fixed-effect and Ordinary Least Squares (OLS) estimation were used to evaluate the data of 161 listed firms from 2001 to 2012. Leverage has a negative and substantial association with ROA, while sales growth, liquidity and size have a positive and significant relationship with ROA. The relation between ROA and GDP, on the other hand, found insignificant.

Cekrezi (2015) used cross-sectional time series data to investigate the factors that influence the financial performance of Albanian insurance businesses. The study was conducted from 2008 to 2013 consisting of a sample of 5 insurance companies. Size, leverage, risk, flexibility and tangibility were some of the firm-specific criteria used. The return on Asset (ROA) was used as a proxy for performance. According to the findings, risk and leverage had negative effects on performance, whereas tangibility had a positive effect.

Mehari and Aemiro (2013) examined the impact of firm-specific parameters (liquidity, size of the company, tangibility of assets, leverage, loss ratio, age of the company, growth in writing premium) on the ROA of nine Ethiopian insurers from 2005 to 2010. According to the findings, the tangibility of assets, the size of the company and leverage all have a significant and positive impact on insurance companies' financial performance, while the loss ratio has a negative and significant impact. The findings also suggest that the company's age, liquidity, and growth in writing premium, have little bearing on financial performance.

3. Financial performance determinants and selection of variables

3.1. Specification of variables: Dependant variables

For insurance business, the most commonly used ratios for determination of insurance companies' profitability are return on assets (ROA) and return on equity (ROE). In studies that investigate the factors that determine insurance companies' profitability, one or both of these ratios is used as a measure of insurers profitability. Because the objectives of each of the profitability measures differ, the choice of profitability ratios (ROA or ROE) is determined by the objective of the profitability measure. Because return on asset (ROA) provides a better indication of an insurance company's ability to earn returns on its assets, ROA is considered the best indicator of an insurance company's profitability. The majority of empirical studies on performance in insurance business used return on assets (ROA) as the performance metric; Ahmed et al. (2011); Boadi et al. (2013); Ayele (2012); Burca and Batrinca (2014); Mwangi and Murigu (2015); Kazeem (2015); Berteji and Hammami (2016); Berhe and Kaur (2017); Alomari and Azzam (2017); Mazviona, Dube and Sakahuhwa (2017). In general, the profit before tax as a percentage of total assets (ROA) is used in the study as a measure of the dependent variable (insurance companies' profitability).

3.2. Specification of variables: Independent Variables

The financial performance (profitability) of insurance companies is influenced by a variety of factors, some of which come from within the organisation and others from outside.

I. Internal Factors

Internal factors are those over which the insurance companies' administrators have authority. Internal factors, in other words, are those that are frequently influenced by insurance companies' management's decisions and policies. Thus, by examining the balance sheet and income statement of the relevant insurance company, the impact of internal factors on profitability of insurers can be determined.

II. External factors

External factors include industry-specific and macroeconomic situations that reflect the economic and legal situation in which insurance companies operate. External factors, in this context, are those that are beyond the control of insurance companies' management. In the context of external factors beyond an insurance companies' management's control, the environment in which an insurer operates and the industry to which it belongs are likely to have an impact on the insurer's profitability. The internal and external factors are discussed below.

Firm Size (SIZ)

The size of a firm is a crucial component in influencing firm performance, and this is due to economies of scale. The size of a company has a number of effects on its financial performance. In comparison to small businesses, large businesses benefit from economies of scale, resulting in increased efficiency. Small businesses are more likely to have problems competing with large businesses in highly competitive markets since they have less power (Hailegebreal, 2016).

Leverage ratio (LEVR)

Financial leverage is the use of debt to acquire additional assets or fund projects.

Leverage ratio is used in this study to assess an insurer's ability to handle unexpected losses.

Debt is one of the tools that many businesses utilize to leverage their resources and boost profits. However, the influence of debt on increasing profitability varies by company. The ability of the company's

management to raise profits by borrowing money reflects the quality of the management's corporate governance.

Liquidity ratio (LIQR)

Because insurance companies are concerned about the timing, frequency, and severity of insurance claims or benefits, it is critical for them to carefully plan their liquidity in order to achieve higher profitability. This ratio reflects the insurance company's ability to meet short-term liabilities when they become due.

Underwriting risk ratio/Loss ratio (UWRR)

The other factor considered as determinant of profitability of insurance companies is the Underwriting risk proxied by the ratio of net incurred claims to net earned premium. According to the majority of studies, the loss ratio has a significant but negative association with profitability.

Retention Ratio (RETR)

The retention ratio is the proportion of underwritten business that is not passed on to reinsurers. The retained risk ratio is calculated as the ratio of net written premiums to gross written premiums and indicates the insurer's share of the underwritten risk, with the difference ceded in reinsurance.

Expense ratio (EXPR)

The expense ratio is another factor deemed to be a predictor of insurers' profitability. It is determined by dividing the costs of obtaining, underwriting, and servicing premiums by the net premiums collected by the insurance company. Previous study has found that the expense ratio is inversely linked to profitability.

GDP growth rate (GDPGR)

The real annual GDP growth rate, which is used to calculate GDP growth, is anticipated to boost insurance profitability. Economic growth can help insurance firms make more money by increasing individual household and business income. This allows consumers to get an insurance policy by paying a premium based on their choice for life, non-life, or health insurance to be protected against risk or uncertainty. As a result, higher premiums will result in higher profits for insurance firms, assuming that claims are paid in a timely manner. However, when the economy is bad, all of this goes the other way.

Inflation Rate (INFR)

According to Perry (1992), the effect of inflation on profitability of firms depends on the kind of inflation (whether inflation is unanticipated or anticipated). If inflation is expected, firms' income will rise faster than its costs because they will be capable of making adjustments to interest rates more quickly. As a result, this form of inflation will be helpful for firms to make profits. If, on the other hand, the sort of inflation is unexpected, firms' costs will rise faster than their revenues since firms may not be able to adjust their interest rates quickly enough. Inflation will have a negative influence on profits in this case.

4. Statement of the problem

Profitability is an issue of survival in the insurance industry and the financial sector as a whole. Then, it is vital to determine the elements that drive industry profit performance. Identifying the most important success indicators of insurance businesses can aid in the development of policies that may improve the insurance industry's profitability. As a result, the factors influencing insurer profitability have piqued the interest of financial market experts, investors, researchers, and insurance regulators. Empirical research has identified a variety of elements that influence the profitability of insurance businesses in both

developed and developing countries. However, to the best of the researcher's knowledge, there are just a few studies on the profitability performance of insurance businesses in Ethiopia and the majority of the research was focused on banks financial performance. Even in the limited research undertaken on the financial performance of insurers in Ethiopia, there is no consistency, resulting in mixed results in the conclusions of those studies relating to firm specific/internal factors and macroeconomic/external factors of profitability of insurance companies. The findings were inconclusive, necessitating additional research.

The objective of this research was to examine the determinants financial performance (profitability) of Ethiopian insurance companies.

To be more specific,

1. To identify the important factors that influence insurance company profitability.
2. To determine the impact of identified factors on insurance companies' profitability.

5. Research Hypothesis

H₁: liquidity has a positive and significant effect on financial performance/profitability (ROA) of insurance companies in Ethiopia.

H₂: The underwriting risk has a negative relationship and significant effect on profitability of insurance companies.

H₃: There is negative and significant relationship between expense ratio and profitability of insurance companies.

H₄: There is positive and significant relationship between retained risk ratio and financial performance/ROA of insurance companies.

H₅: Financial leverage has a negative and significant effect on return on total assets ratio of insurance companies.

H₆: The size of a company has a positive and significant influence on profitability (ROA) of insurance companies.

H₇: There is positive and significant relationship between GDP growth rate and profitability of insurance companies.

H₈: Inflation negatively and significant influence profitability of insurance companies.

6. Research Methodology

6.1. Data and methods

The study takes into account the most critical factors that affect the financial performance (profitability) of insurance companies in Ethiopia. The parameters considered are based on the factors that have been used frequently in previous research studies. This study made use of secondary data taken from the head offices of sampled insurance companies and the National Bank of Ethiopia. The information was gathered from eight insurance companies, out of a total of 17 that are currently operating in the country. The insurers for the study were chosen using a purposive sample technique, with the requirement that they have been in existence in the insurance sector for at least ten years. Those insurance companies operating insurance business for ten years covering a time period from year 2009/10 to 2018/19 are included in the sample. As a result, the sample size for this study is eight insurance companies that meet the inclusion requirements and have continuous data from 2009/10 to 2018/19.

6.2. Model Specification

The analytical model for this study was developed using the existing literatures that associate the key factors to performance. The majority of empirical studies on performance in insurance business used

return on assets (ROA) as the performance metric.; Daare (2016); Lire and Tegegn, (2016); Berteji and Hammami, (2016) Alomari and Azzam, (2017) Berhe and Kaur, (2017); Mazviona, Dube, and Sakahuhwa, (2017) and Hailegebreal, (2016).In the study, which spans the years 2009/10 to 2018/19, the relationship between explanatory variables and profitability (ROA) is analysed using a linear regression analysis with the help of the models specified below.

$$ROA_{it} = \beta_0 + \beta_1SIZ_{it} + \beta_2LIQR_{it} + \beta_3LEVR_{it} + \beta_4EXPR_{it} + \beta_5UWR_{it} + \beta_6RETR_{it} + \beta_7INFR_{it} + \beta_8GDPGR_{it} + \epsilon_{it}$$

Where ROA is the return on assets ratio; β_0 is the constant; i is the insurance company selected; t time period covered for the research (from 2009/10 to 2018/19); β_m is regression coefficient to be estimated, $m = 1, 2, 3, 4, \dots, 8$; SIZ is the size of the company; LIQR is the liquidity ratio; LEVR is the leverage ratio; EXPR is the expense ratio; UNDERWR is the underwriting ratio; RETR is the risk retention ratio; INFR is the inflation rate; GDPGR is the GDP growth rate and ϵ is the error term.

6.3. Measurement of variables

Table-I: Definition, measurement and expected relation of independent variables on performance

Variables	Measurement	Notation	Expected Relation	
Dependent	Return on Asset (ROA)	Profit before tax/total assets	ROA	
Internal Independent	Liquidity	Total current Assets / Total current Liabilities	LIQ	+
	Leverage	Total Liabilities/Total Assets	LEV	-
	Underwriting risk	Net claims incurred / Net earned premiums	UR	-
	Expense ratio	Expenses/Net earned premiums	ER	-
	Retention ratio	net written premiums / gross written premiums	RR	+
	Company Size	From date of establishment to up to date	SIZ	+
External Independent	GDP growth rate	$(GDP_t - GDP_{t-1}) / GDP_{t-1}$	GDPGR	+
	Inflation rate	$I = (Inf_t - Inf_{t-1}) / Inf_{t-1}$	INFR	-

6.4. Method of Data Analysis

Following data collection and sorting, it was analysed using descriptive and multiple regression analysis, aided by SPSS computer software, to discover the relation between dependent and independent variables. The regression results were also used to put the study hypotheses to the test. It gives descriptive analysis of the study's panel data or variables in collaboration with some important tests.

7. Results and Discussion

7.1. Descriptive statistics

Table-II below shows the descriptive statistics for the independent variables and the dependent variable (ROA).

As revealed in table-II, ROA has an average value of 0.0910 (9.10 percent) with a minimum of -12.04 percent and a maximum of 20.32 percent. This means that on average, the sampled insurance companies

generate 0.091 cents on a birr invested in their asset, ranging from 0.12 cents to a profit of 0.2032 cents over the study period, with a standard deviation of 0.043 (4.30%) from the mean.

With respect to the independent variables, the size of the insurance companies expressed in terms of natural logarithm of total asset has a mean value of 8.88 while the minimum and maximum values reported 7.75 and 10.00 respectively and a standard deviation of 0.393. Table-II also revealed the minimum and maximum values for liquidity of the selected insurers as .9849 and 3.5301 respectively. This mean value of the liquidity ratio for the selected Ethiopian insurance companies is found to be 1.8281.

The financial leverage, measured as a ratio of total debt to total assets yields a mean value of .6545 (65.45 percent). The variable's minimum and maximum values were .3834 and .7935 respectively. This is an indication for some insurance companies in that, in relation to their asset financing, highly levered insurance companies in Ethiopia used debt up to a rate of 79.35 percent, whereas less levered companies used debt around a rate of 38.34 percent over the research period.

In terms of macroeconomic indicators, the average real GDP growth rate is 9.78 percent, with lowest and highest values of 6.82 percent and 12.55 percent, respectively, indicating that economic growth was moderately consistent over the research period. Finally, with a standard deviation of 7.96 percent, the mean score of inflation rate for the period was 13.44 percent with maximum and minimum score of 32.01 percent and 6.63 percent respectively

Table II: Descriptive Statistics for the dependent and independent variables

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	80	-.1204	.2032	.091038	.0433430
EXR	80	.1166	.4698	.229524	.0799897
UWRR	80	.1355	.8871	.610723	.1601467
RETR	80	.3628	1.0027	.799629	.1325479
LEVR	80	.3834	.7935	.654496	.0853394
LIQR	80	.98490	3.53010	1.828156	.81036935
GDP GR	80	.0682	.1255	.097780	.0152950
INFR	80	.0663	.3201	.134430	.0795738
SIZ	80	7.7500	10.0000	8.880000	.3925864
Valid N (listwise)	80				

Source: Audited financial statements of insurance companies and NBE report (2009/10-2018/19)

Pair-Wise Correlation Analysis

Pairwise correlation analysis is frequently used as a preliminary stage for determining correlations or associations between variables. When there is a significant correlation between independent variables, the result will be influenced by the relationship that exists between these variables. To avoid this problem, we use independent variables that are not significantly correlated. The correlation analysis between the independent variables employed in the study is shown in Table-III below. In general, the matrix revealed that the examination of correlation between the independent variables was not severe, indicating that multicollinearity was not a concern. When the correlation analysis between two variables is found to be more than 80%, the problem of multicollinearity is taken to be serious (Kennedy, 2008). The following is the correlation output for the assumed variables.

Source: Authors' own calculation, NBE, MoFED

Table III: Pearson Correlations

	ROA	GDP GR	INFR	LOGT A	ER	UE	FL	LR	RRR
ROA	1.000								
GDPGR	.063	1.000							
INFR	-.120	-.098	1.000						
SIZ	.241	-.555	-.180	1.000					
EXPR	-.026	.032	.092	-.155	1.000				
UWRR	-.214	-.223	-.138	.171	-.186	1.000			
LEVR	-.168	.099	.143	.118	-.433	-.183	1.000		
LIQR	.208	-.221	.048	.526	-.212	.004	-.031	1.000	
RETR	.078	-.434	-.180	.229	-.173	.463	-.243	.152	1.000

The model summary of the regression for the sample insurance companies is shown in Table IV. The value of R is 61.5 percent, and the model's R-Square is 47.4 percent. This suggests that fluctuations in the independent variables utilised in this model account for 47% of the change in the dependent variable, namely Return on Assets (ROA).

Table-IV: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.615 ^a	.474	.397	.0378608	1.377

a. Predictors: (Constant), Risk Retention Ratio, Liquidity Ratio, Inflation Rate, Financial leverage, underwriting risk/Loss Ratio, GDP Growth Rate, Expense Ratio, Log of total Assets

b. Dependent Variable: Return on Asset

The Durbin-Watson test has a result of 1.377, indicating that there is no evidence of autocorrelation.

Table V shows the result of ANOVA and the overall model is strongly significant

(P-value = 0.001)

Table-V: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.047	8	.006	5.067	.001 ^b
	Residual	.102	71	.001		
	Total	.148	79			

a. Dependent Variable: Return on Asset

b. Predictors: (Constant), Risk Retention Ratio, Liquidity Ratio, Inflation Rate, Financial leverage, underwriting risk/Loss Ratio, GDP Growth Rate, Expense Ratio, Log of total Assets

7.2. Regression Results

The regression analysis was carried out after the Pearson correlation coefficients were indicated, and the findings are presented in Table VI, which displays the regression results of LR, LV, UR, ER, RR, SZ, INF and GDP on ROA. The results are based on a linear regression model that was applied to panel data from 8 insurance companies with 80 observations for ten years from 2009/10 to 2018/19. The important findings in relation to determinants of profitability of insurance companies are presented below

Table-VI: Regression Summary

Model	UnstandardizedCoefficients		StandardizedCoefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.421	.179		-2.351	.022
LIQR	-.005	.007	-.091	-.709	.481
LEVR	-.202	.065	-.397	-3.080	.003
SIZ	.064	.017	.576	3.657	.000
EXPR	-.102	.067	-.189	-1.525	.132
UWRR	-.113	.031	-.417	-3.592	.001
RETR	.073	.042	.222	1.741	.086
GDPGR	1.190	.398	.420	2.989	.004
INFR	.047	.062	.086	.749	.457

Source: linear regression output

Leverage ratio (LEVR)

From Table VI, the regression result clearly illustrates the return on assets and insurance leverage have a negative relationship. The Beta coefficient for this variable is negative and significant at 5% with a P-Value of 0.003 and H₅ is accepted. As a result, return on assets and insurance leverage have negative and significant relationship. The beta value of the standardised coefficient is -0.397. If the insurance leverage is increased by 100, the return on assets will decrease by 39.7, using the standardised coefficient and leaving all other variables unchanged. Thus, insurers with excessive leverage (leveraging above a certain level) will experience a negative impact on profitability.

Liquidity (LIQR)

Liquidity ratio was found to have a negative but insignificant relationship with insurance companies' profitability as shown by the regression result in Table VI. The negative coefficient of 0.091 with a p-value of 0.481 shows insignificant relationship at 5% level leading to the rejection of null hypothesis H₁. Hence, the coefficient for this specific variable indicates that liquidity and profitability are inversely related, i.e., an increase in insurer liquidity leads to a decrease in profitability, and vice versa. One of the many probable explanations for this could be resource misallocation or improper utilisation of idle resources. This study's findings are in line with John et al. (2013), Agnes (2012), Abate and Yuvaraj (2013), and Hadush (2015).

Size of the company (SIZ)

The size of insurance company (SZ) has been discovered to have a significant and positive impact on insurance company profitability and the null hypothesis (H₆) is accepted. The positive coefficient indicates that insurance businesses with larger sizes are more likely to make the most profit than those

with smaller sizes. The findings of this study support the relative market power hypothesis, which claims that organisations with big sizes are more likely to be able to use their market power to maximise profits by leveraging their products. The findings of this study are in line with those of earlier researchers such as Charumati (2012), Amal et al. (2012), Abate and Yuvaraj (2013) and Naveed (2010).

Underwriting risk ratio/ loss ratio (UWRR)

In relation to the underwriting risk, it has been identified that the underwriting risk has a negative and significant association with profitability of insurers. The negative coefficient of the Underwriting risk indicates that when incurred claims increase in relation to the earned premiums, it will have a negative impact on insurer profitability since it raises the expenses.

The Beta coefficient for this variable is positive and significant at 5% level with a P-Value of 0.001 and the null hypothesis H_2 is accepted. Hence, the loss ratio has a significant negative association with the return on assets. The findings of various studies are in line with this finding including Demis, (2016); Aster and Meseret, (2017); Asrat and Tesfahun, (2016) and Gemachis, (2017) all investigated that underwriting risk has a significant and inverse relationship with profitability.

Retained risk Ratio (RRR)

Retained Risk Ratio measured as a ratio of net written premiums to gross written premiums, was found to have a positive but insignificant relationship with insurance companies' profitability as shown by the regression result in Table VI. Even though the relationship is insignificant, the retained risk ratio showed a positive association with profitability with a coefficient of 0.222 and a p-value of 0.086 at a level of 5%. Hence, the retained risk ratio and the return on total assets ratio of insurance businesses have a positive but insignificant association. This is in line with earlier research studies conducted by Charumathi, B. (2012), Mwangi & Murigu (2015).

Expense ratio (EXPR)

Relating to this factor, it has been found that the expense ratio has a negative and insignificant association with profitability of insurers. The Beta coefficient for this variable is negative and insignificant at 5% with a P-Value of 0.132 and hence, return on assets and expense ratio have a negative but insignificant relation. This finding is consistent with the findings of earlier studies conducted by Mwangi & Iraya (2014) and Mazviona et al (2017).

GDP growth rate (GDPGR)

In relation to the external factors, The Gross Domestic Product (GDP) was found to have a positive and significant relationship with Ethiopian insurers profitability. Doreen (2013), Qinhua and Meiling (2015) and Infuero and Chijuka (2014) were among the earlier researchers to confirm a positive and significant relationship between GDP and profitability. The positive coefficient of the variable indicates that economic growth and profitability are highly associated, i.e., economic growth can help insurance businesses be more profitable by raising the demand for financial services, hence improving cash flows and profit margins. When the economy improves, the demand for insurance services rises, which can lead to a high return on investment or profit margin for the company. The Beta coefficient for GDP growth rate is positive and significant at 5% with a P-Value of 0.004 and H_7 is accepted. Thus, insurers with improved GDP growth rate will experience a positive impact on profitability.

Inflation (INFR)

Another key external factor; Inflation (INF) is found to be positively related but statistically insignificant on profitability of insurers. This variable's positive sign suggests that managers of insurance companies

anticipated inflation over the research period, allowing them to alter interest rates in time to reduce inflation costs. With a P-Value of 0.457, the Beta coefficient for INF is positive and insignificant at 5%, leading to the rejection of H_8 . As a result, the relationship between return on assets (ROA) and inflation is positive but statistically insignificant. Hadush (2015) discovered a positive association between inflation and insurers' profitability, and Alper & Anbar (2011) discovered that inflation rates would lead to an increase in commercial bank profitability.

Conclusion

The study was carried out to explore the key factors that influence the profitability of Ethiopian insurance companies using a balanced panel data over the period 2009/10-2018/19 Using linear regression model. A total of six internal and two external factors were regressed against ROA of the selected insurance companies. The study found that size of the company was the only element from the internal factors that has positive and significant impact on the profitability of Ethiopian insurance companies at 5% level. Insurance leverage and underwriting risk were the other internal factors found to have negative and statistically significant impact on profitability of the insurers at 5% level.

GDP growth rate from the external factors showed positive and significant impact on the profitability (ROA) of Ethiopian insurance companies at 5% level. It implies that the GDP growth rate contributes more to the profitability performance of insurance companies. Inflation rate found to have positive influence on profitability though it is statistically insignificant. The signs of inflation though it is insignificant, as well provide important implications for policy makers and bank regulators. This variable has positive impact on profitability of insurers over the study period. Inflation was an anticipated type and thus managers of insurance companies could improve insurers' revenues at a faster rate than costs in response to timely adjusting interest rates by banks.

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