Profitability of Non-Life Insurance and its Driving Dynamics in Ethiopia

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Abstract

Recently, profitability is considered as a central issue to the company's overall operational activities and improving the company's financial performance is highly contributing to the development of the country economy. This study intends to investigate the driving factors of profitability in the insurance sector in Ethiopia with special reference to non-life insurance companies, data obtained from audited financial statement of twelve (12) insurers for a period of six years (2011-2016) with total of 72 observations through panel data by using Ordinary-Least-Square (OLS). The results of panel least square regression analysis indicate that industry concentration ratio and leverage have statistically significant and positive impact whereas diversification, underwriting risk and reinsurance dependence has a negative and statistically significant relationship with non-life insurance companies' profitability. However, there were no support of firm liquidity, real GDP growth rate and Inflation impact on profitability of non-life insurance companies in Ethiopia. In this study, the perceived drivers of profitability was estimated as a result of low amount of revenues collected from the general insurance in Ethiopia The management bodies of non-life insurance companies (line) should give high attention on firm and industry related variables, particularly by adopting better risk management strategies as well as better internal control to achieve superior profitability.

Keywords: Non-life Insurance, Profitability, Firm specific, Insurers, Ethiopia

Introduction

An insurance is growing rapidly and gaining importance in the global financial development by helping countries economic activities as an intermediary as well as the risk bearer for individual or firm (Cudiamat and Siy, 2017; Daare, 2016; Hana, 2015; Kihara, 2012;Ndalu, 2017 and Douglass, 2011). Hence, the financial system needs to be developed to support the economy well. Particularly, an Ethiopian insurance sector is not that much developed (Douglass, 2011 and Abebaw, 2014). The non-

life insurance business environment is capture the function of risk transfer and indemnification functions whereas the financial intermediation is reflected in the life insurance business function (Ndalu, 2010).

The corporation can't survive in the long run and maintain business sustainability their economic entity, without identifying the driving factors influencing their profitability (Ayele and Sambasivam, 2013 and Borlea and Achim, 2010). Therefore, valuing profitability of an insurance company is difficult due to the unique format of financial statement and the complex accounting system used by an insurance (Davies et.al., 2003).

As per National Bank of Ethiopia report (2011-2016), the Ethiopian insurance sectors growth rate of revenue from gross premium of insurance sector exhibits decline over time. The amount of revenues collected from the general insurance was low in comparison to revenue collected from life insurance service. Most of non-life insurance business have taken a hit on their profitability in the previous fiscal year (Bhat, M., & Dar, F. A. 2012). For instance, National insurance companies, Nile insurance companies and Nyala insurance companies have suffered net profit decline by 10.5%, 57% and 24%, respectively in the year end of 2016 on their policies underwritten by non-life insurance business. Despite, Lion insurance companies, United insurance companies and Awash Insurance Companies are also report low amount of profit on their policies underwritten by the non-life insurance business. But, few of them were profitable companies in the period of year-ago. As a whole the premium portfolio of insurance companies operating in Ethiopian were dominated by general insurance line, but more revenues are collected from the policies written by long-term insurance companies. Particularly, the Ethiopian insurance sector are also remains underdeveloped and they are targeted at the corporate market, focusing on general insurance and almost 90 percent of the population does not have any type of formal insurance (Gieger and Moller, 2015). Therefore, this paper aimed to explore factors influencing the profitability of non-life insurance companies in Ethiopia, by addressing main question: How was the profitability affected by the firm underwriting risk, reinsurance dependency, liquidity

ratio, firm financial leverage, industry concentration ratio, real GDP growth rate, inflation and diversification of the firm?

Review of literature

An insurance is a contract under which one party accepts significant insurance risk from another party by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder (IFRS, 4). It plummeting uncertainty of occurrence of an event (Sushma, 2012). It is a service provided financial benefit in favor of an individual, association or business in exchange for collected premiums that provides a benefit in case a risk occurs (Berteji and Hammami, 2016 and Sushma, 2012).

In this study, the researcher believed that using a game theoretical perspective would help to understand how profitability related factors interlinked with the overall performance general insurance. A lot of studies conducted, but no single theory gives a correct and comprehensive explanation on the nature profitability. Therefore, an insurance firm should consider the theories which discussed in different finance literatures and they must relate those theories with their operational activities. Among the profitability related theories the Market Structure Theory (MST) of the firm was assumed as a firm's objective is simply to maximize profits (Rasiah, 2010). It proposes two theories which consist of structure-conductperformance hypothesis (Relative-Market-power hypothesis) which states that a more concentrated sector favors high profitability and motivated by benefits of greater market power, which reflects the setting of prices that are less favorable to consumers (high policy holders, higher Gross Written Premium) as a result of competitive imperfections in market (Berger, 1995 and Berger and Hannan, 1989). The second theoretical framework of Market Structure Theory is the efficient structure hypothesis (ESH which states that efficient firms in the market lead to increase in the firms' size and market share due to the aggressive behavior. This will help the large firms to maintain high profits through low cost as a consequence of concentrated market structures and collusion occur among firms.(Berger and Hannan, 1989) states that ESH

and SPC stand on similar observation on the relationship between concentration and performance (profitability). The findings of Lee and Lee, 2012; Pervan and Kramaric, 2012 and Jovovic et.al., (2014) is also support this finding.

The other profitability related theory is Modern portfolio approach which is the most relevant approach in financial institutions; particularly in bank, non-bank financial institutions and insurance sectors (Nzongang and Atemnkeng, 2006). The major ideas of the modern portfolio theory are maximizing the expected portfolio returns for a given amount of minimum portfolio risk in a given level of return by carefully choosing the proportions of various assets (Sadiye, 2014). As perErdugan (2012)the risk and return on firms diversified portfolio is depending on domestic and foreign economic and financial variables for financial industry which are based on decisions taken by the financial manager. It also real for the insurance companies in elsewhere. Since insurance firms are investments by themselves its standard practice for them to invest in a diversified portfolio for purpose of minimize risk and increase the returns (Bhat, M. A et al;2020). Thus, when choosing a portfolio, an insurance firm should maximize the capitalized value of future earnings (Suyehli, 2015). Further, the ability to obtain maximum profits depends on the feasible set of assets and liabilities determined by the management of the organizations and the unit costs incurred by the firm for producing each component of assets (Nzongang and Atemnkeng, 2006). Therefore, this theory is also important for the insurance companies operating in elsewhere and all over the world.

Generally, a large number of studies has been investigated on profitability and its driving factors in different jurisdictions. But a scanty of study had been conducted in the selected area from developing countries as the researcher concerned and they are also insufficient in amount. For instance, in order to conduct this study, some of the literatures were taken from Pakistan, Kenya, India, Taiwan, Nigeria and other Europe countries for an intention to investigate non-life insurance business profitability driving factors. Some of the previous researches that conducted on these jurisdictions as well as in Ethiopia have also documented unclear results on relationship between profitability which measured by return on asset and some other variables used to measure it as a proxy. For instance, (Mazvionaet.al., 2017; Sumaira and Amjad, 2013 and Lee and Lee, 2012) indicates that, financial leverage of the nonlife insurance companies is positively related with profitability. Whereas,(Kozak, 2011 andKazeem, 2015) found inverse relationship between leverage and profitability of general insurers. Despite to that (Mazvionaet.al., 2017;Daare, 2016;Kazeem, 2015;Lee and Lee, 2012)found positive relationship between ROA and the firm liquidity.

When coming back to context of Ethiopia, some of few researches are conducted driving factors of profitability; particularly in non-life life insurance. Despite, some of few studies conducted in Ethiopia also provide inconsistent and controversial result among the variable used in their study and profitability. For instance, (Suyehli (2015) found positive and significant relationship between profitability and liquidity whereas (Mehari and Aemiro, 2013) found positive insignificant relationship between profitability and liquidity. In opposite to that, [Ayele and Sambasivam, 2013; Hana, 2015; Teklit and Jasmindep (2017); Suyehli (2015), Demis, 2016; Mehari and Aemiro, 2013 and Asrat and Tesfahun, 2016) states that liquidity have negative impact on profitability of insurance companies in Ethiopia. Despite to this gap,(Asrat and Tesfahun, 2016)are also failed to include one of the largest government owned Insurance company namely Ethiopian Insurance Corporations during their study. The conceptual framework that designed by the researcher is represented in the following figure :





Data and methodology

This study used the quantitative research approach based on the nature of data, the problem taken into account and predetermined objective of the study. In context to the approach of the study, the study was based on positivist research paradigm philosophical assumption because the study is commonly based on empirical observation, measurement and its deterministic in which cause determine the effects. The nature of research problem tends to be need explanatory research design to explain the relationship between profitability and it related driving factors(Saunders et.al., 2016). According to National Bank of Ethiopia quarterly bulletin of 2017 which states 1 public and 16 private insurance companies with a total of 482 branches operating throughout the country. The target population of the current study employed all insurance companies operating in Ethiopia which have a license from [2016]to underwrite a non-life insurance business as a target population, with audited financial statements from the 2011 to 2016. In this study, secondary data was used from 2010/2011 to 2015/16 for six consecutive years from twelve insurance companies, National bank of Ethiopia [2016]and Ministry of Finance and Economic development (MoFED, 2011-2016) was used for considering the effect of selected variables.

The Ordinary Least Square (OLS) regression model was mostly used to measure and understand profitability for non-life insurance companies operating in Ethiopia. In this scenario, dependent variable (profitability) is measured by return on asset which is determined ratio of net income before tax to total assets the baseline. Ordinary Least Square (OLS) regression model with dependent variable was developed in line with (Mazviona et.al., 2017; Demis, 2016;Asrat and Tesfahun, 2016; Daare, 2016;Datu, 2016;Hussain, 2015;Moro and Anderloni, 2014; Lee, 2014;Burca and Batrinca, 2014; Mehari and Aemiro, 2013; Lee and Lee, 2012;Pervan and Kramaric, 2012 and Kozak, 2011) for this study is follows:

$$\begin{split} ROA &= \alpha + \beta_1 DIV + \beta_2 GDP + \beta_3 HHI + \beta_4 INF + \beta_5 LEV \\ + \beta_6 LIQ + \beta_7 RED + \beta_8 UR + \varepsilon \ it \end{split}$$

Where ROA = Return On Asset used as a barometer of profitability, Return On Asset used as a barometer of profitability, DIV as Diversification, GDP as real growth domestic product, HHI as industry concentration ratio (Herfindahl-Hirschman Index), INF as average Inflation anticipated change, LIQ as liquidity, LEV as leverage, RED as UR as underwriting risk, ε is error term and it is an insurance companies at time t.

Variables Name	Measurable	Sources	
Profitability (ROA)	Net Income before taxes /Total asset	(Lee, 2014))	
(Dependent Variable)			
Independent Variables			
Underwriting risk	Annual net claims incurred / Net earned premiums	(Burca and Batrinca, 2014)	
Re-insurance dependence	Premium ceded/Total asset	(Suyehli, 2015),)	
Leverage	Total debt/ Total Capital and reserve	(Asrat and Tesfahun, 2016)	
Liquidity	Total current Assets / Total current Liabilities	(Mwangi and Murungi,2015)	
Diversification	Dummy variable: 1 if non-lifeline and 0 otherwise.	(Moro and Anderloni, 2014 andZhang, 2015)	
Industry concentration Level	Herfindahl - Hiershman Index (Sum of market share square)	(Jovovic <i>et.al.</i> ,2014;Lee and Lee (2012)	
Gross Domestic Product	$(\text{GDPt} - \text{GDPt}_{-1})/\text{GDPt}_{-1}.$	(Zhang, 2015)	
Inflation	$I = (Inft - Inft_{-1})/Inft_{-1}.$	(Hussain, 2015 and Zhang, 2015)	

Table 1: Measurement of dependent and independent variables

Results

The profitability determinants of non-life insurance companies' descriptive statics of this study are presented in

table 4.1 and the multiple regression result of the model estimated parameter were presented in table 4.2.

	ROA	DIV	GDP	HHI	INF	LEV	LIQ	RED	UR
Mean	0.10	0.40	0.10	0.02	0.15	2.64	1.39	0.68	0.72
Median	0.11	0.00	0.10	0.00	0.12	2.19	1.10	0.41	0.64
Maximum	0.22	1.00	0.11	0.22	0.34	14.18	17.14	3.88	4.76
Minimum	-0.06	0.00	0.08	0.00	0.08	0.71	0.36	0.01	0.07
Std. Dev.	0.05	0.49	0.01	0.05	0.09	1.79	1.93	0.69	0.54
Observations	72	72	72	72	72	72	72	72	72

Table 1. : Descriptive statistics of profitability and its driving factors for Non-life insurance

Source: Output of Eviews 9

For the total sample 12 non-life insurance companies, the mean of ROA was 10% with a minimum of -6% and a maximum of 22% which shows that the most and least profitable non-life insurers among the sampled insurers earned 22 and -0.06 cents of profit before tax for a single birr invested in the premium written of the firm respectively. In addition to that, the standard deviation which analyzed through Eviews 9 software for ROA was 5% which indicates that as the insurers need to optimize the premium written to increase the return on their assets. The mean values of all variables are ranged from the minimum of 0.02 for the insurance companies' concentration ratio which measured by the Hirschman Herfindahal Index (HHI) to a maximum of 2.64. The mean value for profitability (ROA) is 0.10 which indicating that, the Ethiopian non-life insurance companies are averagely observing the income before tax of 10%. The value of the standard deviation is -0.05 which shows profitability of the non-life insurers operating in Ethiopia is varies from the mean by -5 during the selected period.

An insurance companies who underwrite both life and nonlife insurers business line have a maximum value of 1.00 and minimum value of 0.00 during the selected period. But, the ratio of undiversified insurers during the selected period is 0.05 standard deviation from its mean value with 0.40. This implies that on average ratio of undiversified insurers is reported to be 40% during the review period. Therefore, we can conclude that few of the insurers operating in Ethiopia are more diversified in both life and non-life insurance business whereas ratio of undiversified insurers is 40% which shows that more diversified firms are more profitable in comparison to non-diversified firms during the selected period.

The growth domestic product (GDP) which are also another variable of the study, as presented on the table 4.1 has an average mean value of 10% which clearly displays the average real GDP growth rate of the country's economy over the past 6 years. The maximum and minimum growth of the economy was recorded and reported during the year of 2011 (i.e. 11.2%) and 2016 (i.e.8.3%) which is 1% and 11% respectively. The table 4.1 also presents small percentage of the standard deviation which is 5% for GDP. The value of GDP across sample of selected insurance companies is the same and there is no deviation in value of GDP across the companies. However, this shows that economic growth in Ethiopia during the period of 2011 to 2016 remains reasonable stable and the result was more or less in agreement with the report that provided by the government regarding to the economic growth.

The other macro-economic variable used in the study is general inflation rate. The general inflation rate is measured by the percentage change in consumer price index in each year. As presented table 4.1 inflation rate had high standard deviation of 9% as compared to the GDP; this implies that inflation rate in Ethiopia during the study period remains somewhat unstable. This indicates the deviation in price of the goods and service from the average mean value during the study period for six consecutive years. The mean value of the general inflation rate of the country during the past six years was 15%, which was more than that of the average real GDP growth i.e. 10%. As per data of Minister of Finance and Economic Development (34) the maximum inflation was recorded in the year of 2011 (i.e. 34.1%) and the minimum was in the year of 2015 (i.e.7.7%) which have minimum and maximum value of 8% and 34% respectively.

The other explanatory variable of the study, leverage, as demonstrated in table 4.1 has a minimum value and maximum value of 0.17 and 14.18 respectively. These indicates that there is a non-life insurer out of the selected non-life (general) insurance companies with the maximum leverage or the ratio of total liabilities to total owners' equity is 14.18 and a non-life insurer with as minimum as 0.17 ratio of total liabilities to total capital and reserve during the review period. Yet, the ratio of total liabilities to total capital and reserve has 1.79 standard deviation from its mean value with 2.64. This also indicates that general insurers are uses debt than equity for their financing purpose and also there are great differences among leveraged status that measured by debt to equity/capital ratio vis-à-vis the selected insurance companies beneath to the study under consideration.

The liquidity ratio is used as another indicator of profitability determinants of general insurance companies in this study. It is computed by dividing total current assets and total current liabilities. As presented in table 4.1 above its mean value and standard deviation is 1.39 and 1.93 respectively. This implies that deviation in liquidity ratio across the selected non-life insurance companies of Ethiopia by 1.39 from the average mean value. The overall maximum and minimum value for liquidity ratio is 17.14 and 0.36 respectively. This implies that the Ethiopian general insurance companies those have more liquid asset is more profitable than those insurance companies own less liquid asset. It also indicates the existence of large variation

among the liquidity ratio for non-life insurance companies operating in Ethiopia for the study under consideration.

The reinsurance dependency (RED) have a mean value of 0.68 and standard deviation of 0.69. Thus, on average 68% percent of gross premium collected from the customers as percentage of total asset was ceded for the reinsurance purpose. On the other hand, the minimum and maximum value of 1 percent and 3.88 percent which indicate that, the minimum ratio of premium ceded shows lower risk of dependency on reinsurance whereas the higher premium ceded shows the higher risk of dependency on reinsurance sides.

Ethiopian general insurance companies have on average 72 percent of underwriting risk measured by net claim incurred divided by annual premium earned in this study. This indicates that around 72 percent of net earned premium on average, paid for loss incurred per year by Ethiopian general insurance companies. The highest ratio of losses incurred to earned premium value was 4.76 and the minimum value for a company in a particular year was 0.07 percent. This indicates that at least seven non-life insurance business out of 12 sampled insurers is pay for claim incurred from the premium they earned in average. The standard deviation in underwriting risk for the selected samples of non-life insurance companies is 0.54. This indicates that deviation in their value of underwriting risk among the sampled non-life companies in Ethiopia from their mean value.

As exhibited in the table above, the overall industry concentration ratio which measured by the sum of squared market shares of companies denoted by the HHI has an average mean value of 0.02 and standard deviation of 0.05. This implies that more concentrated insurers are more profitable than less concentrated insurance companies. On average, the non-life insurance business operating in Ethiopia's are less concentrated and they have low market share and there is low degree of competition. Despite, a more and less concentrated insurers have maximum of 0.22 and minimum of 0.00 respectively which means that a more concentrated insurance company has a profit per cents of 0.22 than less concentrated insurers.

Table 1 + Regional Testate for pronoubline, and arring factors							
Variable	Coefficient	Std. Error	r	t-Statisti	c	Prob.	
С	0.069547	0.059294		-1.172910		0.2452	
DIV	-0.037963	0.011640		-3.261343		0.0018***	
GDP	0.455904	0.555720		0.820384		0.4151	
HHI	0.333711	0.131913		2.529779		0.0139***	
INF	-0.049869	0.062065		-0.803500		0.4247	
LEV	0.015348	0.004313		3.558208		0.0007***	
LIQ	0.002331	0.012246		0.839719		0.4042	
RED	-0.042903	0.010227		-3.03405		0.0009***	
UR	-0.012392	0.011474		-1.21172	5	0.0039***	
R-squared			0.783156				
Adjusted R-squared			0.739237				
Prob. (F-statistic)			0.000383]		
Durbin Watson stat			1.798208]		

Discussion

Table 1 : Regression result for profitability and driving factors

***, **, and * denote significance at 1%, 5%, and 10% levels, respectively. Source: Own computation through output of E-views 9

In developing countries like Ethiopia, the insurance companies are underdeveloped due to its low amount of profitability. As presented in table 4.2, results of the multiple Regression analysis which showed that there was a strong negative significant relationship between insurers diversifications and profitability measured by the ROA, with a regression coefficient of -0.037963, t-statistic of -3.261343 and P-value of 0.0018. This implies diversification which measured by dummy variable that has a value of zero if the firm is composite which underwrite both of life and non-life insurance business, one otherwise is considered as a proper explanatory variable of profitability in Ethiopian non-life insurance companies. The finding of this study was inconsistent with the findings of researches such as (Zhang, 2015; Krivopavicet.al., 2017;Hussain, 2015; Burca and Batrinca, 2014 and Pervan and Kramaric, 2012)but consistent with (Moro and Anderloni, 2014 and Lee, 2014) who found negative and significant and [Ayele and Sambasivam, 2013] who found negative relationship between profitability and diversification (Gomero, G. D et al 2020). Therefore, the financial impact of diversification on firm ROA will differ

from sector to sector as well as countries to countries and for this particular study the undiversified insurers underperform than diversified insurers those have underwritten both life and non-life insurance business simultaneously.

On the other hand, an industry concentration is measured by Herfindhal-Hirchaman (HHI) have impact positive and statistically significant both at 1% and 5% significance level (p-value = 0.0139) in explaining the variability in profitability of non-life insurance companies in Ethiopia. Despite to that, the more concentrated insurers increase their market share and competition level by 0.0139 of ROA less concentrated insurers. This finding was consistent with the findings of (Lee and Lee, 2012 and Pavic and Pervan, 2010) which indicates insurance companies in more concentrated business lines are able to charge high price and earn higher profits than companies in less concentrated lines. In addition the finding of this study is in agreement with a prior expectation of the Market Structure Theories that support an assumption of the Structural Conduct Performance (SCP) hypothesis which states that more concentrated sector favors high profitability and motivated by the benefits of greater market power, which reflects the setting of prices that are less favorable to consumers (high policy holders, higher Gross Written Premium) as a result of competitive imperfections in these markets.

From the theoretical point of views, GDP is expected to have a positive effect on the insurance companies' profitability which is consistent with studies of (Pervan and Kramaric, 2012; Daare, 2016; Suyehli, 2015; Doumposet.al., 2012; Hana, 2015) states that GDP has positive coefficient and statistically insignificant with the profitability which measured by ROA. The other variable is inflation which commonly measured by calculating the percentage change in the overall level of prices over a period as measured by price index. As indicated in the regression output of the study in table 4.2, the coefficient of Inflation rate (INF) measured by change in annual inflation is -0.049869 and its probability value (P-Value) is 0.4247. This may be interpreted as holding other factor constant at their average value, when inflation (INF) decreased by one percent, the profitability which measured by ROA of sampled Ethiopian non-life insurance companies would be decreased by -0.049869 percent but it is statistically insignificant. The result of the current study is in line with the finding of the previous studies conducted in developing countries such as (Lee, 2014;Asrat and Tesfahun, 2016;Suyehli, 2015;Pervan and Kramaric, 2012 and Teklit and Jasmindep, 2017), and developed countries such as (Lee, 2014 and Daare, 2016) those states that, inflation is negatively related to the profitability of insurance companies but it is statistically insignificant.

On the other hand, liquidity has positive and statistically insignificant impact on profitability measured by the Return on Asset (ROA) with the p-value of 0.4042 and coefficient of 0.002331. However, this is pinpoints the same conclusion with some of the previous studies finding such as (Daare, 2016;Mwangi and Murungi,2015 and Kazeem, 2015). In contrary, some of the previous study conducted by (Teklit and Jasmindep, 2017; Mehari and Aemiro, 2013;Malik, 2011; Burca and Batrinca, 2014) also found negative and insignificant relationship between profitability and liquidity. The positive sign implies that the insurers who has higher current ratio will bring higher profits for their firms and increase insurance companies' ability to pay claims incurred to policy holder and creditors by increasing their profitability. Furthermore, the reinsurance dependence which measured by the ratio of premiums ceded in reinsurance to total asset was statistically significant and has negative impact on profitability which measured by ROA at 1% significance level (p-value = 0.0009) which implies that increase reinsurance dependence on the non-life reinsurers will leads to decline profitability negatively in Ethiopian nonlife insurance companies. This finding created controversy with that of the previous studies conducted in Ethiopia as well as in other jurisdictions. For instance, (Boyjoo and Ramesh, 2017) in Mauritius, (Suyehli, 2015;Asrat and Tesfahun, 2016; andDemis, 2016)in Ethiopian, found negative and insignificant relationship between profitability and reinsurance dependence among general insurance companies which implies that reinsurance dependence is not prime determinant of profitability in Mauritius and in Ethiopia during they conduct their studies. In contrary to that, (Lee 2014 and Iqbal et.al., 2013] found a significant and negative relationship between reinsurance dependence and insurance profits. Furthermore, (Iqbal et.al., 2013 and Lee, 2014) states that reinsurance utilization improves the performance of the firm while the reinsurance dependence and exposure of reinsurance reduce its performance which measured ROA which is in line with the finding of the current study. When the company reduce the amount of premium ceded to the insurers it will help the insurers to increase their profitability and vice-versa.

The other variable used in this study is financial leverage which measure long term financing of the company and it is calculated as the percentage of total debt to total equity value of the company. The regression output in table 4.2, shows that the financial leverage has statistically significant positive impact on profitability of non-life insurance companies operating in Ethiopia with the p-value of 0.0007 and coefficient of 0.015348 which implicates the H0 of the study is rejected, since the t-statistic value is less than 0.05. The finding of the study is consistent with some of previous literature such as (Malik, 2011; Sumaira and Amjad, 2013; Ayele and Sambasivam, 2013; Jovovicet.al.,2014 and Mehari and Aemiro, 2013). Inversely, the finding of the current study is inconsistent with [Teklit and Jasmindep, 2017and Kazeem (2015] indicates that profitability measured by ROA is positively influenced by firm's financial leverage decision. According to Pervan and Kramaric (2012), a large insurance companies who has high total gross written premium have a higher leverage ratio which in line with result of this study that shows insurance companies with high leverage ratio have higher return on asset non-life insurance companies in Ethiopian context.

Underwriting risk which measured by net claim incurred to earned premiums was statistically significant and has negative impact on profitability of general insurance companies in Ethiopia. This result is in accordance with the result expected by the researcher and consistent with finding of (Asrat and Tesfahun, 2016, Demis, 2016; Mehari and Aemiro, 2013; Suyehli, 2015; Suyehli, 2015; Datu, 2016: Lee, 2014; Burca and Batrinca, 2014; Malik, 2011 and Kazeem (2015) who found negative and significant relationship between profitability and underwriting risk. The finding of the current study indicates that understanding root cause of underwriting risk will help general insurance operating in Ethiopia to accurately estimate the future claims or losses and expenses and thereby correctly price the insurance contracts provided by their companies. Therefore, high claim ratios indicate premium rate are too low, for a given level of risk and companies' profitability will be endangered and vice versa.

Conclusion

Result of the study indicated that profitability of the nonlife insurance companies are not well understood in the current different finance literatures in both developed and less developed countries because profitability drivers are not the same from one country to another country; even from one sector to another sectors. In some countries, the firm-specific factor are highly affects profitability of the organizations whereas industry-specific and macroeconomic factor are most powerful determinants of profitability in some or other countries. Besides, different firm-specific operational environments, overall industry

condition and macro-economic environment are one of the main causes and consequences of the profitability variation and determination among the non-life insurance companies. The basic question is what is the perceived determinants of profitability and how can we identifying and measure these perceived profitability determinants for general insurance business? In general, the finding of the study shows that that firm financial leverage, diversification, industry concentration ratio, reinsurance dependency and underwriting risk are the most determinant influence non-life insurance companies' profitability in Ethiopia. However, there were no support of firm liquidity, real GDP growth rate and Inflation impact on profitability of non-life insurance companies in Ethiopia during period of the study. Furthermore, result of this study indicated that, variables of firm financial leverage, reinsurance dependency, underwriting risk, diversification and industry concentration ratio were significantly related to the profitability of the non-life insurance business in Ethiopia. Thus, firm and industry specific factors are mostly driving profitability of non-life insurance companies in Ethiopia. Therefore, it is recommended that board and management of non-life insurance company should adopting better risk management strategies as well as better internal control and give high attention on both firm and industry specific related factors to achieve superior profitability.

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