

Determinants of Insurance Company Profitability in Ethiopia (Case Study on Nile Insurance, Dire Dawa Branch)

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Abstract

Every business organization faces a problem which hinders its objective for which it is established. So, like any business organization Nile Insurance Company faces many problems which affects its profitability and the main purpose of this study is to assess factors affecting profitability of Nile Insurance Dire Dawa branch. To do so, a descriptive research design together with primary and secondary data were applied and data were collected from 319 active customers in addition to the interview made with branch manager. The result shows size, leverage, tangibility of asset, loss ratio/ risk, firm growth and managerial efficiency are identified as significant determinants of profitability hence Liquidity and age of the company have medium significant determinants of profitability in addition to brand preference and perceived quality which have high impact on insurance selection process by customers.

Keywords: Insurance ,perceived quality ,brand preference, leverage, tangibility of asset.

1.0. Introduction

The best performance of any industry in general and any firm in particular plays the role of increasing the market value of that specific firm coupled with the role of leading towards the growth of the whole industry which ultimately leads to the overall success of the economy. Measuring the performance of financial institutions has gained the relevance in the corporate finance literature because as intermediaries, these companies in the sector are not only providing the mechanism of saving money and transferring risk, but also helps to channel funds in an appropriate way from surplus economic units to deficit economic units so as to support the investment activities in the economy (Hifaz, 2011).

Having the above, Insurance companies are the one that play significant role in the service-based economy and its services are now being integrated into wider financial industry. Insurance companies (both private and public) consisting the organizations which provides life, fire, accident, causality and many other forms of insurance. The main objective of all insurance companies is maximizing their profit because one goal of financial management is to maximize the owner's wealth and profitability is very important determinants of performance, in the work of (Ngoyen, 2006) and (Hailu,2007). Though it will be affected with firm-specific factors and external factors too play crucial role in influencing insurance companies' profitability. It is therefore essential to identify what are these factors and how they help insurance companies to take actions that will increase their profitability and investors to forecast the profitability of insurance companies.

Studies by SylwesterKozak (2011) in Poland, Hamadan Ahamed Ali Al- Shami (2008) in United Arab emirates (UAE), Swiss Re (2008) in Egypt conducted their research concerning determinants of profitability in general insurance companies where as Naveed Ahmed, Zulfqar Ahmed, Ahmed Usman (2011) in Pakistan, Adams M., Hardwick P. and Zou H., (2008) in Canada, Desheng Wu Z., Sandra V. and others conducted their study on determinants of life and health insurance companies focused on internal factors affecting profitability shows , age of company, size of company, leverage ratio, growth rate, volume of capital, tangibility of assets and liquidity ratio affect profitability.

This study were focused on the micro level (internal to the company) factors of profitability. Because the absence of empirical studies in Dire Dawa about factors affecting profitability of insurance companies is then what motivated to make this study on what factors affect the profitability of insurance companies. While taking into consideration the absence of empirical inquiry to the factors affecting insurance companies' profitability, this study attempts to work on such untouched empirical evidence in Dire Dawa Through assessing internal factors affecting profitability of insurance company in case of Nile insurance, Dire Dawa branch and further strive

- ✓ To discover the micro level (internal) factors that affects the profitability of the Nile insurance company.
- ✓ To know the relationship between the identified factors and profitability.
- ✓ To identify the strength of Nile insurance company
- ✓ To give suggestions or recommendations based on the findings of the study.

2.0. LITRETURE REVIEW

2.1. Introduction

According to Hifza Malik (2011) insurance plays a crucial role in fostering commercial and infrastructural businesses. Michael Koller (2011) in his investigation identified that insurance companies are playing the role of

transferring and sharing of risk which can create confidence over the occurrences of uncertain event though it affected by different factors i.e. internal factors which are under the control of the management of banks and external factors those are beyond the control of the management (Hafiz Malik, 2011).

Renbao Chen et al. (2004). portey firm specific factors affecting property/ liability which are general insurers and life/ health insurance profitability separately that again provide valuable guidelines for insurers financial health. This is because life/ health insurance companies are different from property/ liability insurers in terms of operation, investment activities, vulnerability and duration of liabilities. Life insurers are said to function as financial intermediaries while general insurers function as risk takers Renbao Chen et al. (2004).

2.2. Profitability

The term profit can take either its economic meaning or accounting concept which shows the excess of income over expenditure viewed during a specified period of time. Michael Koller (2011) argued that profitability is the most important and reliable indicator as it gives a broad indicator of the ability of an insurance company to raise its income level (Kaur and Kapoor, 2007).

According to Hamad Ahmed Ali Al-Shami (2008) there are different ways to measure profitability such as: return on asset (ROA), return on equity (ROE), and return on invested capital (ROIC). ROA is an indicator of how profitable a company is relative to its total assets. whereas ROE measures a company's profitability which reveals how much profit a company generates with the money shareholders have invested. ROIC is a measure used to assess a company's efficiency in allocating the capital under its control in profitable investments. This measure gives a sense of how well a company is in using its money to generate returns. However, most researchers in the field of insurance and their profitability stated that the key indicator of a firm's profitability is ROA defined as the before tax profits divided by total assets. Philip Hardwick and Mike Adams (1999), Hafiz Malik (2011) are among others, who have suggested that although there are different ways to measure profitability it is better to use ROA.

2.3. Profitability and its determinants

Hifaz Malik (2011) investigated the determinants of profitability in insurance companies of Pakistan. Specifically, the effects of firm specific factors (age of company, size of company, volume of capital, leverage ratio and loss ratio) on profitability proxies by ROA. The findings show that there is no relationship between profitability and age of the company and there is significantly positive association between size of the company and profitability. The result also shows that the volume of capital is significantly and positively related to profitability. Loss ratio and leverage ratio showed negative but significant relationship with profitability.

Dr. Amal Yassin Almajali (2012), investigated the factors that mostly affect financial performance of Jordanian Insurance Companies. The results showed, Leverage, liquidity, Size, Management competence index have a positive statistical effect on the financial performance of Jordanian Insurance Companies.

Ćuraket al. (2011) examines the determinants of the financial performance of the Croatian composite insurers, between 2004 and 2009. The finding reveals that company size, underwriting risk, inflation and return on equity have a significant influence on insurers' profitability.

Ana- Maria and Ghiorghe (2014), analyze the determinants of the financial performance in the Romanian insurance market during the period 2008–2012 it shows the financial leverage in insurance, company size, growth of gross written premiums, underwriting risk, risk retention ratio and solvency margin have significance effect.

Sylwester Kozak (2011) in Poland, Hamadan Ahamed Ali Al- Shami (2008) in United Arab Emirates (UAE), Swiss Re (2008) in Egypt conducted their research concerning determinants of profitability in general insurance companies where as Naveed Ahmed, Zulfqar Ahmed, Ahmed Usman (2011) in Pakistan, Adams M., Hardwick P. and Zou H., (2008) in Canada, Desheng Wu Z., Sandra V. and others conducted their study on determinants of life and health insurance companies. Hence, most of the researchers focused on internal factors affecting profitability and most of the factors considered are age of company, size of company, leverage ratio, growth rate, volume of capital, tangibility of assets and liquidity ratio which is also used in this study too.

3.0. Material and method

3.1. Research design

A descriptive research design together with mixed approach were used to describe characteristics of object, people, groups, organizations, or environments and map out the characteristics and perceptions of the respondents and provide an accurate snapshot of the surveyed market (focus area), so as to find out internal factors that affect profitability of Nile insurance in dire Dawa branch (Zikmund et al., 2010).

Survey was design to seek out information on age of the company, liquidity, and leverage and capital volume effect on profitability of the Insurance company (Ezeani 1998).

3.2. Sample Design and sampling method

This study drawn a sample from Nile insurance customer data base and list of responses were selected randomly and 319 respondents which is 20% of the population was selected. Probability sampling was used as a sampling method of this research. From that simple random sampling were applied to obtain a required sample (Zikmund et al., 2010, pp 369). Whereas, According to Sekaran (2009), sample size 30-500 is already adequate for most of the research. Also, Doubling sample sizes will double the cost but it will not double the accuracy of sample data (Janet, 2005:108). So one can infer that the relationship between larger sample size and sampling error is not proportional. In general the size of sample is depending upon the types and purpose of the research (Catherine, 2007:56).

3.3. Data collection techniques

Both interview and structured questionnaire were used to study the determinants of insurance company profitability.

3.4. Data preparation, Analysis and Interpretation

The collected data were processed, analyzed and interpreted to report the result of research finding of selected company and both descriptive and inferential statistical techniques were used.

4.0. Data analysis and discussion

4.1. General Information of Respondents'

Age groups were taken as a sample. From the total number of respondents 40.1%, 35.6% and 22.3% were 18-35, 36- 50 and >50 respondents respectively and 44.2% and 55.8 % were male and female correspondingly. Particularly 41.1%, 37.6% and 21.3% male respondents were taken from 18-35, 36- 50 and >50 age groups and 39.3%, 37.6% and 23.0% female respondents were obtained from 18-35, 36- 50 and >50 age groups.

Table 4.1: Profile of Respondents'

Age vs. Gender of Respondents'						
Gender						
	Male		Female		Total	
Age	Count (A)	N %	Count (B)	N %	Count (A+B)	N %
18-35	58	41.1%	70	39.3%	128	40.1%
36- 50	53	37.6%	67	37.6%	120	37.6%
>50	30	21.3%	41	23.0%	71	22.3%
Total	141	100.0%	178	100.0%	319	100.0%

Source; survey data 2016

4.2. Insurance company preference based on gender

Determinants	Gender Of Respondents	N	Mean	Std. Deviation
Age of the company	Male	141	3.0496	.47003
	Female	178	3.4663	.34643
Premium amount	Male	141	3.7092	.72249
	Female	178	3.3034	.64977
Geographical proximity	Male	141	3.7648	.43373
	Female	178	4.0281	.40805
Perceived Quality	Male	141	3.9362	.60164
	Female	178	3.9017	.65324
Brand Preference	Male	141	4.0473	.60760
	Female	178	3.9925	.57348

Source; survey data 2016

Based on the table, age of the company for male was lower than female with mean of 3.0496 where as regarding to premium amount, males are highly conscious than females with mean of 3.7092 and also geographical proximity of the product are much more considered by females than male with mean 4.0281. However, on consideration of perceived quality both male and females are scoring the highest mean with 3.9017. Meanwhile on brand preference, though there is no significant difference between gender, males are considering higher than females.

4.3. Brand preference based on age category using 4 determinants

Determinants	Age category	N	Mean	Std. Deviation
Age of the company	18-35	128	4.3464	.42071
	36-45	120	4.3764	.44716
	>45	71	1.1451	.09867
	Total	319	3.2821	.45499
Premium amount	18-35	128	4.9766	.49879
	36-50	120	4.9944	.07389
	>50	71	2.2488	.55981
	Total	319	3.4828	.71102
Geographical proximity	18-35	128	4.8672	.43690
	36-50	120	3.6292	.44051
	>50	71	1.7934	.39688
	Total	319	3.9117	.43892
Perceived Quality	18-35	128	3.2676	.45483
	36-50	120	3.9104	.35798
	>50	71	4.3099	.44614
	Total	319	3.9169	.63021

Source; survey data 2016

As shown in Table 4.7, from Age category of 18-35 and 36-45 with (Mean = 4.3464, SD = .42071) and mean = 4.3764, and SD = .44716 respectively are influenced by age of the company. While, the influence of premium amount in the preference of insurance company were in age group greater than 45 is low. Like premium amount, in the case of geographical proximity 18-35 and 35-45 age groups attain the highest score (Mean = 4.3464, SD = .49879 and 4.9944 SD = .07389). Showing they are more perceived quality and the name of insurance company highly affects their preference. However as the age greater than 45 are less conscious about brand preference. Also, from the dimension of emotional value, age group between 18-35 and 36-45 score Mean = 4.8672, SD = .44051 and mean = 3.6292, SD = .44051. Showing perceived quality of the product highly affect purchase decision of insurance.

4.5. Independent Sample T-Test of Male and Female in Their insurance company brand Preference

	N	Mean	SD	Mean Difference	T	P
Perceived quality	Male	3.9925	.60760	.05477	.825	.972
	Female	4.0473	.57348			

Source, survey data 2016

The results of independent samples t-test on perceived quality between male and female explained that there is no significant mean difference between male and female respondents (mean difference = .05477 and $t = .825, P > 0.05$).

Table 4.6. Independent sample t-test of male and female in each determinant

Determinant	N	Mean	SD	Mean Difference	T	P
Age of the company	Male	141	3.0496	-.41665	-8.801	.000
	Female	178	3.4663			
Premium amount	Male	141	3.7092	.40585	5.272	.188
	Female	178	3.3034			
Geographical proximity	Male	141	3.7648	-.26331	-5.566	.225
	Female	178	4.0281			
Perceived Quality	Male	141	3.9362	.03448	.485	.305
	Female	178	3.9017			

Sources survey data 2016

From the results of independent sample t-test, there is significant mean difference between male respondents age of the company and female respondents age of the company ($t = -8.801, P < 0.01$). Also the results of t-test on premium amount between male and female respondents identified that there is no significant mean difference between male respondents premium amount consideration and female respondents premium amount consideration though males are bit higher than females mean score ($t = 5.272, P > 0.05$). For geographical proximity the results of independent samples t-test shows, there is mean difference between male respondents geographical proximity and female respondents' geographical proximity ($t = -5.566, P > 0.05$). Showing females are much concerned with geographical proximity. Finally, for perceived quality, the independent samples t-test on reflected that there is no significant mean difference between male perceived

quality and female respondents' perceived quality ($t=.485, P > 0.05$).

Variation between insurance Profitability of the Company and Determinates

Table 4.6. ANOVA between each determinant

		\sum^2	df	Mean Square	F	Sig.
Technical provision risk	Between Groups	2.151	2	1.075	5.337	.005
Within Groups		63.679	316	.202		
Total		65.830	318			
Size of the company	Between Groups	53.192	2	26.596	78.125	.000
Within Groups		107.574	316	.340		
Total		160.766	318			
Branch Company	Between Groups	2.903	2	1.451	7.858	.000
Within Groups		58.360	316	.185		
Total		61.263	318			
Number of customers	Between Groups	70.843	2	35.422	201.841	.000
Within Groups		55.456	316	.175		
Total		126.299	318			
Leverage factor	Between Groups	37.786	2	18.893	82.521	.000
Within Groups		72.347	316	.229		
Total		110.133	318			

Source, survey data 2016

A one-way ANOVA tests whether the means of all the groups are the same. The test whether the groups' mean are the same is represented by the F-ratio. For Technical provision risk the value of F-ratio is 82.521 and the significant value for F-ratio (.000) is less than 0.01. Therefore, there is significant difference between three age groups; for Size of the company the result shows that the value of F-ratio is 5.337 and the significant value for F-ratio is .05 which is exactly equal to the desired significant level in statistical term. Hence, there is significant mean difference between age group of 18-35, 36-45 and >45 respondents with regard to their Branch Company; for Size of the company, F-ratio =78.125 the significant value for F-ratio is .000 which is less than 0.01. Hence the mean difference between age 18-35, 36-45 and >45 groups respondents with regard to their size consciousness is significant; the Branch Company of F-ratio is 7.858 ($p < 0.01$). Hence, there is significant mean difference between age group of 18-35, 36-45 and greater than 45 respondents on their Branch Company. Finally For perceived quality, the result shows that ($F=201.841, p < 0.01$) and the mean difference between three ages groups respondents is significant. This indicates that the consideration of perceived quality as a preference factor by different age groups is not the same.

The Significant Factor That Affect company profitability

The translation of level ranking and degree of importance were analyzed based on the criteria of Best (1977: 174) The score between 1.00-1.80 mean most least important The score between 1.81-2.61 least important (Low) The score between 2.62-3.41 mean average important (Average or Medium) The score between 3.42-4.important The score between 4.22-5.very important.

	Determinate of insurance company profitability	Rank	Mean	St. d.
1	Technical provision risk	1 st	4.0408	.74915
2	Size of the company	7 th	3.6803	1.06308
3	Branch Company	8 th	3.2435	0.86836
4	Number of customers	4 th	3.9169	0.1549
5	Leverage factor	5 th	3.8527	.83190
6	Tangibility of asset	2 nd	4.0376	.87873
7	liquidity factor	3 rd	3.9718	1.0999
8	Competitor companies	6 th	3.8056	.60903

Source, survey data 2016

Table 4.6 explains the mean and standard deviation score of each element in the dimensions and also the average mean and standard deviation score of the four broad determinants of insurance company profitability. As of the table, from the total 4 factors that affect insurance company profitability, technical provision of risk score the highest mean (4.04), tangibility of asset is the second determinant of purchase decision by scoring 4.03 mean values. Liquidity factor and number of customer are ranked at the 3rd and 4th step by accounting 3.48 and 3.28 mean values.

4.6 Relationship of Antecedents and profitability

Determinants	Profitability	
	Pearson correlation	Sig (2-tailed)
Technical provision risk	.201**	.000
Branch Company	.589	.000
Size of the company	.165**	.002
Number of customers	.708	.000
Leverage factor	.604	.000
Tangibility of asset	.504**	.000
liquidity factor	.807	.000
Competitor companies	.701	.001

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

Source, survey data 2016

Table 4.6 portray the association between each determinants and Nile insurance profitability, the result depicts that there is significant correlation between the size of the company and its profitability($r= 0.165$) as well as between technical provision risk and profitability($r=0.201$).

4.7 Interview analysis

The interview showed that there are factors that can influence and a number of factors are mentioned by interviewee about determinant of Nile insurance profitability. Despite many determinant factors, however, the most common determinants of profitability includes variables such as lack of innovative products or investment opportunity and fear of risky investments by insurance company themselves, technical reserve, liquidity, company age, size, leverage, competitors and tangibility of assets. And all affect the profitability of the company and the manager portrayed that they are subject to unpredictable but significant demands for cash. When a disaster such as a hurricane or earthquake occurs, insurers must be able to start making payouts very quickly in order to avoid major hardship to policyholders.

According to the interviewees major causes of liquidity risk are sometimes premium is not collected as expected, when the company has no clear cash management policies, lower rate of interest at bank for time deposit.

5.0. Conclusion and Recommendation

5.1. Conclusion

The descriptive statistics shows that there is no significant difference between number of respondents however each determinant have significantly affected by age and gender of the respondents and even profitability have significantly affected perceived quality ,age of the company ,premium amount and geographical proximity.

Although the quantitative research indicate that the relation between liquidity and profitability is positive and significant implying that more liquid insurance have higher profitability, all other things held constant, if current assets pay insurance firm's current liabilities, it will have direct positive impact on profitability. Regarding the impact of liquidity on profitability, the interviewees revealed that insurance firm in nature must be liquid to meet claims obligation, to avoid loss of business and damage to public image which is consistent with the previous empirical findings (Amal, 2012 and Chen & Wong, 2004).

Although the number of customers has an impact on the profitability of insurance companies in addition to technical provision risk showing that the coefficient of technical provision which is measured by claims outstanding to equity was high. According to the interview results, the major causes of inadequate provision problems are lack of optional reserve arrangement such as claims fluctuation reserve, absence of reserve for man-made or moral hazard and this may lead to overstatement of current year's profit but actually not.

competitor companies have an impact on the profitability of their company and there are active competitor company near or found in the country the customers or users of Insurance Service will tend to use their service this in turn affects the company's profitability. Further leverage ratio of insurance companies has significant impact on financial performance/profitability/of Nile insurance companies.

Empirical evidences with regard to Size of company found to be statistically significant relationship. Although the unstructured interviewed manger said that size of company affects the profitability of Insurance Company which is consistence with Jay Angoff Roger Brown (2007). This reveals that performance of large size insurance companies is better than small size companies.

Age of insurance companies has a medium impact on profitability of insurance companies and has strong relationship with customers and good governance experience so it has an impact on profitability.the *interview result* indicates that insurance companies increase underwrite premium to increase the underwriting profit without increasing their capital ,which may results an excess of liabilities over assets, sometimes referred

to as capital deficit. 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. The interview result suggested that adequate capital is the principal element to kick off business, insure continuous operation, sustainability and growth of the business and to increase retention capacity of the insurers.

5.2. Recommendation

The organization should be committed on building its financial strength and quality of delivering service which boost overall image that affect profitability

Also it should be work on expansion of its branches in different places so that it will increase its customer number and degree of conveniences

Finally it should work on competitors handling techniques and strategies in addition to taking appropriate financial strategic measures for each problems

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