

1 Impact of Firm Level Factors on Capital Structure: Evidence 2 from Ethiopian Insurance Companies

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6

7 **Abstract**

8 The purpose of this study is to investigate important firm-level determinants of capital
9 structure on Ethiopian insurance companies. The study employs panel regression model. The
10 results show that growth, profitability and age of the firm were found to have significant
11 influence on Ethiopian insurance companies? capital structure. Liquidity and business risk
12 were also significant for long term debt and total debt ratio respectively. However, among the
13 hypothesized capital structure determinants asset tangibility and size of the firm were found
14 to have statistically insignificant contribution on capital structure of Ethiopian insurance
15 companies.

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17 **Index terms**— capital structure, ethiopia, firm level factors, insurance companies.

18 **1 Introduction**

19 n one way or another, business activity must be financed. Without finance to support their fixed assets and
20 working capital requirements, business could not exist. There are three primary sources of finance for companies:
21 Cash surplus from operating activities, new equity funding, borrowing from bank and non-bank sources. By
22 taking into account a company's particular circumstances, management should decide what the most appropriate
23 mix of internal and external funding i.e. how the company should structure the necessary capital to finance its
24 activities. This leads to capital structure decision, which affects the financial performance of the firm and it is
25 one of the tough challenges that firms face (Abor, 2005).

26 The roots of the modern capital structure theory can be assumed to be grown up on the seminal paper of
27 Modigliani and Miller (1958) commonly known as the MM theory, dating back to 1958 as one of the most
28 influential papers in the economics literature. It states that based on the assumption of no brokerage, tax and
29 bankruptcy costs, investors can borrow at the same rate as corporations and they would tend to have the same
30 information as management about the firm's future investment opportunities. The MM theory proves that under
31 some restrictions a firm's value would be unaffected by its capital structure and thus assumes that earnings
32 before income tax (EBIT) would not have been related to the use of debt, that leads to the inference that capital
33 structure may be considered theory can be assumed unrealistic in the eyes of investors and other economic agents
34 (Modigliani & Miller, 1963). In line with these theoretical fundamentals, the preceding arguments lead to the
35 development of trade off theory which suggests that a firm's target leverage is determined by taxes and costs of
36 financial distress.

37 **2 II.**

38 **3 Statement of the Problem**

39 However, according to the pecking order theory of Myers (1984), companies prioritize their sources of financing
40 -from internal financing to equity issues according to the law of least effort, or preferring to raise equity as a
41 financing means of last resort. Hence, internal funds are likely to be used first, and only when they are depleted,

9 A) THEORETICAL FRAMEWORK

42 the firms apply to the new debt issues. Similarly, Mary et al. (2011) put in plain words that in case of using
43 external financing, the firms issue the cheapest security first so they start with debt, and then possibly apply to
44 hybrid securities such as convertible bonds, and they issue equity only as a last resort. Thus, in contrast to the
45 trade-off theory, there is no well-defined target leverage ratio in the pecking order theory. company has too much
46 debt; it may overextend its ability to service the debt and can be vulnerable to business downturns and changes
47 in interest rates, and thus would be viewed to be financially risky. On the other hand, too much equity dilutes
48 ownership interest

49 4 C

50 Abstract -The purpose of this study is to investigate important firm-level determinants of capital structure
51 on Ethiopian insurance companies. The study employs panel regression model. The results show that growth,
52 profitability and age of the firm were found to have significant influence on Ethiopian insurance companies' capital
53 structure. Liquidity and business risk were also significant for long term debt and total debt ratio respectively.
54 However, among the hypothesized capital structure determinants asset tangibility and size of the firm were found
55 to have statistically insignificant contribution on capital structure of Ethiopian insurance companies.

56 Brounen & Eichholtz (2001) explain that in the trade off theory the interest payments tend to be tax deductible,
57 this makes debt less expensive than the use of equity financing; which leads us to assume that there would be
58 a positive relationship between the corporate tax shield and the value of the firm. Brounen & Eichholtz (2001)
59 further states, in practice, the firms rarely use 100% debt financing. Because, when a firm raises excessive debt
60 to finance its operations, it may default on this debt and thus can be exposed to bankruptcy costs. For these
61 reasons, trade off theory claims that tax shield benefits of debt financing need to be adjusted for financial distress
62 costs that rise with increasing debt levels, creating an optimal capital structure that balances both forces. Mary
63 et al. (2011) further elucidate that if a and exposes the company to outside control. This may be discouraging
64 to investors, because it means less profits being distributed to them. All these lead to nonstoping debates that
65 make the topic to be researched in various countries.

66 So far most studies have been conducted on an effort to preview capital structure decision and its impact on
67 firm value on developed countries perspective. Thus, the purpose of this paper is to present empirical evidence
68 on the determinants of capital structure of insurance companies in the context of a developing country since
69 a design feature that works well in one country may not in another. As Bird 2005 (cited in Yesegat, 2009)
70 noted this may be referred to as The No-One-Size-Fits-All (the NOSFA) principle. Specifically in Ethiopia,
71 though few studies have been conducted on the determinants of capital structure, to the best of the researcher's
72 knowledge, insurance industry has received little attention. Therefore, the current study investigates empirically
73 the firm-specific determinants of capital structure of insurance companies in Ethiopia over the period 2004-2010.

74 5 III.

75 6 Objective of the Study

76 The main objective of the study is to empirically examine the link between a number of potential firmspecific
77 capital structure determinants and debt level, and to identify relevant theories as well, for the insurance industry
78 in Ethiopia.

79 7 IV.

80 8 Literature Review

81 This section discusses the literature concerning the capital structure determinants. First it considers the general
82 theory of capital structure. This is followed by a review of the empirical studies on the determinants of capital
83 structure choice.

84 9 a) Theoretical Framework

85 The theoretical principles underlying the capital structure, financing and lending choices of firms can be described
86 either in terms of a static trade-off choice or pecking order framework. Trade-off hypothesis, developed by Myers
87 (1984), proposes that firm should have optimal capital structure based on balancing between the benefits of debt
88 and costs of debt. It also postulates that a firm will borrow up to the point where the marginal value of tax
89 shields on additional debt is balanced by increasing the present value of possible bankruptcy costs (Myers, 2001).

90 According to the trade-off theory, higher profitability lowers the expected costs of distress; however, firms
91 increase their leverage to take advantage from tax benefits. Moreover, agency theory supports this positive
92 relation because of the free cash flow theory of Jensen ??1986). Therefore, leverage and profitability are positively
93 related. On the other hand, according to pecking order theory, Myers (2003) discusses that firms prefer to finance
94 with internal funds rather than debt if internal equity is sufficient due to the asymmetric information. Hence,
95 profitability is expected to have negative relation with leverage.

96 The pecking order theory was developed by Myers and Majluf (1984) and it focuses on asymmetric information
97 costs. It states that external investors do not have access to required information on the topic of the value of the

98 firm's assets and growth opportunities. The information asymmetry may also explain why existing investors do
99 not support new equity financing. The reason is that the new investors may require higher returns to reimburse
100 the risk of their investment and this request dilutes the returns of existing investors, and thus the firm should
101 follow specific hierarchy for financing its assets. At the outset, the firm utilizes internally produced fund i.e.
102 retained earnings followed by debt and if more funds are required, as a final option, assets are financed by equity
103 capital. Therefore, according to the pecking order hypothesis, firms that are profitable generate high earnings
104 are expected to use less debt capital than that do not generate high earnings.

105 **10 b) Review of Empirical Studies**

106 Following from above theoretical standpoints, a number of empirical studies have identified firm-level characteristics
107 that affect the capital structure of firms. Among these characteristics are: liquidity, firm risk, growth,
108 tangibility of assets, size of the firm, profitability and firm age.

109 **11 i. Liquidity**

110 Various researchers investigated the link between liquidity and capital structure, and some find positive relation
111 and some others provided negative relation evidences. Morellec (2001) gives a comprehensive analysis of the
112 implications of liquidity that build up the asset transformation theme by applying dynamic model of a levered
113 firm; and they showed that partial asset sale increases the value of equity and reduces the value of debt. Thus,
114 asset liquidity reduces the value of the firm and the debt capacity of the firm. Consequently, asset liquidity can
115 result in underinvestment relative to the illiquid asset benchmark case, and leads to an inverse relationship with
116 the level of debt. Similarly, Lipson and Mortal (2010) discover that firms with more liquid equity carry less debt,
117 as predicted by the trade-off model. Further, when considering external financing, firms with more liquidity are
118 more inclined to raise equity than debt. Likewise, the finding of Naveed et al. (2010) empirical investigation on
119 Pakistan Life Insurance Sector shows a negative relation between liquidity and leverage.

120 ii. Business Risk Despite the broad consensus that firm risk is an important inverse determinant of corporate
121 debt policy, empirical investigation has led to contradictory results. Likewise, an empirical study by Mary et al.
122 (2011) on the determinants of capital structure in listed Egyptian Corporations also indicates a positive relation
123 between business risk and leverage, which contradicts the theoretical background and the findings observed in
124 most developed and developing countries. However; most theories and empirical findings (Titman & Wessels
125 1988) indicate an inverse relationship between risk and debt ratio.

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127 iii. Growth Most researchers evidenced that higher growth firms use less debt. For instance, Rajan and Zingales
128 (1995) performed upon a firm-level sample from each of the countries, and although the results of their regression
129 analysis differ slightly across countries, they appear to uncover some fairly strong conclusion; and find a negative
130 relationship between growth and the level of leverage on data from the developed countries. This is consistent
131 with trade-off theory. On the other hand, some others found positive relationships between growth and leverage;
132 for example, Booth et al. ??2001).

133 The empirical investigation of Naveed et al.

134 (2010) on Pakistan life insurance companies indicates a positive relationship between growth and debt ratio.
135 However, this positive relationship is found statistically insignificant. Though positive sign confirms that growing
136 firms are expected to have high debt ratio (Pecking order theory) but insignificant result indicates that growth
137 is not considered as a proper explanatory variable of leverage in life insurance sector.

138 **13 iv. Asset Tangibility**

139 Tangible assets are likely to have an impact on the borrowing decisions of a firm because they are less subject
140 to informational asymmetries and usually have a greater value than intangible assets in case of bankruptcy.
141 Static trade-off and pecking order theories maintain that there is a positive correlation between debt ratio and
142 tangibility. The majority of empirical studies in developed countries also found a positive relationship between
143 tangibility and leverages (Rajan & Zingales, 1995). However, empirical studies for developing countries found
144 mixed relationship between these variables. On the other hand, some studies reported a negative relation between
145 tangibility of assets and debt level; for example, Booth et al. ??2001).

146 v. Firm Size

147 The effect of size on debt ratios is ambiguous from the theoretical point of view; some authors encountered
148 a positive relation between size and leverage; some others reported negative relation and others also found
149 statistically insignificant relationship between them. ??011) recent work on the actively listed Egyptian
150 corporations, the findings of the estimated model and the various other tests confirm the existence of a significant
151 positive relation between the firm size and the debt-equity ratio. This finding conforms to those of the other
152 empirical studies conducted in countries all over the world. These results also confirm the notion that large firms
153 are employed more debt because these are less risky and diversified in nature (static trade-off theory). In addition,
154 larger firms are preferred to issue more debt because it reduces direct bankruptcy costs due to market confidence.

155 Moreover, smaller firms prefer to acquire lower debt because these firms might face the risk of liquidation at the
156 time of financial distress.

157 14 Mary et al. (

158 Contrary to the above, Faris (2010) found a negative relationship between leverage and firm size. A quite different
159 result was also obtained by Dilek et al.

160 (2009) using panel data analysis within the time period 2000-2007 on Turkish firms; and they report as the
161 coefficient of the size of the firm is statistically insignificant and also its coefficient takes a value about zero.

162 vi. Profitability evidence from previous studies examining on capital structure is consistent with pecking order
163 arguments with leverage being found to be negatively related to profitability. Akhtar (2005) also found significant
164 and negative coefficients of profitability variable which conform to the pecking order theory. Similarly, Naveed
165 et al. (2010) analysis on Pakistan Life Insurance Sector indicates the negative relationship between leverage
166 and profitability and predicts that, in Pakistan, profitable life insurance companies are preferred to utilize small
167 portion of debt. This result confirms the notion that Pakistani life insurance companies follow pecking order
168 pattern i.e. preferred to employ internal financing than debt.

169 However, Mohammad (2007) made empirical analysis on Bangladeshi companies and found that the coefficient
170 of profitability is positive which is contrary to the researcher's previous argument; but statistically insignificant.
171 Finally, the researcher gave the conclusion that the positive signs could be explained by the argument that
172 profitable firms will be able to attract more debts from banks and the capital market and these firms will
173 prefer debt in order to reduce their higher tax rate on profit. However, the fact that the coefficients are
174 not significant implies that profitability does not have any material impact on capital structure decision for
175 Bangladeshi companies. Likewise, Dilek et al. (2009) also found profitability to be the most significant variable
176 with a positive sign.

177 15 vii. Firm Age

178 Age of the firm is a standard measure of reputation in capital structure models. As a firm continues longer
179 in business, it establishes itself as an insurance companies specifies the negative relationship between age of
180 the insurance companies and debt ratio. This inverse relationship predicts that in Pakistan older or mature
181 insurance companies are preferred to utilize small portion of debt in formation of capital. According to Naveed
182 et al. (2010) one key reason to employ less debt ratio is that when firm survives in business for a long time then
183 it can accumulates more funds for running the operations of the business and subsequently keeps away the firm
184 to go for debt financing.

185 V.

186 16 Research Methodology

187 The study examines firm level factors that determine the capital structure of insurance companies in Ethiopia.
188 Currently, twelve insurance companies are working in Ethiopia; and the researcher believe that, for meaningful
189 analysis, there is no need to sample from the twelve insurance companies as they are already few in number
190 to collect information over the period of 2004-2010. However, three insurance companies (Lion, Oromia and
191 Ethio-Life) did not have information for the required period; their year of service was below five, and thus they
192 were excluded in the sampling frame to make the panel data model structured. The data was collected from each
193 insurance company's annual report over the proposed period. The debt (DEBT) ratio is total debt to total asset
194 while the long-term debt (LTD) ratio is the total long-term debt divided by total asset. The explanatory variables
195 include liquidity (LQ), business risk (BR), growth (GR), tangibility (TA), size of the firm (SZ), profitability (PR)
196 and age of the firm (AG). The entire variable for this study is based on book value in line with the argument by
197 Myers (1984) that book values are good proxies for the value of assets in place.

198 The nature of data used in this study enables the researcher to use panel data model which is deemed to have
199 advantages over cross section and time series data methodology. As Brook (2008) states the advantages of using
200 the panel data set; first it can address a broader range of issues and tackle more complex problems with panel
201 data than would be possible with pure time-series or pure cross-sectional data alone. Second, it is often examine
202 how the relationships between variables change dynamically. Besides, by combining cross-sectional and time
203 series data, one can increase the number of degrees of freedom, and thus the power of the test. It can also help
204 to mitigate problems of multicollinearity among explanatory variables that may arise if time series are modeled
205 individually. Third, by structuring the model in an appropriate way (fixed or random effect), we can remove the
206 impact of certain forms of omitted variables bias in regression results and it can allow controlling for individual
207 unobserved heterogeneity among the cross sections. Thus, the general model for this study, as is mostly found
208 in the extant literature is represented by: $Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \dots + \beta_k X_{kit} + \epsilon_{it}$
209 $\epsilon_{it} = \epsilon_0 + \epsilon_1 it + \epsilon_2 it^2 + \epsilon_3 it^3 + \dots + \epsilon_k it^k$

210 With the subscript i denoting the cross-sectional dimension and t representing the time series dimension. The
211 left-hand variable, Y_{it} , represents the dependent variable in the model. X_{it} contains the set of explanatory
212 variables in the estimation model, β_0 is the constant, β represents the coefficients and ϵ_{it} is the error term.

213 In this study, the empirical methodology is adopted mainly from Naveed et al. (2010) with some modifications.
214 Therefore, the models for the empirical investigation, built in line with the findings of previous studies, are given
215 as follows: $LTD_{it} = \beta_0 + \beta_1 (LQ_{it}) + \beta_2 (BR_{it}) + \beta_3 (GR_{it}) + \beta_4 (TA_{it}) + \beta_5 (SZ_{it}) + \beta_6 (PR_{it}) + \beta_7 (AG_{it}) + \epsilon_{it}$ (2)
216 $DEBT_{it} = \beta_0 + \beta_1 (LQ_{it}) + \beta_2 (BR_{it}) + \beta_3 (GR_{it}) + \beta_4 (TA_{it}) + \beta_5 (SZ_{it}) + \beta_6 (PR_{it}) + \beta_7 (AG_{it}) + \epsilon_{it}$ (3)

217 Where LTD_{it} , ratio of long-term debt to total asset for firm i in period t ; $DEBT_{it}$, ratio of total debt to
218 total asset for firm i in period t ; LQ_{it} , current asset to current liability for firm i in period t ; BR_{it} , standard
219 deviation of operating income for firm i in period t ; GR_{it} , annual changes in total assets for firm i in period t ;
220 TA_{it} , ratio of fixed assets to total assets for firm i in period t ; SZ_{it} , natural log of total assets for firm i in
221 period t ; PR_{it} , operating income to total asset for firm i in period t ; and ϵ_{it} the error term.
222

223 VI.

224 17 Empirical Results

225 18 a) Regression Analysis

226 To test the capital structure theories, the relationship between the leverage and explanatory variables representing
227 liquidity, business risk, growth, tangibility, size, profitability and age of the firm were analyzed over the period
228 2004-2010. This relationship belonging to leverage can be explained as follows:

229 19 C

230 The relationship was analyzed by the panel data analysis. An appropriate model for this analysis, testing
231 random versus fixed effects models, was selected in this study. To perform this comparison, the character of
232 the individual effects is tested through the Hausman's specification test. According to the Hausman's test, as
233 indicated in Appendix 1 the fixed effects estimate was found to be more appropriate with the significance level
234 of 1% for $DEBT$ model whereas the significant level for LTD model was 5%. Thus, the relationship between
235 leverage and the explanatory variables were examined by the fixed effects model in this study and the results
236 obtained by the fixed effect models are reported in Appendix 2.

237 The results of fixed effect model indicate that liquidity has a positive impact on long term debt and total
238 debt. This result implies that considering external financing, firms with more liquidity are more inclined to raise
239 debt than equity. According to trade-off models of capital structure there is a positive relationship between the
240 liquidation value of the firm and its leverage. Thus, expected liquidation values are higher for firms with more
241 liquid assets, which imply that firm's debt is positively associated with asset liquidity (Harris and Raviv, 1990).
242 In addition, companies with higher liquidity ratios might support a relatively higher debt ratio due to greater
243 ability to meet short-term obligations. Thus, a high asset liquidity ratio could be considered by institutional
244 investors to be a positive signal because it indicates that the firm can easily pay its obligations and hence face
245 a lower risk of default. The positive and statistically significant influence of liquidity in this study is consistent
246 with the theoretical analysis of firms with high liquidity ratios may have relatively higher debt ratios due to
247 their greater ability to meet short-term obligations and the trade-off theory. It is also in line with the empirical
248 investigation of Faris (2010) and Basil and Peter (2008).

249 The results also show a positive relationship between risk and leverage and its relationship was statistically
250 significant at 1% level with total debt ratio. This may suggest that higher risk may leave the indebted firms
251 to demand more debt; it is in line with the agency theory and supported by Naveed et al. (2010) and Mary et
252 al. (2011) empirical study. This indicates that in order to fulfill the claims of the insurance policyholder and
253 depositors, risky companies acquire external funds. A probable justification of such result could be that investors
254 in Ethiopian insurance companies might be highly risk averse and low-trusting relative to their counterparts in
255 other foreign countries.

256 According to the theoretical discussions above, the researcher expect a positive relationship between growth
257 and leverage due to higher costs of financial distress (trade-off and agency theory). Contrary to the theory,
258 growth has significant negative impact on long term debt and total debt ratio, significant at 5% level, in this
259 study. The negative association between growth with long term debt and total debt ratio is in line with Akhtar
260 (2005), agency theory and trade-off (financial distress) theory. This suggests that firms with more investment
261 opportunities have less leverage ratio because they have stronger incentives to avoid underinvestment and asset
262 substitution that can arise from stockholder-bondholder agency conflict.

263 A positive relationship is expected between tangibility and leverage from the theoretical point of view. In this
264 study, tangibility was found to be positive but insignificant impact on long-term debt. The positive correlation
265 is in line with the pecking order theory. On the other hand, the relationship was found negative with total debt
266 ratio. This implies that since it has a positive relation with long term debt, tangibility has significant negative
267 relation with short term debt. Consistent with the findings of previous studies (Ebru, 2011); the relationship
268 between tangibility and short term debt was negative and significant. It is generally expected with respect to
269 the short term debt that firms tend to match their duration of assets and debts. This means that firms with
270 more fixed assets rely more on long term while those with more contemporary assets depend more on short term
271 debt for financing their assets (Abor, 2005). A negative relationship between tangibility and total debt ratio, in
272 this study, is also in line with information asymmetries theory. According to this theory, companies with smaller

23 VIII.

273 share of tangible assets tend to be more subject to information asymmetries. It is because intangible assets are
274 more difficult to price. Therefore, intangible firms will face underinvestment problem more often. Hence, ceteris
275 paribus, these firms will tend to accumulate more debt over time. However, insignificant result indicates that
276 tangibility is not considered as a proper explanatory variable of leverage in Ethiopian insurance companies since
277 this sector holds less fixed assets.

278 As firms size increases, they become more diversified and have more stable cash flows. They are less often
279 bankrupt compared to small firms so that they can afford higher levels of leverage. Similarly in this study, size
280 positively affects leverage ratios, and it is in line with trade-off theory and agency theory. This result is also
281 supported by Rajan and Zingales (1995) and Akhtar (2005) findings. However, it was statistically insignificant;
282 the reason might be that the inability of log of assets to serve as a good proxy for firm size; other more significant
283 results might be obtained by using another measures (proxy) for size, for instance, log of sales, commonly used
284 proxy for size of insurance companies. Otherwise, almost nil regression coefficients of size can also taken to show
285 absence on the part of lending institution of considering size of the firm as a component of their credit analysis.

286 20 C

287 The coefficient estimate for profitability was negative for long term debt ratio, suggesting that as profitability
288 increases, leverage decreases. Firms follow pecking order theory (Myers & Majluf, 1984); they use retained
289 earnings first and then move to debt and equity. In this study, supporting the hypothesis, profitability negatively
290 affects long term debt ratio. The negative association between profitability and long term debt is in line with
291 pecking order theory and agency theory. It is also in line with the findings of Rajan and Zingales (1995), Cassar
292 and Holmes (2003), and Akhtar (2005). However, the coefficient was positive and significant (p-value=0.0448)
293 for total debt ratio, which is in line with the tax trade-off model, predicts that profitable firms will employ more
294 short term debt since they are more likely to have a high tax burden and low bankruptcy risk. Also, profitable
295 firms are more capable of tolerating more debt since they may be in a position to service their debt easily and on
296 time. Besides, profitable firms are more attractive to insurance companies as lending prospects; therefore, they
297 can always take on more debt capital.

298 The regression result also indicates that positive and significant coefficient of variable age for total debt and
299 long term debt ratio. Consistent with the information asymmetry theory and the empirical study by Onaolapo
300 and Kajola (2010), this positive relationship predicts that in Ethiopia older or mature insurance companies prefer
301 to utilize large portion of debt in formation of capital. One key reason to employ more leverage is that when
302 firm survives in business for a long time then it can accumulate more funds for running the operations of the
303 business and uses its reputation in accessing more debt, as firms grow older more information regarding their
304 future viability becomes available and reduces information asymmetries. Lower information asymmetries imply
305 higher leverage. Bondholders would be more likely to lend to firms they know more about than lending to firms
306 they know less about. Besides, Myers (2001) states that as a firm continues longer in business, it establishes
307 itself as an ongoing business and therefore increases its capacity to take on more debt.

308 To sum up, the difference in long-term versus short-term debt is much pronounced in Ethiopian insurance
309 companies; this might limit the explanatory power of the capital structure models derived from developed economy
310 settings. However, the results of this empirical study suggest that some of the insights from modern finance theory
311 are portable to Ethiopia because certain firm-specific factors that are relevant for explaining capital structures
312 in developed countries are also relevant in Ethiopian insurance companies. Besides, the findings of the fixed
313 effect model on liquidity, business risk, growth, tangibility, size, profitability and age of the firm for this study
314 are in line with the findings of Faris (??010 Onaolapo and Kajola (2010) respectively. But the magnitude in
315 contribution of these determinants is quite different. These differences may be partly explained by the following
316 factors: sample size, proxy used in the measurement of variables, methodology of data analysis, the difference in
317 the sectors in which the studies were conducted and the different the economic background beyond the industry
318 that differs across countries.

319 21 VII.

320 22 Conclusion

321 The results of this study provide some useful information about the capital structure of Ethiopian insurance
322 industry. Results obtained from the empirical investigation indicate that growth, profitability, age of the firm
323 and liquidity have significant effect on Ethiopian insurance companies. Moreover, it can also be stated that the
324 findings show evidence that static trade-off theory; pecking order theory and agency theory are partially accepted
325 in insurance sector of Ethiopia though the trade-off theory appears to dominate the Ethiopian insurance sector
326 capital structure.

327 23 VIII.

328 Recommendation ? ? Having less proportion of long term debt means being more risk averse and this may also
329 slow down the growth of insurance industry. Thus, the firm should increase its leverage without suffering from

330 financial distress. Therefore, it is always recommended to think the capital structure in the way that minimizes
331 the firm's cost of capital and thus maximizes firm value.

332 IX.

333 **24 Further Research Directions**

334 This study addressed only firm level determinants of capital structure specifically on Ethiopian insurance industry.
335 Therefore, further study can also incorporate macro variables, and it might also extend its scope on Sub-Saharan
336 Africa.

337 In the study periods, the analysis indicates that the proportion of long term debt is low, and thus it might be
338 advisable for insurance companies to place greater emphasis on the facilitation of equity capital since it provides
339 a base for further borrowing and reduces businesses' uncertainty.

340 **25 Global**



Figure 1: VolumeC

341 1

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