

FACTORS AFFECTING PROFITABILITY OF INSURANCE FIRMS: CASE OF FIRMS LISTED ON NAIROBI SECURITIES EXCHANGE

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Abstract

This study was designed to assess the factors that affect profitability of insurance firms in Kenya, case of firms listed on the NSE. It evaluated the effect of firm size, effect of liquidity, effect of equity and also established the effect of debt on profitability of insurance firms in Kenya, case of firms listed on NSE. The target population was all the 6 insurance firms listed on the NSE and a census was done over a period of 5 years from 2010 to 2014. Secondary data was obtained from the annual published financial statements which were quantitatively analyzed using descriptive statistics like mean and percentages. The study found out that liquidity of insurance firms was one of the major determinants of Kenyan insurance firms' profitability. Equity has a direct influence on insurance firms' profitability. The study therefore recommends that insurance firms should maintain adequate liquidity levels though in the form of short term marketable securities in order to realize profits for the insurance firms. The study also recommended that equity when not utilized becomes a liability to the insurance firm as interest paid on such is incurred, insurance firms therefore should aggressively identify viable investment opportunities and link such opportunities to their equity from clients.

Keywords: insurance, profitability, financial performance, equity, liquidity, debt

INTRODUCTION

Insurance as we know it today can be traced to the Great Fire of London, which in 1666 devoured 13,200 houses. In the aftermath of this disaster, Nicholas Barbon opened an office to insure buildings. In 1680, he established the first insurance company, The Fire Office, to insure brick and frame homes. The world's oldest insurance market, Lloyd's of London was formed 335 years ago. During 1980, the profitability of insurance firms varied across different a legal and regulatory measure which reveals that these environments were supposed to protect the insurance contract may have had reverse effect if they created a significant constrained on the activities of the insurance firms (Born, 1989). Thus, one of the objectives of management of insurance companies is to attain profit as an underlying requirement for conducting any insurance business (Wilson, 2001).

The main players in the Kenyan insurance industry are insurance companies, reinsurance companies, intermediaries such as insurance brokers and insurance agents, risk managers or loss adjusters and other service providers. The activities of insurance companies include underwriting insurance policies (including determining the acceptability of risks, the coverage terms, and the premium), billing and collecting premiums, and investigating and settling claims made under policies (Insurance Regulatory Authority, 2010).

The statute regulating the industry is the insurance Act; Laws of Kenya, Chapter 487. The insurance industry in Kenya is regulated by the Insurance Regulatory Authority (IRA), a semi-autonomous regulator, set up in 2008. Insurance Regulatory Authority is expected to improve regulation and stability of the industry by formulating and enforcing insurance standards, particularly in relation to compulsory lines such as compulsory third-party motor liability insurance. It monitors and enforces claims settlement, ownership of insurance companies limiting it to 25% for an individual shareholder and increasing the minimum capital requirements (Association of Kenya Insurers, 2010).

Insurance density (premium per capita) and insurance penetration (premium in percentage of GDP) which are important growth indicators are quite low in Kenya compared to other countries (African Insurance Market Outlook, 2010). Life insurance penetration in Kenya varied lowly from 0.83% of the GDP in 2007, 0.87% of the GDP in 2008 to 0.94% of the GDP in 2009 and 1.05% of the GDP in 2010 (Olende, 2010). The industry's contribution to the country's GDP is still low although there has been notable growth for the last 9 years. The gross written premium by the industry was KShs. 108.54 billion compared to Kshs. 91.60 billion in 2011, representing a growth of 18.49% (AKI Report, 2013).

Statement of the Problem

Profitability is one of the most important objectives of financial management because one goal of financial management is to maximize the owner's wealth and profitability is a very important determinant of performance (Malik, 2011).

The insurance industry has been experiencing lower profitability. The insurance firms' underwriting profits (sector avg. 3%) over the past 5 years have remained low. This has been attributed to factors like weak pricing, increased fraudulent claims, high administrative costs high underwriting and acquisition costs. The underwriting profit margin has also remained below sector average (-17% compared to 5% sector average in 2011) weighed down by high underwriting costs. In this research, we intend to assess the factors that affect profitability of insurance firms in Kenya, case of listed firms in the Nairobi Securities Exchange.

Objectives of the Study

The study was designed to assess the factors affecting profitability of insurance firms in Kenya, case of listed firms in the Nairobi Securities Exchange. The study has following specific objectives;

1. To evaluate the effect of firm size on profitability of insurance firms in Kenya.
2. To find out the effect of liquidity on profitability of insurance firms in Kenya.
3. To determine the effect of equity on profitability of insurance firms in Kenya.
4. To establish the effect of debt on profitability of insurance firms in Kenya.

THEORETICAL REVIEW

Agency Theory

According to Abdullah et al (2009), agency theory explains the relationship between the principals and agents. In this theory members who are the owners (principals) of the insurance firm hire by electing the management board as their agents (Mitnick 2006). Principals delegate the stewardship of the business to the management board which in turn hires and bestows authority upon managers (Clark 2004). The theory narrows the firm to two participants-principals (owners) and agents (managers). In this regard shareholders anticipate the agents to act and make decisions in the best interest of the principals (Padilla 2002). However, the agent may yield to self-interest, opportunistic behavior and violate the contract between the interests of the principals and the agents' ends (Odhiambo 2012). Agents are likely to have different motives to principals. They may be influenced by factors such as financial rewards, labor market opportunities, and relationships with other parties that are not directly relevant to principals. This can, for instance, result in a tendency for agents to be more optimistic about economic

performance of the insurance firm or their performance under contract than the reality would imply. Agents may also be more risk averse than principals and as a result of these differing interests, agents may have an incentive to bias information flows. Principals may also express concerns about information asymmetries where agents are in possession of information to which principals do not have access (Insurance Institute of Kenya 2007).

Implicit in this theory is that different motivations and information asymmetries lead to the reliability of information, which impacts on the level of trust that principals will have in their agents. The insurance firms have a variety of mechanisms that may be used to try to align the interests of the agents with the principals' and to allow the principals to measure and control the behavior of their agents and reinforce trust in agents. However, the less trust is in an agent the more likely it is that principals will opt for certain performance related pay measures and incentives that will align interests. In such scenario, insurance firms are likely to set basic salary at a relatively low level but this would go hand in hand with a package of other benefits which might include bonuses and share options. Such mechanisms, however, create potential new agency problems related to the measurement of performance. These agency problems may conspire against the insurance firms' performance thereby warranting the need for structural transformation to reverse this trend. Duties can be captured in contracts and be made the subject of enforcement and penalties for any perceived deviation from the insurance firms' objectives (Institute Chartered Accountants 2005).

Pecking Order Theory

Pecking order refers to a hierarchy of financing beginning with retained earnings followed by debt financing and finally external equity financing. Myers et al (1984) assert that firms prefer internal sources of finance over external sources due to transaction cost, agency cost and information asymmetry. Donaldson (1961) claimed that firms decide to follow the " financing hierarchy" as posited by the pecking order theory (POT) due to the transaction cost and according to Zurigat (2009) this transaction cost includes compensation for the dealer placing the issue and other expense such as legal, accounting and printing cost as well as registration fees and taxes. Donaldson further explained firms that use internal finance experience less or no transaction cost as compared to the use of external funds POT explains that firms follow up the "hierarchical" ordering due to the existence of information asymmetry which arises out of the fact that management of the insurance firms have more knowledge regarding the investment opportunities and profitability of the business than investors in the firms. Myers et al (1984) posited that information symmetry would lead to mispricing of a firm's equity which would impact adversely on the existing shareholders wealth. According to this theory insurance firms are not

eager in external finance if they don't have sufficient internal finance. If the external funds are inevitable then the insurance firms like to make choice among external sources of funds, which has less cost of capital as well as cost of uneven information. POT model predicts that the optimal capital structure will not be achieved by insurance firms but they would follow a certain principle and select external financing when 'debt capacity' is attained. The pecking order theory asserts that management will finance the activities of the firm without control restrictions if the firm doesn't possess adequate internal funds. Hence, short-term financing is acquired first because that does not warrant collateral, followed by long-term debt and then equity issuance (Karami et al 2014). POT further implies that outside investor is conscious about the debt and equity financing of the insurance firm. Thus insurance firms consider retained earnings as the better source of finance than outside financing. Retained earnings are utilized first when possible, but if the insurance firm does not possess sufficient amount of retained earnings then it will choose debt financing. A company finances overtime with the method providing the least resistance to management and there's little capital market discipline on management's behavior. The capital structure that results is a by- product and changes whenever there's an imbalance between cash flows and capital investments.

Trade-Off Theory

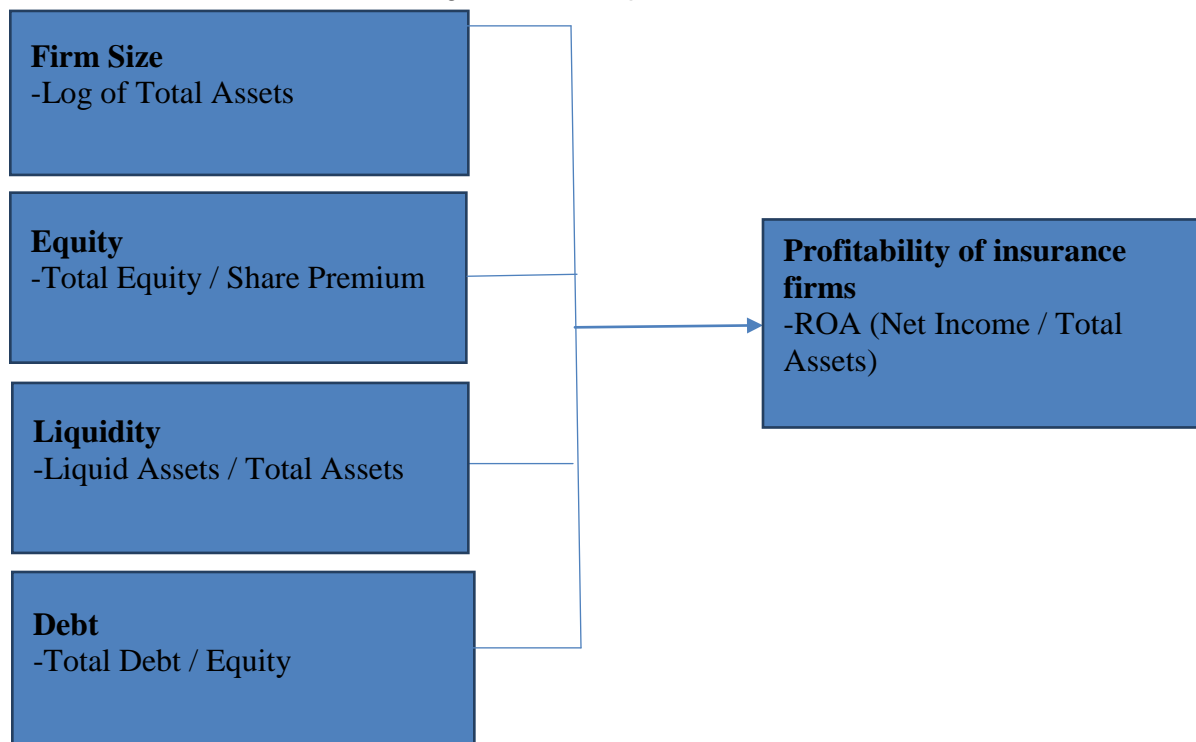
Trade-off theory claims that firms have an incentive to turn to debt as the generation of annual profits allows benefiting from the debt tax shields. A positive relationship is expected between the effective tax rate and debt (Mira,2008). A firm with a high level of non-debt tax shields will probably have a lower level of debt than a firm with low non-debt tax shields. The Trade-off theory forecasts a negative relationship between non-debt tax shields and debt. The most profitable firms have capacity for a higher level of debt, taking advantage of debt tax shields (Fama, French 2002). Highly profitable firms are likely more able to fulfil their responsibilities regarding the repayment of debt and interests, which contributes to a less likelihood of bankruptcy. There is a positive relationship between profitability and debt in insurance firms. Myers (1984) states that as bankruptcy and agency costs are greater for firms with high expectations of growth opportunities, firms can be reluctant to use high amounts of debt so as not to increase their likelihood of bankruptcy. As a result, firms with high growth opportunities may not use debt as the first financing option. According to the trade-off theory, firms with greater growth opportunities have a lower level of debt, given that greater investment opportunities increase the possibility of agency problems between managers/owners and creditors, because the former have a great incentive to underinvest (Myers 1977). Tangible assets can be used as collaterals in the case of firm bankruptcy, protecting the creditors'

interests. Michaelas et al. (1999) claim that firms, with valuable tangible assets, which can be used as collaterals, have easier access to external finance, and they have probably higher levels of debt than firms with low levels of tangible assets. Therefore, in the trade-off approach, a positive relationship is forecast between asset tangibility and firms' level of debt, and so the following hypothesis is formulated. Larger firms tend to have greater diversification of activities that implies less likelihood of bankruptcy (Titman, Wessels 1988). In addition, large firms with less volatile profits are more likely to take advantage of the debt tax shields, so increasing the potential benefits of debt (Smith, Stulz 1985). Therefore, according to the trade-off approach, large firms tend to increase their level of debt as a consequence of the lesser likelihood of bankruptcy, and also as a way to increase the debt tax shields.

Conceptual Framework

Conceptual framework is a scheme of concept (variables) which the researcher operationalizes in order to achieve the set objectives, Mugenda & Mugenda, (2003).

Figure 1: Conceptual Framework



Research Gap

A number of studies have been carried out about many aspects of factors affecting profitability of insurance firms in Kenya. None of them addresses on the firms listed on the Nairobi

Securities Exchange. This study has the following objectives: to evaluate the effect of firm size on profitability of insurance firms in Kenya, to find out the effect of liquidity on profitability of insurance firms in Kenya, to determine the effect of equity on profitability of insurance firms in Kenya and to establish the effect of debt on profitability of insurance firms in Kenya. This study therefore sought to assess the factors that affect profitability of insurance firms in Kenya, case of firms listed in the NSE.

RESEARCH METHODOLOGY

Quantitative research approach was applied during this research study which involved using secondary data gathered from published financial statements of insurance firms in Kenya. The target population was all the insurance firms listed on the NSE. A census of all the 6 insurance firms was carried out for a span of 5 years from 2010 to 2014. All the data was collected by review of documents, annual reports of the insurance firms, published books of accounts and sites of AKI and IRA. Therefore, financial information of 6 insurance firms was derived out of the balance sheets and income statements. Quantitative analysis of data was used, descriptive statistics like mean and percentages was employed to describe and summarize the behavior of the variables in the study. Data was presented using tables.

EMPIRICAL RESULTS AND DISCUSSION

Descriptive and inferential statistics were used to discuss the findings of the study. The study targeted 6 insurance firms listed on the NSE whose financial statements were reviewed and analyzed to derive out required information.

Firm Size

Table 1: Statements relating to effect of firm size on profitability of insurance firms

Model	Unstandardized coefficients		Standardized coefficient		
	B	Std.Error	Beta	T	Sig
Constant	-11.234	1.521		-7.620	.000
Firm size	.963	.079	.912	10.131	.000

The regression equation was therefore $y = -11.234 + 0.963x$. This means that an increase in firm size by 1 shilling increases profitability by sh.0.963. The standardized beta value of 0.912 indicated that an increase in firm size by 1% causes an increase in profitability of the insurance

firms by 91.2%. The calculated t value of 10.131 as indicated in table 4.2 above is higher than the critical table value at 5% level of significance, implying that firm size has a significant effect on profitability of the insurance firms.

These findings confirm the work of Vaughan, (2008) who determined the effect of firm size on profitability of quoted firms in Nigeria. In his findings he concluded that firm size both in terms of total assets and total sales has a positive impact on the profitability. The study recommended that for the small nonlife insurers to improve their efficiency level they should follow the managerial strategy of larger insurers.

Loewenstein et al (2014) carried out a study to investigate how insurance companies in Macedonia performed. The study aimed to find out the influence of expense ratio, claim ratio, size of insurer, economic growth and inflation on profitability of insurance companies. He concluded that size of the insurer had a positive and statistically significant influence on insurers' performance.

Liquidity

Table 2: Statements relating to effect of liquidity on profitability of insurance firms

Model	Unstandardized coefficients		Standardized coefficients		
	B	Std Error	Beta	T	Sig
1.Constant	-6.620	1.109		-5.971	.000
Liquidity	.105	.012	.871	9.036	.000

The regression equation was $y = -6.62 + 0.105x$. This means that an increase in liquidity level by 1 shilling increases profitability by sh.0.105. The standardized beta value of 0.871 indicates that an increase in liquidity by 1% causes an increase in profitability by 87.1%. The findings indicated that liquidity had a significant effect on profitability levels of the insurance companies listed in the Nairobi stock exchange. This implied that firms with high liquidity levels have higher profit levels. This can be attributed to the insurance firms' ability to settle short term liabilities and other operational expenses thus facilitating better service delivery to its clients.

The finding confirmed the works of Mossin (2011) who examined the determinants of Korean banking sector where insurance firms-specific and macroeconomic determinants were evaluated. The findings revealed that liquidity levels significantly affect the profitability of insurance firms. The research finding in this work also concurred with Muchire (2011) who concluded that adequate level of liquidity is positively related with profitability of insurance firms.

However the findings of Roth and Athreye (2005) contradicted these findings by indicating that the relationship between liquidity and profitability of insurance firms was insignificant.

Equity

Table 3: Statements relating to effect of equity on profitability of insurance firms

Model	Unstandardized coefficients		Standardized coefficients		
	B	Std Error	Beta	T	Sig
1(constant)	-.732	.461		-2.001	.039
Equity	4.235	.482	.785	11.016	.000

The regression equation was therefore $y = -0.732 + 4.235x$ which indicated that an increase in equity by sh.1 increased profitability by sh.4.235. The standardized beta value of 0.885 shows that when equity increases by 1%, profitability of the insurance firms increases by 78.5% holding constant all other factors meaning that equity has a significant effect on profit levels of the insurance firms in Kenya. The findings demonstrated that equity has a substantially high effect on the level of profitability of insurance firms in Kenya.

The findings confirmed the works of McCord et al (2011) who conducted a study to examine the factors which influence the overall performance of insurance companies. They confirmed that size of equity has a significant impact on the profitability of insurance firms. Schlesinger (2011) who studied on the determinants of insurance firms' performance in Jordan disclosed that there is significant positive relationship between ROA and equity. This in effect also confirms the findings of this research.

However, Mutugi (2013) who empirically examined the effect of equity management on insurance firms' profitability in Ethiopia concluded that liability management particularly equity negatively affects the profitability of insurance firms.

Debt

Table 4: Statements relating to effect of debt on profitability of insurance firm

Model	Unstandardized coefficients		Standardized coefficients		
	B	Std Error	Beta	T	Sig
1 (constant)	-3.872	.655		-6.056	.000
Debt	13.050	1.248	.914	11.265	.000

The debt regression model was therefore $y = -3.872 + 13.050x$, implying that an increase in debt by sh.1 increased profitability by sh.13.050. The standardized beta value of .914 shows that an increase in debt by 1% increases profitability of insurance firms by 91.4% , implying that the debt has a significant effect on profitability of insurance firms.

The findings indicated that decrease in debt has a strong positive effect on the profitability of insurance firms. This confirms the findings of Laplume et al (2011) who analyzed the determinants of 10 insurance firms and their effects on profitability in Pakistan over the period 2004 to 2008. The empirical results found strong evidence that debt has a strong influence on profitability.

The study by Majumdar (2011) which reviewed the impact of insurance risks on profitability of Nigerian insurance firms using 5-year data for the period 2004-2008, established that insurance risks management has an important role in the profitability of Nigerian insurance sector. Though the findings of insurance Committee (2010) seek to contradict the findings in this study; the committee proposed that increases in insurance risks will raise the marginal cost of debt and equity which in turn increases the cost of funds to the insurance firms therefore diminishing the profitability of insurance firms.

CONCLUSION

It is evident from the findings that firm size has a significant effect on the profitability of insurance firms. It indicates that insurance firms that have substantial investments in assets are likely to have higher profits compared to those that have low investment in assets. However, this can only be true if those assets are optimally utilized in line with the insurance firms' mission and vision. This confirms the work of Loewenstein and Hsee (2011) who concluded that investment income and net interest income influence the profitability of insurance firms directly. The study noted that liquidity of insurance firms was one of the major determinants of Kenyan insurance firms' profitability. This is the case because adequate liquidity helps the insurance firms minimize liquidity risk and financial crises. The insurance firms can absorb any possible unforeseen financial position. The effect on profitability is higher when the liquid assets are not held exclusively, because exclusive liquid assets have no or little interest generating capacity. Also the opportunity cost of holding low return assets would eventually outweigh the benefit of any increase in the insurance firms' liquidity resiliency as perceived by funding markets, Liber (2012).

Equity had a direct influence on insurance firms' profitability though the extent of the effect is lower than that of firm size and liquidity. This work confirms that when an insurance firm

has higher equity the level of profitability is likely to be higher. This can only be true in the event of existing viable investment opportunities which can be optimized. This effect can hold with high competency levels of asset liability management as well as efficient monitoring and evaluation system. Brown, (2013)

Debt is the most significant risk faced by insurance firms and the success of their business depends on accurate measurement and efficient management of this risk to a greater extent. This finding is consistent with the works of Teece, (2004).The research noted that higher debt contributes negatively towards profitability of insurance firms in Kenya.

IMPLICATIONS

Insurance firms with low investment in assets have lower profits therefore insurance firms should invest heavily in assets if substantial gains have to be realized. These investments should be economically viable to guarantee returns. Liquidity has a significant effect on profitability, however when liquid assets are held exclusively they generate little or no interest at all. The study recommends that insurance firms should maintain adequate liquidity levels though in the form of short term marketable securities in order to realize profits for the insurance firms. Equity when not utilized become a liability to the insurance firm as interest paid on such is incurred, insurance firms therefore should aggressively identify viable investment opportunities and link such opportunities to their equity from clients. This will translate to substantial investment income and net interest income that will cater for the interest paid on customer deposits. Finally debts cause variation to insurance firms' profitability though to a small percentage mainly due to debt default by customers and as such insurance firms should regularly and thoroughly utilize 'Know Your Customer' (KYC) policies to reduce the debt defaults that may arise.

SCOPE FOR FURTHER RESEARCH

Further research should be carried out on: the effect of age of insurance firms, asset diversification, asset quality, capital adequacy and cost of capital on the profitability of insurance firms, a study should be done on the effects of external factors on the profitability insurance firms.

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