

Do Tanzanian Companies Practice Pecking Order Theory, Agency Cost Theory or Trade-Off Theory? An Empirical Study in Tanzanian Listed Companies

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ABSTRACT: The empirical study was focused predominantly on validity tests of the three theories on capital structures, the static trade-off theory, the pecking order theory (information asymmetry theory), and agency cost theory in the Tanzanian context. The study used secondary data from eight of the non-financial companies listed in Dar Es Salaam Stock Exchange (DSE) from 2006-2012. The study used descriptive (quantitative) approach to test the practicality of the theories in Tanzania. The multiple regressions model used to test the theoretical relationship between the financial leverage and characteristics of the company. The research found that there is no strong evidence for validation of static trade off theory, little support of pecking order theory, but the agency cost theory is confirmed to be valid and practiced in Tanzania. It recommended that Tanzanian companies should be adhering to the determinants of the capital structure in the Tanzanian context found by this study.

Keywords: Capital structure; Tanzania; Pecking Order Theory; Trade-off Theory; Agency Cost Theory

JEL Classification: G31; G32

1. Introduction

1.1 Background to the Research

One of the challenges facing the Tanzanian investors is how to choose and adjust their strategic financing mix, forming an optimal capital structure. A company's capital structure refers to the mix of its financial liabilities. As financial capital is an uncertain but critical resource for all companies, suppliers of finance are able to exert control over companies. Debt and equity are the two major classes of liabilities with debt holders and equity holders representing the two types of investors in the company. Each of these is associated with different levels of risk, benefits, and control. While debt holders exert lower control, they earn a fixed rate of returns and are protected by contractual obligations with respect to their investment. Equity holders are the residual claimants, bearing most of the risk, and, correspondingly, have greater control over decisions.

Questions related to the choice of financing (debt versus equity) have increasingly gained importance in company finance research. Traditionally examined in the discipline of finance, these issues have gained relevance in the past few years, with researchers examining linkages to strategy and strategic outcomes. This research aimed to examine the company's characteristics (micro-factors) that guide Tanzanian non-financial listed companies to choose either debt and or equity financing. The relationship between the proportion of debt usage and micro-factors namely size of the company, profitability, growth rate, assets tangibility, liquidity and dividend payout has been the subject of considerable fact, in empirical research. Most of empirical studies have done on testing those explanatory variables if they relate to the financial leverage of the company. Numerous of these studies have done in the developed countries. For example Rajan and Zingales (1995) use data from the G-7 countries and Bevan and Danbolt (2000, 2002) utilize data from the UK. This research found

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out the micro-factors that influence the capital structure decisions in the non-financial companies listed at the Dar Es Salaam Stock Exchange (DSE).

The DSE is the solely secondary capital market in Tanzania incorporated in 1996 as a company limited by guarantee without a share capital. It became operational in April 1998. The DSE is a non-profit making body created to facilitate the Government implementation of the reforms and in the future to encourage wider share ownership of privatized and all the companies in Tanzania. The mission of the DSE is to provide a responsive securities market, which mobilizes savings and channels them into productive sectors, encourages a savings culture that contributes to the country's economic growth and facilitates wider access to resources.

The securities currently being traded are Ordinary Shares of 17 listed companies, 5 company bonds and 8 Government of Tanzania bonds as per 28, April, 2012. The DSE membership consists of Licensed Dealing Members (LDMs) and Associate Members. Both the Capital Markets and Securities Authority (CMSA) and DSE monitor the market trading activities to detect possible market malpractices such as false trading, market manipulation, insider dealing, short selling, and others. The Government has deliberately provided several incentives in order to encourage active participation in capital markets by Issuers and investors. They cater universal to both foreign and domestic investors without any distinction. Reduced company tax from 30% to 25% for the period of three years where the Issuer has issued at least 35% of the issued shares held by the public. The reduced rate is applicable for five years starting from listing date. Tax deductibility of all Initial Public Offering (IPO) costs for the purposes of income tax determination. All IPO costs are accepted by the Tanzania Revenue Authority (TRA) as acceptable expenses used in the generation of income and profits, and therefore are taken into consideration when determining profit for tax purposes; and withholding tax on investment income made by Collective Investment Schemes (CIS) is final tax. Investors in CIS are not charged with tax on the income distributed by CIS after the scheme's income taxation.

Incentives to Investors are provided such as zero capital gain tax as opposed to 10% for unlisted companies, zero stamp duty on transactions executed at the DSE compared to 6% for unlisted companies and withholding tax of 5% on dividend income as opposed to 10% for unlisted companies. Zero withholding tax on interest income from listed bonds whose maturities are three years and above, exemption of withholding tax on income accruing to fidelity fund maintained by DSE for investor protection and Income received by the Collective Investment Scheme (CIS) investors is tax-exempt. Foreign investors are allowed to invest up to 60% in aggregate of the share capital of any listed company. Furthermore, once invested there is a lock-in period of six months before a foreign investor is allowed to exit. Foreigners are allowed to invest 100% in Company Bonds but are not allowed to invest in securities issued by the Government. Tanzania as the one of developing countries highly differs in economic, financial and institutional situations from other developing and developed countries where the researches undertaken on the capital structure theories. The research was based on testing the validity of the existing capital structure theories in the context of Tanzania.

1.2 Introduction of Companies in Tanzania

Tanzanian companies are established under the compact Act, 2002. The company is defined as an association of persons incorporated under the company Act. The company is an artificial entity (person) that has a legal personality different from that of individual members who make up the company. The compact Act, 2002 describes two kinds of company, namely public and private companies. The company may be limited by shares or grantees or unlimited. The public companies may consist of at least two directors and imposing no restriction on the number of members or on the transfer of shares. The private companies consists of not less than two and not more than fifty members, restricting the right to transfer shares and prohibiting any invitation to the public to subscribe for any shares or debentures of the company.

The Business Registration and Licensing Agency (BRELA) established under the Government Executive Agency Act No. 30 of 1997, is responsible for facilitating and regulating business activities in the country. BRELA is a semi-autonomous agency, under the Ministry of Industries, Trade and marketing charged with the responsibility of registration of both local and foreign companies, registration of business names, registration of trade and service marks, granting of patents, overseeing copyrights and neighbouring rights administration in Tanzania, issuing business and industrial licenses.

The major capital financing strategies of the Tanzanian companies are debt and equity. Debt financing is a strategy that involves borrowing money from a lender or investor with the understanding that the full amount will be repaid in the future, usually with interest. In contrast, equity financing in which investors receive partial ownership in the company in exchange for their funds does not have to be repaid. In most cases, debt financing does not include any provision for ownership of the company (although some types of debt are convertible to stock). Instead, small businesses that employ debt financing accept a direct obligation to repay the funds within a certain period. The interest rate charged on the borrowed funds reflects the level of risk that the lender undertakes by providing the money.

1.3 Statement of the Problem

Most of Tanzanian companies operate under unsatisfactory profit, heavy burden of debts, accrued dividends and other liabilities often fail and cease to operate because of bankruptcy, this is caused by their poor capital structure decisions (Rwegasira, 1991). The capital structure of a company is defined as the mix of its financial liabilities. The components of these financial liabilities are debts and equity. The company can finance its assets through debts and, or equity. The aspect on how and where to obtain the best sources of financing for their projects is not clear, probably there is no ideal factors studied that influence the capital structure decision in the Tanzania context. Companies that use debt financing often experience shortages in cash flow that may make the regular payment of principal and interest difficult (Rwegasira, 1991). Most lenders provide severe penalties for late or missed payments, which may include charging late fees, taking possession of collateral, or calling the loan due early. Failure to make payments on a loan, even temporarily, can adversely affect a company business's credit rating and its ability to obtain future financing eventually companies fail and cease to operate.

The Tanzanian non-financial companies with equity financing often suffer from high cost of paying their shareholders, agency cost management and lack power in their capital structure decisions, and they are no longer the only persons or entities in charge of making decisions such as pricing employees, merchandise, and suppliers. They will also need the other owner's signature in order to apply for bank accounts, credit cards, as well as other forms of debt financing, from this fact the companies may be forced to walk away from their business entirely.

To avoid the stated above problems there is a need to establish a framework of studied factors that guide companies to choose and adjust their strategic financing mix so as configure optimal capital structures. The research enlightened the micro-factors to be considered to prefer debt to equity or equity to debt or both financing strategies. It aimed at determining the micro-factors that influence the capital structure decisions in the Tanzanian context as stipulated by various capital structure theories. Therefore, was based on attempting to examine the relations of Tanzanian non-financial listed companies' characteristics and their financial leverages, and to examine how Tanzanian companies choose and adjust their strategic financing mix.

1.4 Objectives of the Research

1.4.1 General objective

The general objective of the research was to determine the determinants of the capital structure in Tanzanian non-financial listed companies in the DSE.

1.4.2 Specific objectives

The specific objectives were:

1. To examine how Tanzanian non-financial listed companies' characteristics relate to their financial leverages.
2. To examine how Tanzanian non-financial listed companies choose and adjust their strategic financing mix.

1.5 Research questions

The following are the questions that guided the research.

1. How Tanzanian non-financial listed companies' characteristics relate to their financial leverages?
2. How do Tanzanian non-financial listed companies choose and adjust their strategic financing mix?

1.6 Significance of the Research

The research aimed to test the validity of capital structure theories in the Tanzanian atmosphere. The findings of this research determine the micro-factors that influence the capital

structure decisions in Tanzanian non-financial companies listed at DSE. These factors are the crucial elements in the establishment of the optimal capital structures. Understanding factors decision makers able to establish sound capital structure policy in their companies. The findings answer questions such as how much company should borrow, issue shares, choose and adjust their companies' capital structures. Moreover, how the companies' characteristics such as size of company, profitability, growth rate, assets tangibility, liquidity and dividend payout influence the proportion of debt usage in the capital structure.

The findings contribute substantial awareness to a number of people, to investors, directors, managers and staff. It helps them in deciding on why, how and when to use debt and or equity financing strategy in their capital structure to maximise the value of their companies. Companies would be aware of unnecessary burden of debts and high cost of paying shareholders. The government also benefits after companies enabled to choose and adjust optimally their strategic financing mix. The companies run their businesses on profitability and sustainability situations and they contribute more to the Government revenues through taxation and social responsibility practices.

2. Literature Review and Research Hypotheses

2.1 Theoretical Literature

An appropriate capital structure is a critical decision for any business organisation. The decision is important not only because of the need to maximize returns to various organizational constituencies, but also because of the impact such a decision has on an organizations ability to deal with its competitive environment. A company can finance investment decision by debt and/or equity. The decision on how these company-financing mixes can be determined is still a puzzle. There are no comprehensive explanations on how to ratio these financing mixes to obtain an optimal capital structure. An optimal capital structure is the one that minimize the average cost of capital. The existing capital structure theories are not valid for every business environments. The determinants or factors that affect the company in choosing and adjusting the financing mix highly depend on the economic, financial and institutional situations of a particular country.

2.1.1 Static and Dynamic Trade Theory

The pioneers of the trade off theory are Modigliani and Miller (1963) who analyse capital structure decisions in a model with taxes, where interest payment on the debt shield profits from being taxed. The static trade-off theory of capital structure (also referred to as the tax based theory) states that optimal capital structure is obtained where the net tax advantage of debt financing balances leverage related costs such as financial distress and bankruptcy, holding company's assets and investment decisions constant (Baxter, 1967) and (Altman, 1984, 2002). According to Myers (1984) companies adopting this theory could be regarded as setting a target debt-to-value ratio with a gradual attempt to achieve it. Myers (1984) however, suggests that managers will be reluctant to issue equity if they feel it is undervalued in the market. Bradley *et al.* (1984) reports evidence on the static trade off theory, which stipulates that companies increase debt levels until the utility of an additional unit of debt equals the cost of debt, including the cost of a higher probability of financial distress with rising debt levels. Hence, companies strive to reach this static optimal point, also called target capital structure.

The dynamic trade off theory implies that the optimal target capital structure of companies adjusts over time and is a function of changing exogenous and endogenous factors. Fisher *et al.* (1989) formulate a theory of dynamic capital structure choice in the presence of transaction costs and find empirical evidence for company specific effects relating to company's financial leverage ranges.

2.1.2 Pecking Order Theory (Information Asymmetry Theory)

Donaldson (1961) first suggested theory but it received its first rigorous theoretical foundation by Myers and Majluf (1984). Pecking order theory advocates an order in the choice of finance due to different degrees of information asymmetry and related agency costs embodied in distinct sources of finance. As such retained earnings are used first since they constitute the cheapest means of finance, hardly being affected by any information asymmetry. Second, debt is used as there is low information asymmetry due to fixed obligations acting as an effective monitoring device. Finally, external equity is used only as a last resort as it conveys adverse signaling effect as explained by event studies. Hence, pecking order theory is also consistent with shareholder's wealth maximization since it attempts to minimize the cost of raising finance. Myers (1984) and Myers and Majluf (1984) stipulate the pecking

order theory as an alternative model to the trade off theory. The traditional version of the pecking order theory stipulates that the company prefers internal to external financing and debt to equity, when issuing securities and therefore, does not possess a target debt-to-value ratio. Myers (1984) introduces an extended version of the pecking order theory, where asymmetric information between manager and investors causes costs of the adverse selection and ties the company to the pecking order in financing new projects.

The adverse selection costs stem from markdowns on share prices, when new equity is issued, because investors assumed an overvaluation of the company. On the other hand, the issuance of debt increases the probability of financial distress, which in turn increases the companies cost of capital. Therefore, companies always recur to internal financing for new projects first. If internal resources are not available, the safest securities are issued first, implying the issuance of debt before equity (Getzman *et al.*, 2010). Halov and Heider (2005) emphasize that large companies face smaller costs of adverse selection than small companies do, when the possibility of risky or mispriced debt are not available to the company.

2.1.3 Agency Cost Theory

The most influential model of agency costs, first established by Jensen and Meckling (1976) defines agency costs as the sum of three variables namely, the monitoring expenditures of the principle, the bonding expenditures by the agent, and the residual loss. The first type of agency cost is expenditures by the principal in monitoring the agent. By monitoring costs, economists usually imply not only observing the behavior of the agent, but also efforts on the part of the principal to control the behavior of the agent through budget restrictions, compensation policies, and operating rules.

The second class of agency costs are usually labeled bonding expenditures. By this, economists refer to situations where the principal will pay the agent to expend resources to guarantee that the agent will not take actions that harm the principal. A bonding cost is incurred where the principal pays a premium to the agent to create some pool of resources or a legal obligation from which the principal can be compensated for detrimental actions of the agent. Bonding can serve as a substitute for monitoring costs, and vice versa. A certain bonding expenditure may decrease the marginal expected utility of monitoring expenditures. Moreover, inability to bond might signal a need to invest additional resources in monitoring.

The final class of agency costs is the principal's lost welfare caused by the divergence in his interests from those of his agent. If because of circumstances such as technology, geography, or even personalities involved, an agent cannot be perfectly monitored or bonded, and then we should expect that the interests of the principal and the agent will not be coextensive. This remaining pocket of diverging interests is generally called the "residual loss" associated with agency. Jensen and Meckling (1976) argue that the use of secured debt might reduce the agency costs. Titman and Wessels (1988) point out that the costs associated with the agency relationship between shareholders and debt holders are likely to be higher for companies in growing industries hence a negative relationship between growth and financial leverage is likely.

2.2 Empirical Literature

Capital structure refers to the mix of debt and equity used by a company in financing its assets. It is one of the effective tools of management to manage the cost of capital. The capital structure decision is one of the most important decisions made by financial management. Its decision is at the center of many other decisions in the area of company finance. These include dividend policy, project financing, issue of long-term securities, financing of mergers, buyouts and so on.

The basis for empirical capital structure research is the seminal study by Modigliani and Miller (1958) who proves that under the restrictive assumptions of perfect capital markets with no arbitrage, no taxes or transaction costs and equal interest on debt and equity, the value of a company is independent of the management's financial decisions. If these assumptions are relaxed through the inclusion of company taxes, transaction costs, disparity of interest rate for debt and equity and information asymmetry, the question of what determines capital structures becomes complex. Despite the fact that some of the fundamental assumptions of the theory can be assumed unrealistic in the eyes of investors and other economic agents, this irrelevance theory was generally accepted and subsequent research focused on relaxing some of its assumptions to develop a more realistic approach. In this sense, Modigliani and Miller published another paper considering some of the criticisms or

deficiencies of their theory and relaxed the assumption that there were no company taxes (Modigliani and Miller, 1963).

Most recently, empirical studies have been done to test the validity of the various existing capital structure theories. The factors that influence the capital structure decisions such as size of the company, profitability of the company, growth rate, assets tangibility, liquidity and dividend payout they were tested empirically. Titman and Wessels (1988), Rajan and Zingales (1995) find a negative relationship between growth and the level of leverage on data from developed countries. Um (2001) however, suggests that if a company's level of tangible assets is low, the management for monitoring cost reasons may choose a high level of debt to mitigate equity agency costs. Therefore, a negative relationship between debt and tangibility is consistent with an equity agency cost explanation (Um, 2001). Um (2001) also argues that company size may proxy for the debt agency costs (monitoring cost) arising from conflicts between managers and investors. Um (2001) emphasizes that the monitoring cost is lower for large companies than for small companies. Therefore, larger companies will be induced to use more debt than smaller ones.

Berk *et al.* (2009) derives a company's optimal capital structure and managerial compensation contract when employees are averse to bearing their own human capital risk. The theory delivers empirically consistent optimal debt levels and implies persistent idiosyncratic difference in leverage across companies as well as a positive relationship between leverage and executive compensation. Rajan and Zingales (1995) analyses the determinants of capital structure choices for companies in the G-7 countries and find company leverage to be similar across the countries. Factors identified as the correlated in the cross-section with company leverage in the U.S are similarly correlated in other countries as well.

Further research was done from an international perspective, where Fan *et al.* (2008) examine the capital structure and debt maturity choices in a cross-section of company in 39 developed and developing countries. They find a stronger relationship between profitability and leverage in countries with weaker shareholder protections. In countries with better legal protection for financial claimants, companies tends to hold less total debt, and more long-term debt as a proportion of total debt. In addition, companies that choose to cross-list, tend to use more equity and longer-term debt. The cross sectional determinants of leverage differ across countries. As empirical capital structure research has grown fast over the years, the literature review does not claim to be exhaustive few studies provide evidence from developing countries. For example, Booth *et al.* (2001) analyses data from ten developing countries (Brazil, Mexico, India, South Korea, Jordan, Malaysia, Pakistan, Thailand, Turkey and Zimbabwe), Pandey (2001) uses data from Malaysia and Chen (2004) utilize data from China. Of the capital structure studies, some have used cross-country comparisons based on data from particular region. For example, Deesomsak *et al.* (2004) analyse data from the Asia Pacific region.

Despite some significant contributions to general perception of the various intricacies about company capital structure, research produced so far did not provide yet a sound basis for establishing, in a decisive fashion, the empirical validity of the different theoretical models. Probably the most eclectic, prevalent and non-controversial view, with respect to the contention surrounding the company capital structure theory is Myers's argument that it is a puzzle. It appears that, we are still lacking a comprehensive theory to explain how companies decide about their strategic financing; and yet we cannot explicitly specify the relation between capital structure choice and company's characteristics. Since the foundational work of Modigliani and Miller (1958), a number of authors extended their capital structure irrelevancy theory. The literature also thoroughly describes the various attempts to model company debt/equity policy. However, what optimal mix of securities should a company issue remain undetermined.

If extant capital structure theoretical literature has so far successfully modeled a large number of potential determinants of capital structure choice (Harris and Raviv, 1991). Empirical literature has as well failed in finding unambiguous and compelling validation of the contextual relevance of such models. Available empirical evidence often appears to show significant dependence of the observed reality and the research methods applied, leading sometimes to unconvincing and contradictory results. As suggested by Frankfurter and Philippatos (1992) one of the debilities of company finance theories is their weak correspondence to facts. Overall, we still lack a satisfactory, comprehensive and positive explanation for companies' capital structure observed behavior. Theoretically, it is still not well understood why companies' financial contracts recurrently appear in certain patterns (Harris and

Raviv, 1989). This suggests that we need to resort to a more robust framework to gather useful insights into the financing behavior of actual real-world companies.

It is a truism that the mainstream of theoretical and empirical research on company capital structure springs from the examination of U.S phenomena. This fact hinders the generalization of these results to other countries or geographical areas with (sometimes) remarkably dissimilar economic, financial, and institutional conditions what, in these conditions, would seem inappropriate or even imprudent. Allocative functions of financial markets may also vary widely across countries. Thus, informational and operating efficiency, and liquidity, are institutional features of financial markets that may have a role as determinant(s) of company financing choices (Demirgüç-Kunt and Maksimovic, 1996). According to Rajan and Zingales (1995) and Harris and Raviv (1992) among others, further substantiation of capital structure hypotheses is needed to increase the robustness of their predictions. This research pursued through the empirical testing in different environmental contexts of country, time and industry. Such investigations may be helpful for a better understanding of the implications of environmental and behavioral factors on capital structure decisions, and thus contributing for broadening the explanatory and predictive power of the theory.

In a broad study for U.S capital markets, Frank and Goyal (2009) report empirical support for the trade off theory. Furthermore, there exists a positive correlation between leverage and company size, the tangibility of the assets, expected inflation and industry median. Positive shocks to profitability lead to an increase in equity and decreases in debt. Since companies do not adjust capital structures immediately after shocks due to transaction costs, a negative correlation can be detected between profitability and leverage. Colombage (2005) empirically investigates the capital structure of Sri Lankan companies and finds that the financing trends of Sri Lankan companies confirm the pecking order hypothesis largely than predictions of the information asymmetry as static trade off considerations. More specifically, the overall analysis strongly supports the correlations of a negative relationship between leverage and retained earnings. Clark *et al.* (2009) find evidence in support of the dynamic trade off theory for large sample of 26,395 companies from 40 countries.

A few studies have looked at pecking order behaviour using samples of companies in Europe. Bessler *et al.* (2008) present European evidence for Welch's (2004) notion that a large part of companies' variation in leverage is determined through stock price movements. Wiwattanakit (1999) analyses the Thai capital market and presents evidence on tax effects, signaling effects and agency costs in the company is financing decisions, indicating the validity of the pecking order theory. Lau *et al.* (2008) test the pecking order theory of capital structure for Malaysian companies from 1999-2005 and find a negative correlation between long-term debt and external financing needs. Furthermore, conversional leverage determinants such as profitability, company size and asset tangibility is positively related to companies' debt levels. Zhao and Wijewardana (2012) found positive relations with financial leverage and growth. Ahmed and Hisham (2009) find that evidence from pecking order model suggests that the internal fund deficiency is the most important determinant that possibly explains the issuance of new debts. Hence, pecking order hypothesis is well explained in Malaysian Capital market.

2.3 Empirical Determinants of Capital Structure

Capital structure of a company is determined by various internal and external factors. The macro variables of the economy of a country like tax policy of government, inflation rate, capital market condition, are the major external factors that affect the capital structure of a company. The characteristics of an individual company which are termed here as micro factors (internal) also affect the capital structure of enterprises. This research presents how the micro-factors affect the capital structure of a company with reference to the relevant capital structure theories stated earlier.

2.3.1 Size of a Company

Size of the company could be an inverse proxy for the probability of the bankruptcy costs according to trade off theory. Larger companies are likely to be more diversified and fail less often. They can lower costs (relative to company value) in the occasion of bankruptcy. Therefore, size has a positive effect on leverage. Pecking order theory also expects this positive relation. Since large companies are diverse and have less volatile earnings, asymmetric information problem can be mitigated. Hence, size is expected to have positive impact on leverage. So we expect small companies and private companies to have low debt and large listed companies have higher debt. The empirical study done by Khan and Shan (2007) using the data of Pakistani found that the size confirms neither to

the prediction of the trade off theory nor to asymmetry of information theory. Furthermore, the empirical research done by Ahmed and Hashim (2009) by using data from Malaysian capital market concluded that the size provides no evidence of static trade off theory.

2.3.2 Profitability

The static trade-off hypothesis pleads for the low level of debt capital of risky companies (Myers, 1984). The higher profitability of companies implies higher debt capacity and less risky to the debt holders. So as per this theory, capital structure and profitability are positively associated. But pecking order theory suggests that this relation is negative. Since as stated earlier, company prefers internal financing and follows the sticky dividend policy. If the internal funds are not enough to finance financial requirements of the company, it prefers debt financing to equity financing (Myers, 1984). Thus, the higher profitability of the enterprise implies the internal financing of investment and less reliance on debt financing.

Most of the empirical studies support the pecking order theory. The studies of Titman and Wessels (1988) show the negative relation between the level of debt in capital structure and profitability. Khan and Shan (2007) found that profitability approves the predictions of pecking order theory. The larger companies with higher profits will have a higher debt capacity and will therefore, be able to borrow more and take advantage of any tax deductibility Bangassa *et al.* (2008). The empirical studies done by Ahmed and Hisham (2009) show that company's profitability related positively to the debt capacity of the company. This is contrary to the pecking order theory which supports the negative relationship between financial leverage and the profitability of a company. The profitable company prefers internal financing to external financing.

2.3.3 Growth Rate

The agency cost theory and pecking order theory explain the contradictory relation between the growth rate and capital structure. Agency cost theory suggests that equity controlled companies have a tendency to invest sub-optimally to expropriate wealth from the enterprises' bondholders. The agency cost is likely to be higher for enterprises in growing industries, which have more flexibility in their choice of future investment. Hence, growth rate is negatively related with long-term debt level (Jensen and Meckling, 1976). The empirical studies carried out by Titman and Wessels (1988) back up this theoretical result but Kester study rejected this relation (1986). Zhao and Wijewardana (2012) in their study done in Colombo Security Exchange, Sri Lanka found that growth and financial leverage are positively related. The study done by Sharif, Naeem and Khan (2012) in Pakistan in the Insurance sector, found that growth opportunities is not a determinant of Insurance sector's capital structure. Arabzadeh and Meghaminejad (2012) and Kumar *at et.* (2012) found growth is in positive to financial leverage.

Pecking order theory, contrary to the agency cost theory, shows the positive relation between the growth rate and debt level of enterprises. This is based on the reasoning that a higher growth rate implies a higher demand for funds, and, *ceteris paribus*, a greater reliance on external financing through the preferred source of debt (Sinha, 1992). For pecking order theory contends that management prefers internal to external financing and debt to equity if it issues securities (Myers, 1984). Thus, the pecking order theory suggests the higher proportion of debt in capital structure of the growing enterprises than that of the stagnant ones. Ahmed and Hisham (2009) by using data from Malaysian capital market concluded that the growth rate provide no evidence of static trade. Ebadi, Thim and Choong (2011) studying the impact of firm characteristics on capital structure in Iranian listed firm, found that growth rate is positively related with the debt ratio.

2.3.4 Asset Tangibility

Compatible with pecking order theory, Rajan and Zingales (1995) and Frank and Goyal (2003) argue that tangibility constitutes a form of secured collateral thus leading to a positive effect on leverage. But Grossman and Hart (1982) state that with high monitoring costs for shareholders of capital outlays for low tangibility of assets companies there should be a correspondingly higher level of debt acting as a cost effective monitoring mechanism. Consequently, this implies a negative relationship instead. Moreover, Titman and Wessels (1988) distinguish between tangibility (tangible assets /total assets) and intangibility (intangible assets /total assets) predicting a positive relationship between tangibility and leverage and a negative one between intangibility and leverage. In this research the ratio of tangible assets and total assets is used to measure the asset tangibility of the sampled companies.

2.3.5 Liquidity

Juan and Yang (2002) confirmed a trade-off relationship between the collateral value of assets and financial leverage. Their finding is almost contrary to the pecking order pattern of financing. They argued that even if listed companies in China were capable of repaying their debts, they would still prefer to employ equity finance. Liquidity is considered as negative debt as it reduces the need to take on debt. According to Ozkan (2001) such negative relationship emanates from the potential conflicts between shareholders and bondholders. The rationale is that the greater liquidity level, the greater the ease which shareholders can manipulate the liquid assets of the companies at the expense of bondholders. Nevertheless, liquidity can generate a positive effect in case high liquidity eases the availability of debt. Ebadi, Thim and Choong (2011) studying the impact of firm characteristics on capital structure in Iranian listed firm, found that liquidity is negatively related with debt ratio.

2.3.6 Dividend Payout

The pecking order theory shows the positive relation between debt level and dividend payout ratio. According to this theory, management prefers the internal financing to external one. Instead of distributing the high dividend, and meeting the financial need from debt capital, management retains the earnings. Hence, the lower dividend payout ratio means the lower level of debt in capital structure. The dividend policy has the positive impact on the investment decisions in the company. The dividend payout depends on the investment opportunity in the company.

2.4 Research Hypotheses

The research tested the following hypotheses on relationship between the defined variables and capital structure if they are relevant for Tanzanian non-financial listed companies:

H0₁: There is no significant relationship between financial leverage and company size

H1₁: There is a significant relationship between financial leverage and company size

H0₂: There is no significant relationship between financial leverage and profitability

H1₂: There is a significant relationship between financial leverage and profitability

H0₃: There is no significant relationship between financial leverage and growth rate

H1₃: There is a significant relationship between financial leverage and growth rate

H0₄: There is no significant relationship between financial leverage and assets tangibility

H1₄: There is a significant relationship between financial leverage and assets tangibility.

H0₅: There is no significant relationship between financial leverage and liquidity.

H1₅: There is a significant relationship between financial leverage and liquidity.

H0₆: There is no significant relationship between financial leverage and dividend payout

H1₆: There is a significant relationship between financial leverage and dividend payout.

3. Research Methodology

3.1 Research Design

The research design is a logical sequence that connects the empirical data to a study's initial research questions and ultimately to its conclusions (Yin, 1994). The study was based on descriptive approach (quantitative) that led to a description of the determinants as found from practice in the existing situation. A description of practices allowed an analysis to be performed based on the practical reality so as to arrive at conclusions that address that reality. A description of practices is also critical for gaining insight into practices, provides a sound basis for judging their relationships – a central issue in this research, and forms a reliable basis for providing recommendations for further improvements.

A sample is a finite part of a statistical population whose properties are studied to gain information about the whole (Webster *et al.*, 2006). When dealing with people it can be defined as a set of respondents (people) selected from a larger population for the purpose of a survey. This research took a sample size of the eight Tanzanian non-financial listed companies in the Dar Es Salaam Stock Exchange (DSE) - respondents.

The research used document analysis technique to collect data. Documents and company reports such as annual reports (financial statements), prospectus and minutes of annual general meetings were used. Publicly available information was used to extract information about the characteristics of the listed companies. The mails, telephone and website or online surveys were used to collect data. These strategies save time, cost, and do not need a team of people (no field staff is required).

3.2 Specification of the model

Following multiple regression model was used to test the theoretical relation between the financial leverage and characteristics of the company.

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 \dots \dots \dots (1)$$

Where

X₁ = Size of the company

X₂ = Profitability

X₃ = Growth rate

X₄ = Assets tangibility

X₅ = Liquidity

X₆ = Dividend payout

a = Constant term of the model

b's = Coefficients of the model

3.3 Definition of variables

3.3.1 Dependent Variable (Y)

It is defined as the ratio of total debt to total assets. The total debt includes both short term and long-term interest bearing debt. It is given by:

$$FL = \frac{TD}{TA} \dots \dots \dots (2)$$

Where,

FL = Financial leverage,

TD = Total debt at the end of a given accounting year

TA = Total assets at the end of a given accounting year

3.3.2 Independent Variables

Size of the Company (X₁): It is defined as the logarithm of total assets of the companies. It is given by:

$$X_1 = \text{Log} (TA) \dots \dots \dots (3)$$

Where,

TA = Total assets for a given accounting year

Profitability (X₂): It is defined in term of return on total assets. It is given by:

$$X_2 = \frac{EBIT}{TA} \dots \dots \dots (4)$$

Where

EBIT = Earnings before interest and tax for a given accounting year

TA = Total assets at the end of a given accounting year

Growth Rate (X₃): It is defined as a percentage change of the total assets. It is given by:

$$X_3 = (TA_n - TA_{n-1}) / (TA_{n-1}) \dots \dots (5)$$

Where

TA_n = Total assets at the end of the observed period of year

TA_{n-1} = Total assets at the previous year of observed period

Tangibility (X₄): It is defined as the ratio of total fixed assets to total assets of the company. It is given by:

$$X_4 = \frac{TFA}{TA} \dots \dots \dots (6)$$

Where,

TFA = Total fixed assets for a given accounting year

TA = Total assets for a given accounting year

Liquidity (X₅): It is defined as a ratio of cash balances and total assets of a company. It is given by;

$$X_5 = \frac{CB}{TA} \dots \dots \dots (7)$$

Where,

CB = Cash balances for a given accounting year

TA = Total assets for a given accounting year.

Dividend Payout (X_6): It is defined as the ratio of dividend to total income available to shareholders. Here, dividend includes only cash dividend not stock dividend and other forms of dividend. It is given by:

$$X_6 = \frac{D}{NI} \dots \dots \dots (8)$$

Where

D = Total dividend distributed in a given accounting year

NI = Income available to shareholders in a given accounting year.

4. Findings Presentation, Analysis and Discussions

4.1 The relationship between non-financial listed companies' characteristics (micro- factors) and their financial leverages

The current research sought to determine the micro- factors that influence the capital structure decisions among the Tanzanian non-financial listed companies. The eight listed companies were included in the research. Before determining the factors that influence the capital structure decisions, data descriptive statistics were computed to profile the characteristics of the sampled companies. The interested statistical measures were means, standard deviation, standard error means and range (minimum and maximum value) of the factors measured (Table 1).

Table 1. Descriptive statistics for dependent variable and independent variables

Variable	N	Mean	SE Mean	StDev	Minimum	Maximum
Financial leverage	8	0.551	0.094	0.267	0.298	0.895
Company size	8	11.236	0.258	0.729	10.027	12.215
Profitability	8	0.297	0.078	0.221	0.037	0.536
Growth rate	8	0.249	0.047	0.133	0.051	0.443
Assets tangibility	8	0.355	0.106	0.300	0.017	0.729
Liquidity	8	0.115	0.027	0.076	0.029	0.265
Dividend payout	8	0.431	0.097	0.276	0.047	0.866

Source: Field data (2012)

The table 1 above shows descriptive statistics for the dependent variable and independent variables from among the non-financial companies listed at DSE. The descriptive statistics show how the companies listed at the DSE characterized or vary in term of size, profitability, growth rate, assets tangibility, liquidity and dividend payout. The descriptive statistics shows that companies employ at least 50% of debt in their capital structure components and there are high variations of independent variables among the companies. After data descriptive statistics computation, the pair-wise Pearson correlation of the independent variables was run to diagnose the multicollinearity problem.

The table 2 shows the correlation of the paired variables among the sampled companies. From this table, figures show that there is no strong correlation, more or equal to 0.8 among the independent variables. This implies that there is no multicollinearity problem among the independent variables. The pair-wise correlation approach of diagnosing the multicollinearity problem does not take into account the relationship of each of independent variable on all other independent variables. Therefore, regression model of each independent variable on all other independent variables was run to assess the multicollinearity problem more precisely (Table 3).

Table 2. Pair-wise Pearson correlation matrix of explanatory variables

Variables	X_1	X_2	X_3	X_4	X_5	X_6
Company size (X_1)	1.000					
Profitability (X_2)	-0.623	1.000				
Growth rate (X_3)	0.151	-0.343	1.000			
Assets tangibility (X_4)	-0.418	0.422	-0.079	1.000		
Liquidity (X_5)	0.421	-0.604	-0.363	-0.792	1.000	
Dividend payout(X_6)	-0.684	0.638	-0.217	0.337	-0.465	1.000

Source: Field data (2012)

The table 3 describes the correlation of each independent variable and all the other independent variables. The value of R^2 nearest to one or equal to one indicates the multicollinearity problems (Lewis-Back, 1993). The table shows that figures are not nearest to or equal to one, therefore, there is no multicollinearity problem among the independent variables.

Table 3. Results of the models used to assess the multicollinearity

Problem	Model R2	Adjusted R2	S.E
Model (1.1)	53.6%	0.0 %	0.929
Model (1.2)	87.9%	57.6 %	0.144
Model (1.3)	72.3%	2.9 %	0.131
Model (1.4)	92.2%	72.7%	0.156
Model (1.5)	90.9%	68.1%	0.043
Model (1.6)	78.2%	23.7%	0.241

Source: Field data (2012)

After clearing up the multicollinearity problem, the stepwise regression was run in first step and found that the most effective micro factors, which influence the capital structure decisions among non-financial listed companies in Tanzania, are profitability and assets tangibility. The profitability of the company is the most or key determinant of the capital structure decision followed by the asset tangibility micro factor. The liquidity and company size micro factors are suggestive determinants. The dividend payout and growth rate were left to the bottom of the best alternative factors implying that are less effective determinants (Table 4). The table 4 shows results of the micro- factors that influence the capital structure decision among the Tanzanian non-financial listed companies. The stepwise regression was run at 0.05 level of significant.

Table 4. Stepwise regression results for companies' characteristics (micro factors) and their financial leverages

Alpha-to-Enter: 0.05 Alpha-to-Removes: 0.05

Response is financial leverage on 6 predictors, with N = 8

Step	1
Constant	0.890
Profitability	-1.140
T-Value	-7.380
P-Value	0.000
S.E	0.091
R^2	90.070
R^2 (adj)	88.420
Mallows Cp	3.100
Best alternatives:	
Micro-factor	assets tangibility
T-Value	-5.190
P-Value	0.002
Micro-factor	liquidity
T-Value	2.350
P-Value	0.057
Micro-factor	company size
T-Value	2.260
P-Value	0.065
Micro-factor	dividend payout
T-Value	-1.480
P-Value	0.188

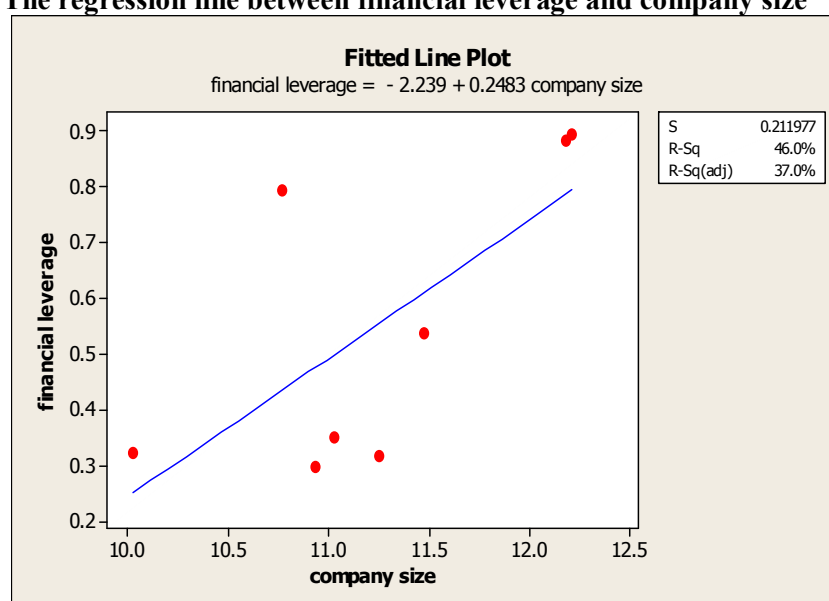
Micro-factor	growth rate
T-Value	0.510
P-Value	0.627

Source: Field data (2012)

4.3 How non-financial listed companies in Tanzania choose and adjust their strategic financing mix

The factors described by the stepwise regression above were then plotted against the financial leverage. The regression lines (the lines of best fit) were plotted to show graphically how non-financial listed companies in Tanzania choose and adjust their strategic financing mix. The regression lines portray the extent on how factors influence the capital structure decisions in the Tanzanian non-financial listed companies. The regression lines describe how the factors lead companies to choose and adjust their strategic financing mix. The companies choose and adjust their strategic financing mix by considering the extent of influence of the prescribed factors on the financial leverage.

Figure 1 The regression line between financial leverage and company size



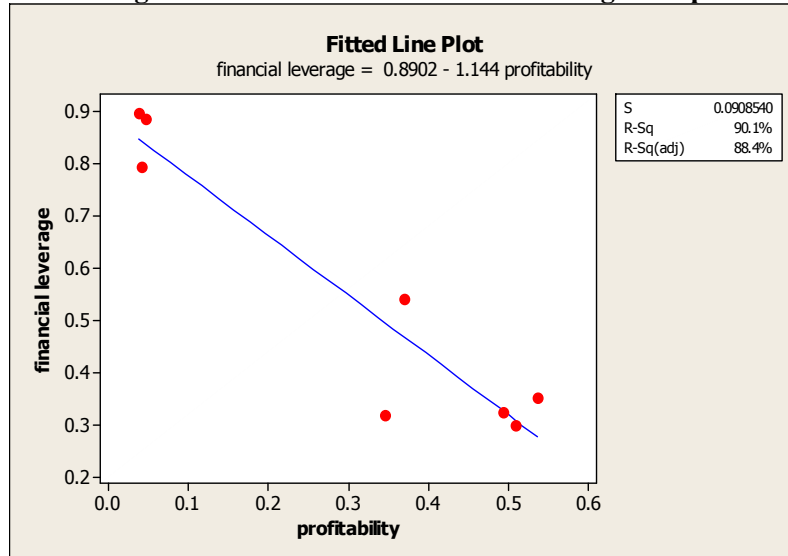
Source: Field data (2012)

The figure 1 shows the relationship between financial leverage and company size and profiles that companies choose and adjust their debt levels positively to their companies' size. The company size is defined as the natural logarithm values of the total assets of the each of the eight samples companies. The financial leverage defined as the ratio of total debts to total assets of each of the eight sampled companies. The regression line between financial leverage and profitability was plotted, and determined at 90.1%. This factor is negatively related to the financial leverage. Therefore, the companies choose and adjust debt level in their capital structure negatively to the profitability level of their companies, thus the more profits in the company the less financial leverage in its capital structure and it is vice versa (Figure 2).

The figure 2 describes the relationship between financial leverage and profitability. The profitability is defined as the ratio of earnings before interest and tax (EBIT) to the total assets of each of the sampled companies. The graph portrays that there is a strong relationship between profitability and financial leverage.

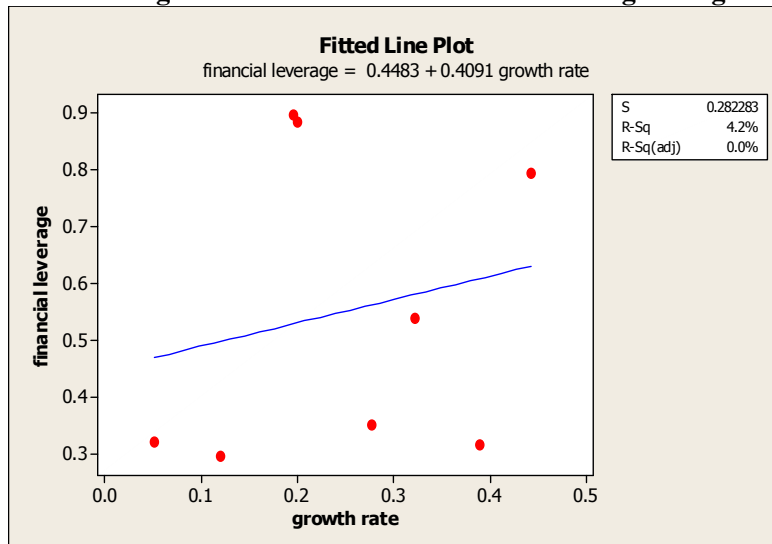
The regression line between financial leverage and growth rate was plotted. The growth rate factor poorly relates positively with financial leverage. This relationship is determined at 4.2% (Figure 3). From this fact, the growth rate is entirely not a determinant of the capital structure decision in Tanzanian non-financial companies listed at DSE. This also evidenced by the stepwise regression, the growth rate is the least determinant (Table 4).

Figure 2. The regression line between financial leverage and profitability



Source: Field data (2012)

Figure 3. The regression line between financial leverage and growth rate

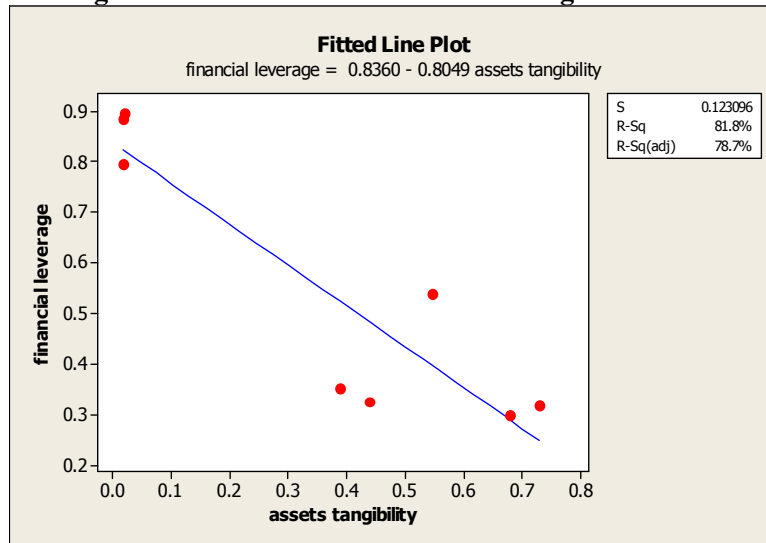


Source: Field data (2012)

This figure 3 shows the relationship between financial leverage and the growth rate. The growth rate is defined as the percentage change of the total assets of the sampled companies. The graph portrays that there is no strong evidence to support the relationship between financial leverage and growth rate.

The financial leverage and assets tangibility was graphed together, the financial leverage as the dependent variable. The results show that the assets tangibility is negatively related to the financial leverage. Companies choose and adjust their debt level negatively to assets tangibility level. The company with higher value of fixed assets tends to use fewer debts in their capital structure and it is vice versa (Figure 4). This figure 4 shows the relationship between the financial leverage and assets tangibility. Assets tangibility is defined as the ratio of tangible assets to the total assets of each of the sampled companies. The line of best fit fits at 81.8%. This implies that there is a strong relationship between financial leverage and assets tangibility.

Figure 4. The regression line between financial leverage and assets tangibility



Source: Field data (2012)

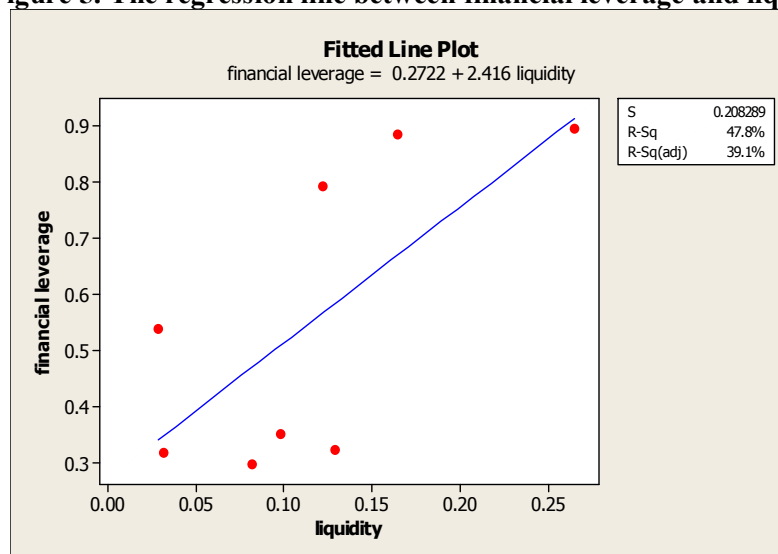
In the stepwise regression results, the liquidity is the third best alternative factor. The regression line of best fit is determined at 47.8%. The slope of this line is positive, with a positive constant. The positive constant confirms the reality that in practice the financial leverage does not be zero. The liquidity is a suggestive determinant. The liquidity tends to vary positively with the financial leverage; therefore, companies choose and adjust their debt level positively to their liquidity ratios (Figure 5).

The figure 5 shows the relationship between financial leverage and liquidity. The liquidity is defined as the ratio of cash and total assets of each of the sampled companies.

The regression line between financial leverage and dividend payout was plotted. The regression line portrays that the dividend payout is poorly positive related with financial leverage that no strong evidence to support this relationship (Figure 6). In the stepwise regression, the dividend payout is ranked to the fifth position of the best alternatives factors or determinants (Table 4)

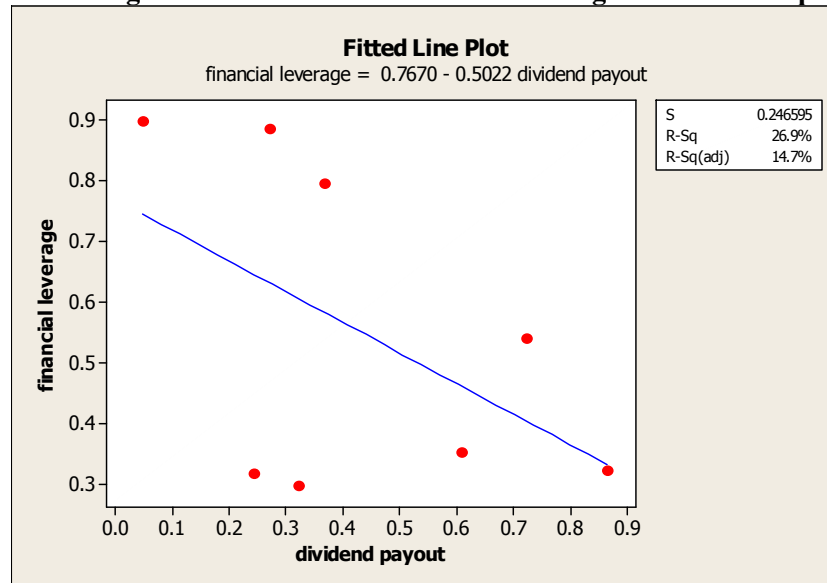
This figure 6 shows the relationship between the financial leverage and dividend payout. The dividend payout is defined as the ratio of dividends available to be distributing to the shareholders to net income of each of the sampled companies. The line of best fit is determined at 26.9%., which shows that there is a poor relationship between financial leverage and dividend payout.

Figure 5. The regression line between financial leverage and liquidity



Source: Field data (2012)

Figure 6. The regression line between financial leverage and dividend payout



Source: Field data (2012)

4.4 Tests of Hypotheses

The six set of paired hypotheses were tested statistically at 5% and 10% levels of significant. The Company size has a positive coefficient value of 0.248 (Figure 1), the t-value of 2.260 and the p-value of 0.065 (Table 4) found to be statistically significant at 10% level and insignificant at 5% level. The p-value is greater than 0.050, this implies that there is no strong evidence to reject the null hypothesis at this level of significant, therefore the null hypothesis of the first set of the hypotheses is accepted. The variable was tested at 10% level of significant and found to be statistically significant, since the p-value is less than 10%. Therefore, the null hypothesis is rejected at this level of significant.

The profitability variable has a very high t-value of -7.38 and p-value of 0.000 (Table 4). The coefficient is -1.144 and R^2 of 90.1%. This variable was tested and found to be significant at 1% since the p-value is less than 0.01. The null hypothesis of the second set of the hypotheses is rejected at more than 99% confidence level.

The third set of the hypotheses were tested with the growth rate variable. The growth rate has a positive coefficient value of 0.409 with R^2 of 4.2 %, the t-value of 0.510 is very small and the p-value of 0.627 is greater than significant level of 0.050. This p-value is strong evidence enough to support the null hypothesis of the third set of the hypotheses. Then the variable was tested at 10% level of significant and found to be statistically insignificant, since the p-value is greater than 0.10, therefore the null hypothesis also is accepted at this level of significant.

Assets tangibility, with coefficient of -0.805, R^2 of 81.8% (Figure 4), it has the second highest t-value of -5.190 and very low p-value of 0.002 (Table 4), was tested with the fourth set of hypotheses. The p-value is less than 0.010, therefore, there is no evidence to support the null hypothesis. The alternative hypothesis is accepted at more than 99% level of confidence.

Liquidity is another explanatory variable tested. The coefficient is 2.416, R^2 of 47.8% (Figure 5) and t-value of 2.350, p-value of 0.057 (Table 4). The p-value of 0.057 is slightly greater than 0.05 level of significant; therefore, there is no strong evidence to support the alternative hypothesis of the fifth set of hypotheses. The null hypothesis is accepted at this level of significant. The variable is tested at 10% level of significant. The variable found to be statistically significant, since the value of p-value is less than 0.10. Therefore, the null hypothesis is rejected at this level of significant.

Dividend payout is tested with the sixth set of the hypotheses. The dividend payout variable has coefficient of -0.502 with R^2 of 26.9% (Figure 6), the t-value of -1.480, and p-value of 0.188 (Table 4). These values show that there is no strong evidence enough to support the alternative hypothesis of the sixth set of the hypotheses. Therefore, the null is accepted at both of 0.05 and 0.10 level of significant. There is no relationship between dividend payout and the financial leverage of a company.

4.5 Discussion of the Results

The companies based characteristics (micro-factors) namely company size, profitability, growth rate, assets tangibility; liquidity and dividend payout were related to the financial leverage of each of the sampled company. The descriptive statistics for the dependent and independent variables (Table 1) show that there is a slight variation of the financial leverage ratio of the sampled companies. Companies employ at least 50% of debts in their capital structure, the less debt-financed company employs at least 30% of the debt in its capital structure, and the most debt-financed company employs at least 89% of the debt in its capital structure.

The company sizes of the sampled companies slightly vary. This implies that the companies' assets of the sampled companies are configured with almost the same elements. Profitability of the sampled companies has a high variation of a range of 0.037 to 0.536. The less profitable company is 14 as times as the most profitable company. This implies that the companies sampled highly differ in generating income and managing of operating and administrative costs. The growth rates of these companies vary from 0.051 to 0.443. The company with smallest growth rate is 9 as times as the company with highest growth rate.

There is a high variation of the assets tangibility of the sampled companies, the company with smallest assets tangibility ratio is 43 as times as the company with the largest assets tangibility ratio. This fact profiles that the fixed assets of the sampled companies highly vary, and this is true due to the fact that fixed assets highly depends on the nature of business of each of the sampled company. The sampled companies fall under various categories of businesses. Liquidity and dividend payout also show a high variation implying that companies largely differ in debts paying ability.

The company size variable, with a positive slope is significant at 10% (Figure 1). This shows that company size variable is a suggestive determinant of the capital structure decisions in the Tanzanian non-financial companies listed at the DSE. This finding fairly does not support Rajan and Zingales (1995) argument, that there is less asymmetric information about the larger companies, which reduce the chance of undervaluation of new equity. The finding confirms to the Titman and Wessels (1988) as well as that larger companies are more diversified and have lesser chances of bankruptcy that should motivate the use of debt financing.

The finding on company size with relation to the financial leverage confirms to the established theories. Trade-off theory suggests that company size should matter in deciding an optimal capital structure because bankruptcy costs constitute a small percentage of the total company value for larger companies and greater percentage of the total company value for smaller companies. As debt increases the chances of bankruptcy, hence small companies should have lower financial leverage. Pecking order theory also expects this positive relation. Since large companies are diverse and have less volatile earnings, asymmetric information problem can be mitigated. Hence, size is expected to have positive impact on leverage. From this fact, size will matter.

The profitability variable is significant at 1% level with the coefficient of -1.144 (Table 4) statistically significant validates the acceptance of the alternative hypothesis of the second set of hypotheses. The negative sign approve the prediction of information asymmetry hypothesis by Myers and Majluf (1984). It is thus proved that pecking order theory dominates trade off theory. The finding explains that retained earnings, is the most important source of financing. Good profitability thus reduces the need for external debt.

The growth rate variable with the positive coefficient value of 0.409 is statistically insignificant. The finding does not confirm to the agency cost theory, which explains the negative relationship between growth rate and the financial leverage (Jensen and Meckling, 1976). The pecking order theory suggests the positive relationship between growth rate and financial leverage, this finding profiles this positive relationship but statistically insignificant. From the stepwise regression results, this variable is the least factor among the best alternative factors, this evidencing that the growth rate variable is not a determinant of the capital structure decision in the Tanzanian non-financial listed companies at DSE.

Asset tangibility, with coefficient of -0.805 is very significantly related to financial leverage (Figure 4). This shows that tangibility is one of the most important determinants of the capital structure decisions in Tanzania. The negative sign confirms Grossman and Hart (1982) which suggested that, with high monitoring costs for shareholders of capital outlays for low tangibility of assets companies, there should be a correspondingly high level of debt acting as a cost effective

monitoring mechanism. Consequently, this implies a negative relationship. The finding does not confirm to pecking order theory, Rajan and Zingales (1995) and Frank and Goyal (2003) which describes the positive relationship between tangibility and financial leverage, in the sense that tangibility constitutes a form of secured collateral.

Liquidity is another explanatory variable tested and found that is positive related with financial leverage at 10% level (Figure 5). This finding does not confirm to Juan and Yang (2002) which suggest the negative relationship between financial leverage and ability to pay off a given company. In the finding, the positive relationship explains that the liquidity generates a positive effect in the sense that high liquidity eases the availability of debt. Therefore, the liquidity variable is a suggestive determinant of capital structure decisions in Tanzanian non-financial companies listed at DSE.

Dividend payout is not significantly related to debt. The coefficient of dividend payout is -0.502 (Figure 6). This finding does not confirm to the pecking order theory that shows the positive relation between financial leverage and dividend payout. This implies that the dividend payout is not a determinant of the capital structure in Tanzania.

4.6 Findings of the Research

The research was guided by the two researchable questions; the first question was presented as how non-financial listed companies' characteristics in Tanzania relate to their financial leverages? Moreover, the second question was presented as how the Tanzanian non-financial companies listed at DSE choose and adjust their strategic financing mix? The findings profile that the effective determinants of the capital structure decisions in the Tanzanian non-financial companies listed at DSE are profitability and assets tangibility. The liquidity and company size are the suggestive determinants of the capital structure decisions in Tanzania. Therefore, in answering the first question, factors that influence the capital structure decisions among Tanzanian non-financial companies listed at DSE are profitability, assets tangibility, liquidity and company size.

The answer for second researched question answered by these findings is that companies choose and adjust their strategic financing mixes, namely debt and equity by considering the determined factors above. Companies choose and adjust debt levels positively to their company sizes and liquidity and negatively to their profitability and assets tangibility levels. This is to say, the company increases the level of debts in its capital structure if its size and liquidity level increases and its vice versa. The companies fairly choose and adjust their capital structure in the sense that the larger company tends to employ more debt in its capital structure. Companies employ less debt if companies are profitable and increase the level of debts if the profits of the companies decrease. This shows that the internal financing is preferred to external financing in the sampled companies. Companies do the same for the assets tangibility. The companies with less value of fixed assets tend to increase the level of debt in their capital structures. There is a little validity of the trade-off theory, pecking order theory and agency cost theory in the Tanzanian context. The findings confirm agency cost theory in the Tanzania context but it is not statistically significant. This may be due to the small sample size taken by the researcher.

5. Conclusion and Recommendations

5.1 Conclusion

The research sought to test the validity of capital structure theories in the Tanzanian context. The objectives of the study were guided by two researchable questions tied in two specific objectives. The first specific objective was to examine how Tanzanian non-financial listed companies' characteristics relate to their financial leverages, and the second specific objective, was to identify how Tanzanian non-financial listed companies in Tanzania choose and adjust their strategic financing mix.

The findings of this research contribute towards a better understanding of financing behaviour in Tanzanian companies. Using multiple regression model, data was run into stepwise regression to find the determinants of capital structure decisions in Tanzanian non-financial listed companies. The data collected from the financial statements for the seven years 2006-2012. The six explanatory variables that represent company size, profitability, growth rate, assets tangibility, liquidity and dividend payout were related to financial leverage of the sampled companies.

If the static trade-off theory holds, significant positive coefficients are expected for profitability, assets tangibility, and company size explanatory variables and negative coefficient for

liquidity variable. This finding profiles that there is no strong evidence for validation of the static trade-off theory in Tanzanian context, as evidenced by the coefficients of profitability and assets tangibility variables, which portray negative relationship with financial leverage.

The company size variable has a positive slope, significant at 10% level. This variable confirms to the static trade-off theory in the Tanzanian companies. This implies that large companies with lower profits will have higher debt capacity and will, therefore be able to borrow more and take advantage of any tax deductibility. The liquidity has a positive slope but it is statistically insignificant.

There is a little support for the pecking order theory that predicts significant positive slopes for the growth rate, liquidity, dividend payout, and asset tangibility variables and a negative significant slope for profitability variable. The results suggest that profitability variable confirms to the pecking order theory and assets tangibility does not confirm to this theory, Rajan and Zingales (1995) and Frank and Goyal (2003) which describes the positive relationship between assets tangibility and financial leverage, in the sense that assets tangibility constitutes a form of secured collateral. In other hand, the finding confirms to Grossman and Hart (1982) which suggests that, with high monitoring costs for shareholders of capital outlays for low tangibility of assets companies, there should be a correspondingly high level of debt acting as a cost effective monitoring mechanism. Consequently, this implies a negative relationship. The growth rate, liquidity and dividend payout confirm to this theory but are statistically insignificant.

The agency cost theory predicts a positive significant slope for company size and negative for growth rate and assets tangibility variables. The results suggest that company size is statistical significant at 10% level and confirms to the theory, growth rate variables confirms to agency cost theory but is statistical insignificant. The assets tangibility approves the prediction of this theory.

Profitability and assets tangibility are the key determinants of the capital structure decisions in Tanzanian non-financial listed companies. Profitability variable confirms to the pecking order theory and fails to confirm static trade-off theory in the Tanzanian context. The assets tangibility is the second important determinant in Tanzania. The variable is negatively related to the financial leverage, that is, the higher the assets tangibility in a company implies the less the financial leverage. Companies that have high level of tangible assets are likely to employ less debt in financing their capitals in Tanzania context. This is due to fact that high monitoring costs for shareholders of capital outlays for low tangibility of assets companies, there should be a correspondingly high level of debt acting as a cost effective monitoring mechanism. Consequently, this implies a negative relationship.

5.2 Recommendations

The financing behaviour is a key aspect in the corporate finance, which should be observed in establishing sustainable and profitable companies in Tanzania. Questions such as why, how, when and where to obtain funds are key questions that should be answered in any company. The determinants of the capital structure decisions should guide companies on how to choose and adjust their strategic financing mix. These findings target to equip the investors, directors, managers, academicians and other stakeholders the real facts on financing behavior of the Tanzanian non-financial companies listed at DSE. The findings should lead them to improve their decisions making in their respective areas.

The findings of this research profile that there is a little supports on thrice capital structure theories. Basing on the theoretical and empirical foundations, companies should employ debt financing if their internal funds are not enough to finance financial requirements of their companies (Myers, 1984). Companies with higher growth rate should demand more funds that need external financing, which is debt (Sinha, 1992). The internal financing based on the profitability of the companies improve the dividend payout of the companies that should employ less debt in their capital structures. Ability to pay and collateral strength of companies place companies in a good position of employing debts in their capital structures (Rajan and Zingales, 1995) and (Juan and Yang, 2002). The company that has high value of its assets (large company) should prefer external financing to internal financing.

Basing on these study findings, the profitability and assets tangibility found to be major determinants. The company with high level of profitability employs less debt in its capital structure components and hence does not improve the dividend payout of it company; external financing is an alternative one of the company with higher level of profitability. The company should observe this to avoid unnecessary burden of debts. The use of internal financing should be done with care since reduces the dividend payout of the companies. The unreliable dividends in the company cause the

conflict of interest to rise between the shareholders and managers. This should be observed to safe the shareholders' interests.

The assets tangibility is negatively correlated with the financial leverage. This means that the company with high fixed assets value should employ less debt in its capital structure components and it is vice versa. This is valid if the company has an effective control mechanism in monitoring cost for their shareholders. The company with low level of tangible assets seeks for external source of fund.

The company size and liquidity are the moderate determinants of capital structure decision in Tanzania. They are positively related to financial leverage. The findings suggest that the large and liquidity companies employ more debts in their capital structure components. In due to this finding, companies should be aware of these determinants, the large companies should prefer debt financing to equity financing for tax deductibility benefits. In addition, the companies that have high paying ability should do the same. Basing on these findings companies should consider their internal characteristics in configuring their capital structure so that they will be free of unnecessary burden of debts or high costs of paying shareholders and the result they will improve their profitability and sustainability of their businesses.

This research has employed a case study approach focusing on Tanzanian non-financial companies listed on the Dar Es Salaam stock exchange. The results highlighted general issues, which, to a certain extent, are also valid for companies considering listing on the Dar Ss Salaam stock exchange. Further research with a study based on a survey, particularly with respect to non-listed firms, will provide a stronger base for generalization over a wide range of companies. This research can also be extended by using the same methodological approach in a different setting/country and then comparing the findings. This will generate additional insight on the general development of capital structure theories in developing countries.

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