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DETERMINANTS OF CAPITAL STRUCTURE DECISIONS: EVIDENCE FROM ETHIOPIAN MANUFACTURING PRIVATE LIMITED COMPANIES (PLCs)

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ABSTRACT

The capital structure of a company consists of a particular combination of debt and equity issues to relieve potential pressures on its long-term financing. To examine such issues, many theories have been developed in the literature and they generally focus upon what determinants are likely to influence the so-called leverage decisions of the firms. Among these, the MM theory, trade-off theory, Information Asymmetry Theory and Agency Cost Theory have been said to mainly play a crucial role in identifying and testing the various properties of the leverage decisions. This paper examines theoretically and explores empirically the problem of the Ethiopian- Manufacturing Private Limited Companies (PLCs) capital structure decisions using firm-level panel data and with the aim of understanding which of the capital structure theories are appealing to them. That is, what determines Manufacturing Listed Companies' capital structure? To seek answers to this question, it estimates Manufacturing Private Listed Companies' leverage as a function of six explanatory variables - profitability, tangibility, size, growth, age, and non-debt tax shields - that exhibit a consistent and stable cross-sectional relationship with the leverage of corporate firms. They suggest that some of the insights from modern finance theory of capital structure are portable to Ethiopia in that certain firm-specific factors that are relevant for explaining capital structure in developed economies are also relevant in Ethiopia. Their sample included five years data from 2006/7 – 2010/11 about 33 companies. For analysis purpose descriptive statistics and pooled cross-sectional ordinary least squares (OLS) are used. The findings support the notion that Ethiopian Manufacturing Private Limited Companies' debt/equity choice do matter. The empirical results are consistent with a number of theoretical propositions typically associated with the determinants of debt-equity choice of non-financial firms. Specifically, evidence support that profitability, growth, and age establish negative relationship and the remaining three variables (tangibility, size, and tax-shield) showed positive relationship with capital structure of Ethiopian Private Limited Companies. The study has laid some groundwork upon which a more detailed evaluation of Ethiopian Private Limited Companies could be applied.

KEYWORDS

Agency Cost Theory, Determinants of Capital Structure, , Ethiopian Private Limited Companies, Pecking Order Theory, Trade-off theory.

INTRODUCTION



PERFORMANCE OF THE MANUFACTURING SECTOR

The manufacturing sector constitutes a small portion of the Ethiopian economy. In 2009/10 it contributed about 11% of the GDP, 9.5% of the total employment and 21.8 of export earnings. The sector is dominated by light manufacturing and agro-processing. Food, beverages and tobacco are the most prominent groups in terms of gross value of production, followed in their order of significance by metal and engineering, leather and foot wear, light chemicals, non-metallic minerals, paper and printing, furniture and wood. The total value of production of the manufacturing sector in 2009/10 was about Birr 13 billion.

The manufacturing sector is divided into two size groups: the large and medium scale industries (LMSI) which are predominantly owned by the public sector and the small scale industries (SSI) which are predominantly owned by the private sector. According to the 2003 industry surveys, there are 641 LMSI establishments accounting for about 97% of the total GVP of the manufacturing sector and 2,731 SSI establishments accounting for the remaining 3%. Of the 642 LMSI's 129 establishments are owned by the public sector while the remaining 513 belong to the private sector. Foreign investors own 7.5% of the capital of the private sector industrial establishments. The privatization process currently underway is expected to change the ownership structure in the near future. (http://www.ethiopiainvestor.com/index.php?option=com_content&tasks -Retrieved on September 11, 2011).⁵⁴

Manufacturing Companies are now exposed to greater opportunities than ever for expansion and diversification across the sub-sectors. Ethiopian market is growing rapidly and Ethiopian entrepreneurs are making remarkable progress in various major sub-sectors of the manufacturing industry. Despite its commendable contribution to the Nation's economy, manufacturing private limited companies (MPLCs) faces a number of problems - absence of adequate and timely banking finance, limited capital and knowledge, non-availability of suitable technology, low production capacity, ineffective marketing strategy, lack of identification of new markets, constraints on modernization & expansions, non availability of highly skilled labor at affordable cost, follow-up with various government agencies to resolve problems etc. Raising of adequate financial resources to meet diverse requirements poses the foremost hurdle for MPLCs. The important of finance in the field of small and MPLCs is fundamental as elsewhere; every problem either operation, marketing or the other is in the ultimate analysis is a "financial problem" which is a handicap in becoming more competitive in the national and international markets.

DEFINITION OF A PRIVATE LIMITED COMPANY IN ETHIOPIA

According to Article 212 of the Ethiopian commercial Code Proclamation 280/2002 (as amended), a private limited company is a company whose partners are liable only to the extent of their contributions. The maximum number of the partners is fifty while the minimum is two. The company shall not issue transferable securities. A private limited company shall not undertake banking, insurance, or any business of similar nature.

The company has a minimum share capital of Birr 15,000 which must be paid up on registration. The capital contributed by the partners may include in kind contribution which is subject to valuation. The registered capital is divided into shares. Shares may be transferred among shareholders as provided in the memorandum of association, but they can be traded with third parties only after seeking the approval of shareholders owning at least three quarter of the capital. The company may have one or more managers. They must be individuals appointed by the shareholders, but they need not be shareholders. Although the memorandum of association may provide limitations on a manager's power, these limitations are not binding on third parties.

The appointment of auditors is compulsory if the number of shareholders exceeds twenty.

The name of the private limited company may contain a disclosure of the nature of its activity and must include the words "private limited company". The firm-name and the amount of capital of the company shall appear on all of the company documents, invoices, publications and other papers. Nowadays, most of the companies established in Ethiopia by foreign or domestic investors are private limited companies. For more information on forms of business organizations and their establishment, refer to the Commercial Code of Ethiopia (1960).¹³

BACKGROUND OF THE STUDY

In one way or another, business activity must be financed. Without finance to support fixed assets and working capital requirements, business could not exist. There are three primary sources of finance for companies:

- Cash surplus from operating activities
- New equity funding.
- Borrowing from bank and non-bank sources. Non-bank sources are mainly investors in capital markets who subscribe for bonds and other securities issued by companies.

By taking into account a company's particular circumstances, management should decide what is the most appropriate mix of internal and external funding, and of equity and debt, i.e., how the company should structure the necessary capital to finance its activities.

This study is important since it works on the following issues:

- Deciding the optimal capital structure for a company, over short-term and long-term planning periods.
- Ensuring that funds are always available to meet loan repayment obligations, and that refinancing would be available if required.
- Helping the Private Companies of Ethiopia to determine the appropriate mix of debt and equity in order to maximize its value and minimize its costs.

Firms included in this sample are all those ones listed on Ethiopian Revenue and Customs Authorities (ERCA) Head Office Addis Ababa, Ethiopia. The firms are selected using convenience sampling. There are about 97 MPLCs listed on ERCA. But, we have included only 33 firms in our sample study, covering the period of five years from 2006/7 – 2010/11.

REVIEW OF RELATED LITERATURE

CAPITAL STRUCTURE THEORIES

Capital structure theories developed since the original Modigliani and Miller (1958)³⁷ propositions may be broadly classified in three types; namely static trade-off theory, agency theory and theories based on information asymmetries (pecking order theory). Whilst these theories were developed in the field of corporate finance, they have been profitably employed in private limited companies studies.

TRADE-OFF THEORY

DeAngelo and Masulis (1980)¹⁵ subsequently proposed the static trade-off theory (TOT), whereby the advantage conferred by debt in the form of a decreased tax bill was offset by an increase in business risk. They proposed a theoretical optimum level of debt for a firm, where the present value of tax savings due to further borrowing is just offset by increases in the present value of costs of distress.

In view of this theory, issuing equity means moving away from the optimum and should therefore be considered as bad news. According to Myers (1984)⁴¹, firms adopting this theory could be regarded as setting a target debt-to-value ratio with a gradual attempt to achieve it. Myers, however, suggests that managers will be reluctant to issue equity if they feel it the firm is undervalued in the market. The consequence is that investors perceive equity issues to only occur if equity is either fairly priced or overpriced. As a result investors tend to react negatively to an equity issue and management is reluctant to issue equity. Empirical investigations of the trade-off theory in the PLC literature do not find evidence to support this theory (Michaelas et al., 1999³⁶, Sogorb Mira, 2005⁴⁸).

PECKING ORDER (INFORMATION ASYMMETRY) THEORY

Myers (1984)⁴¹ and Myers and Majluf (1984)³⁹ developed the pecking order theory (POT) based on the premise that 'inside' management are better informed of the true value of the firm than 'outside' investors. These information asymmetries result in varying costs of additional external finance, as potential investors perceive equity to be riskier than debt. They propose that firms seek to overcome problems of undervaluation arising from information asymmetries, preferring to finance investment projects with internal funds in the first instance. When internal equity is exhausted, firms use debt financing before resorting to external equity. Authors state that the POT is even more relevant for the PLC sector because of the relatively greater information asymmetries and the higher cost of external equity for PLCs (Ibbotson et al., 2001)²⁸. Additionally, a common phenomenon in the sector is the desire of firm owners to retain control of the firm and maintain managerial independence (Chittenden et al., 1996¹², Jordan et al., 1998³⁰). These factors suggests that PLC owners source their capital from a pecking order of, first, their "own" money (personal savings and retained earnings); second, short-term borrowings; third, longer term debt; and, least preferred of all, from the introduction of new equity investors, which represents the maximum intrusion (Cosh and Hughes, 1994)¹⁴. Empirical evidence supports the applicability of the POT in explaining the financing of PLCs (Chittenden et al., 1996¹², Michaelas et al., 1999³⁶, Berggren et al., 2000⁶, Lopez-Gracia and Aybar-Arias, 2000³⁴, Sogorb Mira, 2005⁴⁸, Ou and Haynes, 2006⁴²). These studies emphasize that small firms rely on internal sources of finance and external borrowing to finance operations and growth, and only a very small number of firms use external equity. A number of studies report that firms operate under a *constrained* pecking order, and do not even consider raising external equity (Holmes and Kent, 1991²⁵, Howorth, 2001²⁶).

AGENCY COST THEORY

- Jensen and Meckling (1976)²⁹ outlined a number of potentially costly principal-agent relationships in publicly quoted corporations that may arise because the agent does not always conduct business in a way that is consistent with the best interest of the principals. The firm's security holders (debt-holders and stockholders) are seen as principals and the firm's management as the agent, managing the principals' assets. Whilst a number of these relationships are relevant for PLCs, the primary agency conflict in PLCs is generally not between owners and managers, but between inside and outside contributors of capital (Hand et al., 1982)²². Potential agency problems in PLCs are exacerbated by information asymmetries resulting from the lack of uniform, publicly available detailed accounting information. The primary concern for outside contributors of capital arises from moral hazard, or the possibility of the PLC owner changing his behavior to the detriment of the capital provider after credit has been granted. This is because the firm owner has an incentive to alter his behavior *ex post* to favor projects with higher returns and greater risk. Debt providers seek to minimize agency costs arising from these relationships by employing a number of lending techniques (Baas and Schrooten 2006)⁴. The pervasiveness of the use of collateral is confirmed by a number of empirical studies, for example; Black et al. (1996)³ find that the ratio of loan size to collateral exceeds unity for 85 percent of PLCs loans in the UK; Berger and Udell (1990)⁵ report that over 70 percent of all loans to PLCs are collateralized. Even for firms with positive cash flow financial institutions typically require collateral (Manove et al., 2001)³⁵.

DETERMINANTS OF CAPITAL STRUCTURE

Both theoretical and empirical capital structure studies have generated many results in an attempt to explain the determinants of capital structure. As a result of these studies, some broad categories of capital structure determinants have emerged. The main determinants of capital structure tested include profitability, size, growth opportunity, tangibility, age and tax shield effects. Titman and Wessels (1988)⁵⁰, and Harris and Raviv (1991)²³, however, point out that the choice of suitable explanatory variables is potentially controversial.

PROFITABILITY

There are no consistent theoretical predictions on the effects of profitability on leverage. From the point of view of the trade-off theory, more profitable companies should have higher leverage because they have more income to shield from taxes. The free cash flow theory would suggest that more profitable companies should use more debt in order to discipline managers, to induce them to pay out cash instead of spending money on inefficient projects. However, from the point of view of the pecking-order theory, firms prefer internal financing to external. So, more profitable companies have a lower need for external financing and therefore should have lower leverage. Most empirical studies observe a negative relationship between leverage and profitability, for example the work of (Rajan and Zingales, 1995)⁴⁶, (Huang and Song, 2002)²⁷, (Booth et al., 2001)⁹, (Titman and Wessels, 1988)⁵⁰, (Friend and Lang, 1988)¹⁹ and (Kester, 1986)³².

SIZE

From the theoretical point of view, the effect of size on leverage is ambiguous. As Rajan and Zingales (1995, p.1451)⁴⁶ claim: "Larger firms tend to be more diversified and fail less often, so size (computed as the logarithm of net sales) may be an inverse proxy for the probability of bankruptcy. If so, size should have a positive impact on the supply debt. However, size may also be a proxy for the information outside investors have, which should increase their preference for equity relative to debt."

Also empirical studies do not provide us with clear information. Some authors find a positive relation between size and leverage, for example Huang and Song (2002)²⁷, and Rajan and Zingales (1995)⁴⁶, and (Friend and Lang, 1988)¹⁹. On the other hand, some studies report a negative relation, for example (Kester, 1986)³², (Kim-Sorensen, 1986)³³ and (Titman and Wessels, 1988)⁵⁰. Moreover, the results are very often weak as far as the level of statistical significance is concerned.

GROWTH OPPORTUNITIES

According to Myers (1977)⁴⁰, firms with high future growth opportunities should use more equity financing, because a higher leveraged company is more likely to pass up profitable investment opportunities. As Huang and Song (2002, p.9)²⁷ claim: "Such an investment effectively transfers wealth from stockholders to debtholders". Therefore a negative relation between growth opportunities and leverage is predicted. As market-to-book ratio is used in order to proxy for growth opportunities, there is one more reason to expect a negative relation – as Rajan and Zingales (1995, p. 1455)⁴⁶ point out: "Theory predicts that firms with high market-to-book ratios have higher costs of financial distress, which is why we expect a negative correlation."

Some empirical studies confirm the theoretical prediction, such as (Rajan and Zingales, 1995)⁴⁶, (Kim and Sorensen, 1986)³³ or (Titman and Wessels, 1988)⁵⁰ reports. However, for example, Kester (1986)³² and Huang and Song (2002)²⁷ demonstrate a positive relation between growth opportunities and leverage.

TANGIBILITY

It is assumed, from the theoretical point of view, that tangible assets can be used as collateral. Therefore higher tangibility lowers the risk of a creditor and increases the value of the assets in the case of bankruptcy. As Booth et al. (2001, p.101)⁹ states: "The more tangible the firm's assets, the greater its ability to issue secured debt and less information revealed about future profits." Thus a positive relation between tangibility and leverage is predicted.

Several empirical studies confirm this suggestion, such as Rajan and Zingales, (1995)⁴⁶, and Titman and Wessels, (1988)⁵⁰ find. On the other hand for example Booth et al., (2001)⁹ and Huang and Song, (2002)²⁷ experience a negative relation between tangibility and leverage.

AGE OF THE FIRM

Age of the firm is a standard measure of reputation in capital structure models. As a firm continues longer in business, it establishes itself as an ongoing business and therefore increases its capacity to take on more debt; hence age is positively related to debt. Before granting a loan, banks tend to evaluate the credit worthiness of firms as these are generally believed to pin high hopes on very risky projects promising high profitability rates. In particular, when it comes to highly indebted companies, they are essentially gambling their creditor's money. If the investment is profitable, shareholders will collect a significant share of the earnings, but if the project fails, then the creditors have to bear the consequences (Myers, 1977).⁴⁰ Hall et al. (2004)²¹ agreed that age is positively related to long-term debt but negatively related to short-term debt. Esperanca et al. (2003)¹⁷, however, found that age is negatively related to both long-term and short-term debt.

NON-DEBT TAX SHIELDS

Other items apart from interest expenses, which contribute to a decrease in tax payments, are labeled as non-debt tax shields (for example the tax deduction for depreciation). According to Angelo and DeMasulis (1980, p.21)¹⁵: "Ceteris paribus, decreases in allowable investment related tax shields (e.g., depreciation deductions or investment tax credits) due to changes in the corporate tax code or due to changes in inflation which reduce the real value of tax shields will increase the amount of debt that firms employ. In cross-sectional analysis, firms with lower investment related tax shields (holding before-tax earnings constant) will employ greater debt in their capital structures." So they argue that non-debt tax shields are substitutes for a debt-related tax shield and therefore the relation between non-debt tax shields and leverage should be negative.

Some empirical studies confirm the theoretical prediction, for example Kim and Sorensen (1986, p.140)³³ declare: "DEPR has a significantly negative coefficient. This is consistent with the notion that depreciation is an effective tax shield, and thus offsets the tax shield benefits of leverage." A negative relation between non-debt tax shields and leverage is also found by (Huang and Song, 2002)²⁷ and (Titman-Wessels, 1988)⁵⁰. However, for example Bradley et al. (1984)¹⁰ observe a positive relationship between non-debt tax shields and leverage.

EMPIRICAL STUDIES

Allan J. Taub (1975)¹, attempted to examine the factors influencing the firm's choice of a debt-equity ratio. He dealt explicitly with the relationship between overall debt equity ratio of the firm and its choice of new financing.

The variables were:

- The difference between the expected future return on firm's capital and pure rate of interest
- The uncertainty of the future earning of the firm
- The size of the firm
- Tax rate, and
- Firm's period of solvency, and the debt equity ratio as dependent variable.

He investigated the relationship between variables for a total of 89 randomly chosen firms, for ten years. The ten year observations were from 1960 – 1969. Two statistics were used: the likelihood –ratio and t – test. The empirical results show that differences between return to the firm and long term rate of interest and size had a positive influence on debt equity ratio. Results for the remaining variables were less than satisfactory.

Fakher, et al. (2005)¹⁸, provided evidence of capital structure theories pertaining to developed countries and examined capital structure with reference the Libyan business environment. The dependent variable was leverage ratio and the independent variables were size, tangibility, growth, opportunities and profitability. Their samples include five year data from 1995 – 1999 about 55 companies. The companies selected as a sample were from both public and private sectors. To test the relationships between the level of debt and their explanatory variables they used ordinary least square regressions. The results indicated that private companies tended to have a higher average growth rate and tangible assets than public ones. The private companies had higher levels of short-term debt than public companies, meaning that private companies had higher average debt ratios than the public ones. The level of long term debt was very similar for both private and public companies. The tangibility and growth variables had a positive correlation with short term debt, and a negative correlation with long term debt. Profitability and size had a negative correlation with short term and total debt ratios. This implies that growing companies and companies with higher levels of tangible assets tend to use short term debt rather than long term and large and profitable companies tend to use less debt overall.

Over the past 50 years, much of the capital structure research has advanced theoretical models to explain the capital structure pattern and also to provide empirical evidence concerning whether the theoretical models have explanatory power when applied to the real business world. The focus of both academic research and practical financial analysis has been on those large corporations with publicly traded debt and equity securities that dominate economic life throughout the developed world.

Despite some significant contributions to the general perception of the various intricacies about corporate 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 electric, prevalent and non-controversial view, with respect to the contention surrounding the corporate capital structure theory, is Myer's argument that it is a *puzzle*, mirrored by Kamath (1997)³¹ *enigma*, Stiglitz (1989)⁴⁹ *dilemma*, or, as suggested in The Economist (January 6th, 1996, p.61), a *mystery*. It appears that (1) we are still lacking a comprehensive theory to explain how firms decide about their strategic financing; and (2) yet we cannot unambiguously specify the relation between capital structure choice and firm value.

Theoretical discourse on the capital structure of the firm originates from the irrelevance propositions of Modigliani and Miller (1958)³⁷, stating that the capital structure of the firm was independent of its cost of capital, and therefore of firm value. The propositions of 1958 were based on a number of unrealistic assumptions, and in 1963 Modigliani and Miller³⁸ introduced taxes into the model. This led to the development of the trade-off theory of capital structure, whereby the tax-related benefits of debt were offset by costs of financial distress. Alternative approaches, based on asymmetric information between 'inside' managers and 'outside' investors, include signaling theory (Ross, 1977)⁴⁷ and the pecking order theory (Myers, 1984⁴¹, Myers and Majluf, 1984³⁹). The latter postulates that when internal sources of finance are not sufficient for investment needs the firm has a preference to raise external finance in debt markets, with equity issues the least preferable source. A further approach considered a nexus of relationships, characterized as principal-agent relationships, and the potential agency costs on the firm (Jensen and Meckling, 1976)²⁹.

While the majority of the research results has been derived from the experiences of the developed economies that have many institutional similarities (Hodder and Senbet, 1990²⁴; Rajan and Zingales, 1995⁴⁶, Wald, 1999⁵²; Ozkan, 2001⁴³; Bevan and Danbolt, 2002⁷), little work has been done to further our knowledge on capital structure within developing countries that have different institutional structures.

Booth et al. (2001)⁹ provided the first empirical study to test the explanatory power of capital structure models in developing countries. It investigated whether they had more general applicability. The results were somewhat skeptical of these premises. They provide evidence that firms' capital choice decisions in developing countries were affected by the same variables as they were in developed countries. Nevertheless, there were persistent differences of institutional structure across countries indicating that specific country factors were at work. Their findings suggest that although some of the insights from modern finance theories are portable across countries, much remains to be done to understand their impact of different institutional features on capital structure choices.

In this paper we investigate the applicability of theories of capital structure in a sample of 33 "Manufacturing Private Limited Companies" in Ethiopia pertaining to developing country by empirically testing the effect of firm characteristics on sources of debt and equity employed and examines the impact of the lack of the secondary capital market. By comparing the capital structures of selected manufacturing PLCs, this study is relevant in the Ethiopian context given the important role the manufacturing industry is expected to pay as the engine of growth in a newly developing economy. Since this is the first examination of its type in Ethiopia manufacturing firms, the aim of this study is to develop some preliminary groundwork that a more detailed evaluation could be based. It is hoped to answer the question whether, and how closely, does the determinants of Ethiopian capital structure support the finance theory?

More specifically:

1. Would capital structure managerial decision making provide empirical support for extant theories?
2. Which are the potential determinants of debt/equity managerial policies in Ethiopian manufacturing PLCs?
3. Can we uncover the same patterns for manufacturing PLCs that have been identified for non-finance firms?

Therefore, this paper fills the stated gap by identifying the factors that determine capital structure decision and providing additional facts to the theory of capital structure relevancy evidencing Manufacturing Firms in Ethiopia.

The remainder of the paper is organized as follows: section two provides a review of related literature on capital structure. The study design, data source and collection, sampling design, methods of data analysis, variables, hypotheses, and model specification are described in section three and section four presents the discussion and empirical results. Section five concludes the discussion and provides some recommendations on research implication.

METHODOLOGY OF THE STUDY

STUDY DESIGN

This study is an explanatory research following a quantitative approach with a study design of case study finding evidence for capital structure determinants in Private Limited Companies (PLCs) in Ethiopia.

DATA SOURCE AND COLLECTION METHODS

The source for the data is entirely from secondary sources i.e., data is collected from the Audited financial statements: Balance Sheets and Income statements - submitted to Ethiopian Revenues and customs Authority at Addis Ababa head office for tax purpose. This is done in an attempt to avoid the risk of distortion in the quality of data that could be obtained directly from the respective company's archives and due to the operational location differences in the companies under investigation.

The criteria for inclusion in the sample will be holding 5 years data from 2006/7-2010/11. The data is obtained and used in the study as a basis for analysis by merging all companies' balance sheet and income statement information during the study period.

SAMPLING DESIGN

The sample frame employed for this study is ERCA list of firms. These firms are classified as having at least capital investment of between 2006/7 to 2010/11 Year. The list was substantially refined and modified to obtain a list of firms consistent with the aims of the study and within the parameters the Ethiopia definition of a PLC. Financial firms were left out, as their capital structure may be determined by Commercial Bank of Ethiopia (CBE) requirements. An advantage of this sampling frame is that it is not confined to particular sectors or geographical area, although it is not representative of the total Ethiopia PLC population in the strictest sense, because eligible firms representing a sample size of 31.96 percent surviving firms.

The study takes a sample size of 33 PLCs. The companies selected as a sample were from both public and private sectors. A stratified sampling design is followed where sample from each stratum is selected using convenient sampling technique. The constructed data set results in a panel database of 165 cases for 33 companies.

The first criteria used in selecting sample units to be included in the study are holding a complete five years financial statement data. The researchers then made two stage restriction criteria to arrive at a definite study population. Firstly, firms belonging to bank, insurance or other financial industries are deliberately excluded from the analysis because their capital structure is considerably controlled by National Bank of Ethiopia (NBE). Subsequently, the researcher made the second level sample restriction that firms with missing financial data for a period covering six years from 2006/7-2010/11 are also excluded from the study in order to examine the trend of firms financing decision. The data pertinent to year 2005/6 is used only to compute the variable growth for the year 2006/7 of all observation, i.e. percentage change in total asset. After the researchers investigate the financial statement of 97 manufacturing Private Limited Companies from PLCs taxpayers' Head Office in Addis Ababa, only 31 firms (see Appendix A – Table 6) that satisfy the above criterion were included in the sample study.

METHOD OF DATA ANALYSIS

To test the hypothesis, the relationships between the level of debt and eight explanatory variables representing profitability, size, growth, tangibility, age and non-debt tax shields.

STATA SE 10 software application will be used and a test of model accuracy is made. The above six independent variables are regressed against dependent variable as expressed in Long-Term Debt Ratio. Descriptive statistical tools such as mean and standard deviations were applied to describe relevant information about each variable. In addition the correlation analysis was employed to measure the degree of relationship between two variables.

VARIABLES, HYPOTHESES AND MODEL SPECIFICATION

In order to analyze the determinants of capital structure in Ethiopian Manufacturing Private Limited Companies, the selection of dependent and independent variables is primarily guided by the result of the previous empirical studies and the availability of data. Thus, the following seven key variables were identified: leverage, profitability, size, growth, tangibility, age, and non-debt tax shield.

DEPENDENT VARIABLE

The dependent variable used in this study is leverage. Leverage can be measured by using different financial ratios. However, as per the definition of capital structure, which is the mix of long term sources of finance, the leverage variable used in this study measured as the ratio of long-term debt to total assets.

INDEPENDENT VARIABLES

The independent variables include profitability, size, growth, tangibility, age, and non-debt tax shield. The entire variable for this study is based on book value in line with the argument by Myers (1984)⁴¹ that book values are proxies for the value of assets in place.

DESCRIPTION OF VARIABLES

A key issue in testing which factors are associated with leverage has been to examine whether book leverage (debt divided by total assets) or market leverage (debt divided by the sum of book debt plus the market value of equity) should be used.

TABLE 3.1: DESCRIPTION OF VARIABLES

No.	VARIABLE	
	Dependent	Description
1	Leverage =Long term Debt Ratio	Long Term Debt/Total Asset
	Independent	Description
1	Profitability	Operating Income/Total Sales
2	Size	Natural Logarithm Of Total Asset
3	Growth	Percentage Change In Total Assets
4	Tangibility	Fixed Assets / Total Asset
5	Age	Number of Years
6	Non-Debt Tax Shields	Depreciation Expense /Total Assets

Source: Mathematical and financial formula.

Early empirical work tended to focus on book leverage. Myers (1977)⁴⁰ argued that managers focus on book leverage because debt is better supported by assets in place than it is by growth opportunities. Book leverage is also preferred because financial markets fluctuate a great deal and managers are said to believe that market leverage numbers are unreliable as a guide to corporate financial policy. Taking the above arguments as a springboard, the dependent and independent variables depicted on Table 3.1 above are scaled by book value measures.

HYPOTHESES FORMULATED

Consistent with the extant literature, the following six hypotheses were developed to test the relationship between the level of leverage and the independent variables.

(1). Profitability

In relation with Manufacturing Private Limited Companies (MPLCs) in Ethiopia, the following hypotheses are formulated based on rationale below.

If earning distributions are taxed at the personal level, there will be a tax advantage associated with retaining equity that lead more profitable firms to reduce their debt ratios. Another argument for a negative relation between profitability and leverage is that, firms with market power prefer keeping their leverage at low levels to deter or discourage potential entrants into their lines of business.

Hypothesis 1: There is negative relationship between profitability and leverage of a firm

(2). Size

In connection with PLCs in Ethiopia, the following hypothesis is formulated based on the following rational. Size is likely to be positively correlated with leverage, since direct bankruptcy costs appear to constitute a larger proportion of a firm's value as that value decreases. It is also the case that relatively large firms in tend to be more diversified, have greater access to debt markets and less prone to bankruptcy therefore there is a tendency of being more leveraged as size increases.

Hypothesis 2: There is strong positive relationship between size and leverage of a firm.

(3). Growth

In connection with manufacturing PLCs in Ethiopia, the following hypothesis is formulated based on rational below.

Growing companies' funding pressures for investment opportunities is likely to exceed their retained earnings (funds generated inside the firm) and according to the pecking order theory growing companies are likely to choose debt rather than equity.

Hypothesis 3: There is significant negative relationship between growth and leverage of a firm.

(4). Tangibility

The value of tangible assets is associated with higher debt capacity. Myers (1984)⁴¹ suggests that issuing debt secured by collateral may reduce the asymmetric information related costs in financing. Hence, debt secured by collateral may mitigate asymmetric information related cost in financing. Therefore, a positive relationship between tangibility and financial leverage may be expected. In alliance with manufacturing PLCs in Ethiopia, the following hypothesis is formulated based on the rational stated above.

Hypothesis 4: There is positive relationship between tangible assets and leverage of a firm

(5). Age

In connection with manufacturing PLCs in Ethiopia, the following hypothesis is formulated based on the rational below.

As firms became aged, the long years of track record will enable them to easily convince creditors and also will expertise in finding alternative credit source cost effectively or in favorable terms while going for debt capital. This induces a positive relationship between leverage ratios and age of the firm.

Hypothesis 5: There is a positive relationship between leverage ratios and age.

(6). Non-debt tax shields

Tax deductions for depreciation and investment tax credits are substitutes for the tax benefits of debt financing. As a result, firms with large non-debt tax shields relative to their expected cash flow include less debt in their capital structures. In association with manufacturing PLCs in Ethiopia, the following hypothesis is formulated based on the rational stated above.

Hypothesis 6: There is a negative relationship between leverage ratios and NDTs.

MODEL SPECIFICATION

The hypotheses formulated in section III-5 above were empirically tested using multivariate ordinary least square (OLS) regression model, employing long-term debt (leverage) and firm characteristics as dependent and independent variables respectively. The model tested for each of the six independent variables in the selected manufacturing PLCs in Ethiopia is represented by:

Leverage = Function of (Profitability, Size, Growth, Tangibility, Age, Non-debt Tax-shield) ----- eq. 1

Consequently, the specified model appears as follows:

Leverage = $\beta_0 + \beta_1[\text{PROF}] + \beta_2[\text{SIZE}] + \beta_3[\text{GROW}] + \beta_4[\text{TANG}] + \beta_5[\text{AGE}] + \beta_6[\text{NDTS}] + e_i$ ----- eq. 2

Where:

- β_1 = Coefficient of Intercept
- β_2 = Coefficient of Profitability,
- β_3 = Coefficient of Size,
- β_4 = Coefficient of Growth,
- β_5 = Coefficient of Tangibility,
- β_6 = Coefficient of Age, and
- β_7 = Coefficient of Non-debt tax shields,
- e_i = The Error Term

DISCUSSIONS AND FINDINGS**DESCRIPTIVE STATISTICS**

Table 3.2 depicts the descriptive statistics of the sample firms including the number of observations; mean distribution, standard deviation, minimum and maximum values of leverage and six explanatory variables for 33 sample manufacturing PLCs for the study period of 2006/7-2010/11.

TABLE 3.2 DESCRIPTIVE STATISTICS OF STUDY VARIABLES

Variable	Obs	Mean	Std. Dev.	Min	Max
LEV	165	0.139989	0.202401	0.279	0.597
PROF	165	0.256149	0.654173	0.313	0.724
SIZE	165	15.3217	1.834576	12.81764	18612
GROW	165	0.135891	0.249289	0.018	0.682
TANG	165	0.523431	1.168673	.357	.724
AGE	165	13.142861	9.324411	11	35
NDTS	165	0.082894	0.84039	0.0256	0.358

Source: STATA output from financial statements of sample companies, 2006/7-2010/11

An appraisal of Table 3.2 above exhibits several facts. In the first place, the average leverage proportion in financing the total asset of manufacturing PLCs in Ethiopia is 13.99%. Which means 86.01% of the total asset invested is left as a buffer being from short-term debt and equity claim. In other words, 13.99 per cent of each Birr 1 asset in the balance sheet is obtained from leverage. The standard deviation 20.24% indicates a wide variation in leverage ratio among sample companies. The minimum and the maximum value of leverage ratio are 27.9% and 59.7% respectively.

The average profitability of firms included in the study, when measured in terms of return on assets (ROA), the ratio of operating income (EBIT) to total asset, accounted for 25.61% per annum. The standard deviation 65.42% indicates the existence of large variation in the profitability among the sampled firms. The maximum attainable average profit is 72.4% where as the lowest record average profitability rate is 31.3%.

The average size, the mean of the natural logarithm of total assets (Size) over the study period indicates that the average manufacturing PLCs in Ethiopia was approximately Birr 12,245,780 in terms of asset holding, ranging from Birr 850,962 minimum value to a Birr 1,145,818,270 maximum value.

The growth of assets over the five years study period has recorded an average rate of approximately 13.58% where all the companies score in between positive growth or asset acceleration of 1.08% and a highest growth score of 68.2%.

The fixed asset to total asset ratio (tangibility) of the sample organizations ranges from 35.7% to 72.4%. The mean fixed asset to total asset ratio of 52.34% is the reflection of the fact that, manufacturing PLCs in Ethiopia relatively invest evenly on fixed and current assets at a rate of 52.34% and 47.66% respectively with a slight inclination to investing more on current asset.

Table 3.4 also showed that the firms included in the study have an age distribution between 11 years and 35 years time span and the mean age is approximated as 13 years. This result can be disclosed as; the largest track record of operation is 35 years while the least achieved track record among the sample firms is 11 years of operating experience.

As far as the non-debt tax shield is concerned, the average tax shields enjoyed by manufacturing PLCs in Ethiopia from sources other than interest are found to be 9.29% of the total assets invested. The ceiling of the non-debts tax shields are 35.8% of the total assets and the lowest coverage on the other hand is 2.56% of the total assets.

REGRESSION ANALYSIS

We ran cross-sectional ordinary least squares (OLS) regressions using data provided by the financial statements covering a period of five years from 2006/7 to 2010/11. We investigate the influence of the independent variables on the financing decision by estimating a regression equation and examining how the observed relationships change in the model estimates. Results of the OLS regression analyses are statistically significant for all six dependent variables, and are presented in Table 3.4.

Correlation among independent variables may pose problems in interpreting regression coefficients. This is not a problem of model specification, but of data (Hair et al., 2006)²⁰. Pearson product moment coefficients presented in Table 3.3 indicate the magnitude and direction of the association between the independent variables. A number of independent variables are correlated at the 0.01 level of significance, and in these instances we reject the null hypothesis that there is no association between the variables. The moderate magnitude of the correlations does not suggest a high degree of first-order collinearity among the independent variables.

TABLE 3.3: PEARSON CORRELATION COEFFICIENTS

	PROF	SIZE	GROW	TANG	AGE	NDTS
PROF	1.000					
SIZE	0.268*	1.000				
GROW	0.380*	-0.378*	1.000			
TANG	-0.377*	0.079	-0.246*	1.000		
AGE	0.195*	0.234*	0.211*	0.057	1.000	
NDTS	-0.158*	-0.161	0.056	0.034	-0.221*	1.000

Source: STATA data summary statistics result

Note: *Correlation is statistically significant at the 99% level of confidence (2-tailed)

Although the magnitude of correlation coefficients is moderate, a lack of high correlation values does not ensure absence of collinearity, as the combined effect of two or more independent variables may cause multicollinearity. The conventional measures for multicollinearity are tolerance and the variance inflation factor (VIF). The tolerance value is the amount of an independent variable's predictive ability that is not predicted by the other independent variables in the equation (Hair et al, 2006)²⁰. A tolerance value of 1.00 indicates that a variable is totally unaffected by other independent variables. Theoretically, a VIF greater than 10 may suggest that the concerned variable is multicollinear with others in the model and may need to be excluded from the model.

Analysis of the tolerance values and VIFs in Table 3.4 below indicates that multicollinearity does not pose a problem. Results of the OLS regression analyses are statistically significant for all six dependent variables.

Brief discussions of the summary regression results show that the statistically significant negative relationship between profitability of the firm and leverage reflects the importance of equity in funding firms with low turnover. Additionally, grow and age are significantly negatively related with leverage, suggesting that firms with more growth opportunities will have less debt as there is less need for the disciplining role of debt. Age which is negatively correlated with leverage suggests that the older the firm is, the more time it has to build up its internal resources from profitable trading. The results also show that size, tangibility and non-debt tax shield have positive correlation with leverage. Therefore, the selected independent variables can explain the dependent variable with considerable degree.

TABLE 3.4: ESTIMATED ORDINARY LEAST SQUARES REGRESSION COEFFICIENTS

	Debt LTD	Tolerance	Collinearity Statistics VIF
Independent Variables	Model β		
PROF	-0.758*** (-1.80)	0.832	1.68
SIZE	0.416* (1.67)	0.726	1.37
GROW	-0.610** (-0.76)	0.695	1.38
TANG	0.408 (0.346)	0.714	1.52
AGE	-0.324 (0.220)	0.638	1.21
NDTS	0.265* (-5.19)	0.854	1.15
Constant	.038 (.490)		
Adjusted R ²	61.2		
"F" Value	5.4		
Significance of "F"	.000		

Source: STATA data summary statistics result

Note: t statistics in parentheses. ***, **, * statistically significant at the 99%, 95% and 90% level of confidence respectively

The overall explanatory power of the model, as can be vividly seen on Table 3.4 from the R square value, is 61.2%. This is an indication that 61.2% of the change in leverage is successfully explained by the selected firm specific factors (profitability, size, growth, tangibility, age, and non-debt tax shield) or independent variables included in the model. However, the remaining 38.8% changes in leverage are caused by other factors that are not included in the model.

HYPOTHESIS TESTING EMPIRICAL RESULTS

Hypothesis testing is conducted on the basis of the relationship of dependent variable leverage and independent variables (the above discussed regression results) with reference to previous empirical studies and the three capital structure theories namely trade-off theory, pecking order theory and agency cost theory. A comparison of the direction in both hypothesized and actual relationships between dependent and independent variables is presented in Table 3.5.

TABLE 3.5: PREDICTED, THEORETICAL AND ACTUAL SIGN OF THE COEFFICIENT OF INDEPENDENT VARIABLES

Independent Variables	Definition	Predicted Sign	Theoretical signs of independent variables based on capital structure theories			Actual Sign
			TOT	POT	ACT	
Profitability	Ratio of operating income to total asset	-	+	-	?	-
Size	Natural logarithm of total assets	+	+	+	+	+
Growth	Percentage increase in total assets	-	-	+	-	-
Tangibility	Ratio of fixed assets to total assets	+	+	+	+	+
Age	Number of years stay in the business	+	+	-	?	-
Non-Debts Tax Shields	Ratio of depreciation to total assets	-	-/+	?	?	+

Source: STATA regression result based on the financial statements of sample companies, 2006/7-2010/11, & capital structure theories.

NOTES:

- "TOT" indicate Trade-Off Theory, "POT" signify Pecking-Order Theory and "ACT" denotes Agency Cost Theory
- "+" indicate that a positive relationship between the independent variable and leverage
- "-" indicate that a negative relationship between the independent variable and leverage
- "?" indicate that the available literature does not indicate a clear outcome for the relationship

The first research hypothesis was postulated in order to assess the relationship between profitability and leverage of a firm based on pecking-order theory on the grounds that there is significant negative relationship between profitability and leverage. In conformity with the hypothesis the actual sign of the coefficient of profitability variable are negatively and strongly relate with leverage at 1% level of significance. This fact provide empirical support for the first hypothesis and provide evidence that, citrus paribus the more the share companies generate profit the less they uses leverage in financing their fund requirement. They prefer internal financing to external debt securities and vice versa. This result is consistent with the findings made by Titman and Wessels (1988)⁵⁰, Rajan and Zingales (1995)⁴⁶ and Bevan and Danbolt (2002)⁷ in developed countries, Booth *et al*, (2001)⁹, Pandey (2001)⁴⁴, Wiwattanakantang (1999)⁵³ and Chen (2004)¹¹ in developing countries.

The second research hypothesis formulated related to financing decision was that there is significant positive relationship between leverage and size of a company based on the combined prediction of trade-off, pecking-order and agency cost theory. In agreement to the hypothesis, Table 3.3 of regression result exhibits statistical evidence that the size is positively related to leverage of large taxpayer manufacturing PLCs in Ethiopia at 10% level of significance. Thus, hypothesis two is accepted. This finding suggests that large firms have the capacity to employ more debt on their capital structure than equity related securities, perhaps because they can hold a greater bargaining power towards creditors. The finding of Wiwattanakantang (1999)⁵³, Al-Sakran (2001)², Pandey (2001)⁴⁴, Booth *et al*, (2001)⁹, and Huang and Song (2002)²⁷ shows a significant positive relationship between leverage ratio and size of a firm in developing countries.

Research hypothesis third predicted that significant negative relationship exists between growth and leverage. In agreement with the research hypothesis, the regression result in Table 3.4 exhibit negative relationship between growth and leverage as suggested by trade-off theory and agency cost theory. Even though the beta coefficient shows the hypothesized theoretical relation between growth and leverage ratio, this is statistically insignificant. This can be interpreted as growth variable does not explain the variation in the leverage ratio and is found to be insignificant factor to decide the capital structure of manufacturing PLCs in Ethiopia.

A significant positive relation between tangibility and leverage of a firm was observed in Table 3.4 of regression result for the tangibility variable. It gives a balanced evidence for the fourth research hypothesis and three arenas of capital structure theories since all the theories expect a positive relation between leverage and tangibility. This indicates that firms with more tangible assets have a greater ability to secure debt and collateral value is found to be the major determinant of the level of debt financing for manufacturing PLCs in Ethiopia. In consistency with this study, the findings of Attaullah and Sufiullah (2007)³ study in Pakistan, the work of Wiwattanakantang (1999)⁵³ in Thailand, the examination of Dilek, *et al*. (2009)¹⁶ for Turkish firms, the study of Um (2001)⁵¹ in South

Korea, Titman and Wessels (1988)⁵⁰ and Rajan and Zingales (1995)⁴⁶ study in developed countries reveals a positive relationship between tangibility and leverage.

Research hypothesis five was postulated to estimate the relationship between age and leverage based on pecking order theory. The regression result in this study rejects the research hypothesis by providing empirical evidence that age variable significantly and negatively impact on leverage and this result is confirms with trade-off theory and the findings of Esperanca, et al. (2003)¹⁷. This gives a meaning that at the initial stage of operating years; share companies raise more money from debt related sources. While, as companies stay in business and get more experience they redirect their financing gears towards equity schemes.

The sixth research hypothesis was formulated in order to assess the relationship between non-debts tax shields and leverage of a firm based on trade-off theory on the premises that there is significant negative relationship between non-debts tax shields and leverage. Beta coefficient associated with non-debts tax shields appears to have a significant positive relation with firm leverage. This leads to reject the fourth hypothesis that non-debts tax shields acts as an inverse proxy for the leverage of a firm. One of the possible explanations of the sign of this effect could be that tax deduction for depreciation is not substitutes for the tax benefits of debt financing. Therefore share companies with a large non-debt tax shield are likely to be more leveraged. The positive impact of non-debt tax shield on leverage is in favor of the results of many empirical studies such as Bradley *et al.* (1984)¹⁰ and Rafiu and Akinlolu (2008)⁴⁵ from Nigeria firms.

CONCLUSION

The capital structure of a company consists of a particular combination of debt and equity issues to relieve potential pressures on its long-term financing. To examine such issues, many theories have been developed in the literature and they generally focus upon what determinants are likely to influence the so-called leverage decisions of the firms. Among these, the MM theory, Trade-off Theory, *Information Asymmetry Theory*/*Pecking Order Theory* and *Agency Cost Theory* have been said to mainly play a crucial role in identifying and testing the various properties of the leverage decisions. In line with the theoretical contributions of these approaches briefly stated in this paper, we have tried to define the fundamentals underlying these theories and evaluates whether some a priori assumed determinants of capital structure decisions can be related to the leverage parameters of interest related to Manufacturing private Limited Companies (MPLCs) in Ethiopia examined in this paper. For this purpose, it estimates Manufacturing Private Listed Companies' leverage as a function of six explanatory variables - profitability, size, growth, tangibility, age, and non-debt tax shields - that exhibit a consistent and stable cross-sectional relationship with the leverage of manufacturing private limited corporate firms. Their sample included five years data from 2006/7 – 20010/11 about 33 companies. For analysis purpose descriptive statistics and pooled cross-sectional ordinary least squares (OLS) are used.

The findings support the notion that Ethiopian Manufacturing Private Limited Companies' debt/equity choice do matter. The empirical results are consistent with a number of theoretical propositions typically associated with the determinants of debt-equity choice of non-financial firms. Specifically, evidence support that Profitability, Growth and Non-debt tax shield establish negative relationship and the remaining three variables (Tangibility, Size, and Age) showed positive relationship with capital structure of Ethiopian Private Limited Companies. The overall explanatory power of the model, as can be vividly seen on Table 3.4 from the R square value, is 61.2%. This is an indication that 61.2% of the change in leverage is successfully explained by the selected firm specific factors (profitability, size, growth, tangibility, age, and non-debt tax shield) or independent variables included in the model. However, the remaining 38.8% changes in leverage are caused by other factors that are not included in the model.

The results of the empirical study suggests that some of the insights from the modern finance theory are portable to the Ethiopia in that certain firm specific factors that are relevant for explaining capital structure in the developed countries are also relevant in Ethiopia. This is true despite institutional differences that exist between Ethiopia and the developed countries. Knowing these factors could help predict the financial structure of a firm. The Pecking Order Theory along with Static Trade-off Theory seems to proved partial explanation.

However, a further investigation of firm specific factors correlated with leverage has shown that neither the Pecking Order theory, trade-off theory and agency cost theory hypotheses derived from the developed countries settings has strong explanatory power in explain the capital choice preference of Ethiopian companies. This is because the fundamental institutional assumptions underpinning the developed countries models are not valid in Ethiopia. The management of the firms prefers equity financing rather than debt financing because the former is not binding. The results imply that significant institutional differences such as the legal system governing companies' operation and banking and security markets, ownership concentration and the corporate governance structure of the listed firms, the agency problems inheriting from public ownership, and the financial constraints in the banking sector are all factors influencing the role of firm specific factors on firm's leverage decisions. Knowing these differences are at least an important as knowing the firm-specific factors they measure.

RESEARCH IMPLICATIONS

This paper has laid some groundwork to explore the determinants of capital structure of Ethiopian Manufacturing PLCs upon which a more detailed evaluation could be based. Further work is required to develop new hypotheses for the capital choice decisions of Ethiopian firms and to design new variables to reflect the institutional influence. A larger, comprehensive, and detailed database is also required for a further detailed capital structure study. In addition, this study has also established a correspondence between corporate governance and capital markets, though preliminary, which should be further studied.

REFERENCES

1. Allan J. Taub (1975), "Determinants of Firms' Capital Structure," Review of Economics and Statistics Vol. 57, November, pp. 410-416.
2. Al-Sakran, S. (2001). "Leverage Determinants in the Absence of Corporate Tax System: The Case of Non-Financial Publicly Traded Corporations in Saudi Arabia," *Managerial Finance*, 27, 58-86.
3. Attaullah, S., and Sufiullah, K. (2007). "Determinants of Capital Structure: Evidence from Pakistani Panel Data," *International Review of Business Research Papers*, 3, 265-282
4. Baas, T. & Schrooten, M., 2006, "Relationship Banking and PLCs: A Theoretical Analysis," *Small Business Economics* 27, 127-137.
5. Berger, A. N. & Udell, G. F., 1990, "Collateral, Loan Quality, and Bank Risk," *Journal of Monetary Economics* 25, 21-42.
6. Berggren, B., Olofsson, C. & Silver, L., (2000), "Control Aversion and the Search for External Financing in Swedish PLCs," *Small Business Economics* 15, 233-242.
7. Bevan, A., and Danbolt, J. (2002). "Capital Structure and its Determinants in the UK-A Decomposition Analysis," *Applied Financial Economics*, 12, 159-170
8. Black, J., De Meza, D. & Jeffreys, D., 1996, "House Prices, the Supply of Collateral and the Enterprise Economy," *The Economic Journal* 106, 60-75.
9. Booth, L., et al. (2001). "Capital Structure in Developing Countries," *Journal of finance*, 56, 97-129
10. Bradley, M., Jarrell, G., and E. Kim (1984), "On the Existence of an Optimal Capital Structure: Theory and Evidence," *Journal of Finance*, 39(3), 857-978
11. Chen, J. (2004), "Determinants of Capital Structure of Chinese- Listed Companies," *Journal of Business Research*, 57, 1341-1351
12. Chittenden, F., Hall G, and Hutchinson P. (1996), "Small firm growth, access to capital markets and financial structure: review of issues and empirical investigation," *Small Bus Econ*, 8:59-69.
13. "Commercial Code of the Empire of Ethiopia" (1960), Proclamation No. 166
14. Cosh, A. D., Hughes, A. (1994), "Acquisition activity in the small business sector," IN A. Hughes and D. Storey (eds) *Finance and the small firm*, London: Routledge.
15. DeAngelo, H., and Masulis, R. (1980), "Optimal Capital Structure under Corporate and Personal Taxation," *Journal of Financial Economics*, 8(1), 3-29
16. Dilek, T., Ozlem, T., and Ayca, T. (2009), "Determinants of Capital Structure for Turkish Firms: A Panel Data Analysis," *International Research Journal of Finance and Economics*, 29, 180-187
17. Esperanca, J.P., Gama, A.P.M., and Gulamhussen, M.A. (2003), "Corporate Debt Policy of Small Firms: An Empirical (Re) Examination," *Journal of Small Business and Enterprise Development*, 10, 62-80

18. Fagher, B., Kenbata, B., and Lynn, H. (2005), "Determinants of Capital Structure: Evidence from Libya," *Research paper serious*, 08
19. Friend, I. and L. Lang, (1988), "An empirical test of the impact of managerial self-interest on corporate capital structure," *Journal of Finance*, 43, 27128
20. Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E. & Tatham, R. L., (2006), "Multivariate Data Analysis," Upper Saddle River, New Jersey: Pearson Prentice Hall.
21. Hall, G., Hutchinson, P. & Michaelas, N., (2004), "Determinants of the Capital Structures of European PLCs," *Journal of Business Finance & Accounting* 31, 711-728.
22. Hand, J. H., Lloyd, W. P. & Rogow, R. B., (1982), "Agency Relationships in the Close Corporation," *Financial Management* 11, 25-30.
23. Harris, M., and Raviv, A. (1991), "The Theory of Capital Structure," *Journal of Finance*, 46, 297-355
24. Hodder, J.E. And Senbet, L.W. (1990), "International Capital Structure Equilibrium," *Journal of Finance*, 45: 1495 – 516.
25. Holmes, S. & Kent, P., (1991), "An Empirical Analysis of the Financial Structure of Small and Large Australian Manufacturing Enterprises," *The Journal of Small Business Finance* 1, 141-154.
26. Howorth, C. A., (2001), "Small Firms' Demand for Finance: A Research Note," *International Small Business Journal* 19, 78-86.
27. Huang, G. and Song, F. (2002), "The Determinants of Capital Structure: Evidence from China," *Working Paper*, University of Hong Kong.
28. Ibbotson, R. G., Sindelar, J. L. & Ritter, J. (2001), "Initial Public Offerings," IN CHEW, D. H. J. (Ed.) *The New Corporate Finance, Where Theory Meets Practice*. 3rd ed., McGraw Hill-Irwin
29. Jensen, M. and Meckling W. (1976), "Theory of the Firm: Managerial Behavior, Agency Costs, and Capital Structure," *Journal of Financial Economics*, 3(4), 305-360
30. Jordan, J., Lowe, J. & Taylor, P. (1998), "Strategy and Financial Policy in UK Small Firms," *Journal of Business Finance & Accounting* 25, 1-27.
31. Kamath, R. (1997), "Long-Term Financing Decision: Views and Practices of Financial Managers of NYSE Firms," *Financial Review*, 33(2), 331-356
32. Kester, V. (1986), "Capital and Ownership Structure: A Comparison of United States and Japanese Manufacturing Corporation," *Financial Management*, 15, 5-16.
33. Kim, W., and Sorensen E. (1986), "Evidence of the Impact of the Agency Cost of Debt on Corporate Debt Policy," *Journal of Financial and Quantitative Analysis*, 21, 131-144
34. Lopez-Gracia, J. & Aybar-Arias, C., (2000), "An Empirical Approach to the Financial Behaviour of Small and Medium Sized Companies," *Small Business Economics* 14, 55-63.
35. Manove, M., Padilla, A. J. & Pagano, M., (2001), "Collateral versus Project Screening: A Model of Lazy Banks," *RAND Journal of Economics* 32, 726-744.
36. Michaelas, N., Chittenden, F. & Poutziouris, P., (1999), "Financial Policy and Capital Structure Choice in UK PLCs: Empirical Evidence from Company Panel Data," *Small Business Economics* 12, 113-130.
37. Modigliani, F., and Miller, M. (1958), "The Cost of Capital, Corporate Finance and the Theory of Investment," *American Economic Review*, 48, 261
38. --- (1963), "Corporate Income Taxes and the Cost of Capital: A Correction," *American Economic Review*, 53, 433-443
39. Myers, S. & N. Majluf (1984), "Corporate Financing and Investment Decisions When Firms have Information Investors Do Not Have," *Journal of Financial Economics*, 13, 187-222
40. Myers, S. (1977), "The Determinants of Corporate Borrowing," *Journal of Financial Economics*, 5, 147-175
41. --- (1984), "The Capital Structure Puzzle," *Journal of Finance*, 39(3), PP. 575-592
42. Ou, C. & Haynes, G. W., (2006), "Acquisition of Additional Equity Capital by Small Firms - Findings from the National Survey of Small Business Finances," *Small Business Economics* 27, 157-168.
43. Ozkan, A. (2003), "Determinants of Capital Structure and Adjustment to Long Run Target: Evidence from UK Company Panel Data," *Journal of Business Finance and Accounting*, 28(2), 175-198.
44. Pandey, M. (2001), "Capital Structure and the Firm Characteristics: Evidence from an Emerging Market," *Working Paper*, Indian Institute of Management Ahmadabad.
45. Rafiu, O. and Akinlolu, A. (2008), "The Determinants of Capital Structure of Large Non-Financial Firms in Nigeria," *The international journal of Business and Finance Research*, 2(2), 75-84
46. Rajan, R., and Zingales L. (1995), "What Do We Know About Capital Structure? - Some Evidence from International Data," *Journal of Finance*, 50: 1421-1460
47. Ross, S.A. (1977), "The Determination of financial Structure- The Incentive Signaling Approach," *Bell Journal of Economics*, 8: 23 – 40.
48. Sogorb Mira, F., 2005, 'How PLC Uniqueness Affects Capital Structure: Evidence From a 1994-1998 Spanish Data Panel,' *Small Business Economics* 25, 447-457.
49. Stiglitz, J. (1989), "Mutual Funds, Capital Structure, and Economic Efficiency: Discussion. In *Theory of Valuation*" – *Frontier of Financial Theory*, 1, 342-356
50. Titman, S., and Wessels, R. (1988), "The Determinants of Capital Structure Choice," *Journal of Finance*, 43(1), 1-19
51. Um, T. (2001), "Determinants of Capital Structure and Prediction of Bankruptcy in Korea," (Unpublished PHD thesis, Cornell University)
52. Wald, J. (1999), "How Firm Characteristics Affect Capital Structure: An International Comparison," *The Journal of Financial Research*, 22(2), 161-187
53. Wiwattanakantang, Y. (1999), "An Empirical Study on the Determinants of the Capital Structure of Thai Firms," *Pacific- Basin Finance Journal*, 7, 371-403
54. http://www.ethiopiainvestor.com/index.php?option=com_content&tasks (Retrieved on April 01, 2011)

APPENDIX

APPENDIX – A

NAME OF THE COMPANIES IN THE SAMPLE FRAME

	Company Registration Name
	Building Materials
1	Mesfin Industrial Engineering P.L.C, P.O. Box 2480, Addis Ababa, Ethiopia
2	Messebo Building Materials Production P.L.C., P.O. Box 9620, Addis Ababa, Ethiopia
3	Saba Dimensional Stone P.L.C. (SDS), P.O. Box 180, Adwa, Ethiopia
4	SUR Construction P.L.C., P.O. Box 34360, Addis Ababa, Ethiopia
5	Ezana Mining Development, Marble, P.O. Box 788, Mekelle, Ethiopia
6	Mag International P.L.C., P.O. Box 12196, Addis Ababa, Ethiopia
	Leather Products
7	Ethio-Leather Industry, P.O. Box 9281, Addis Ababa, Ethiopia
8	Becky Leather Articles, P.O. Box 6456, Addis Ababa, Ethiopia
9	Genuine Leather Craft P.L.C., P.O. Box 2218, Addis Ababa, Ethiopia
10	Hora Tannery P.L.C., P.O. Box 472, Debrezeit, Ethiopia
11	Jamaica Shoe Factory, P.O. Box 26430, Addis Ababa, Ethiopia
12	Modern Zege Leather Products Industry, P.O. Box 1035, Addis Ababa, Ethiopia
13	Nyala Shoes & Leather Products Factory, P.O. Box 9357, Addis Ababa, Ethiopia
14	Ras Dashen Shoe Factory P.L.C., P.O. Box 22723, Addis Ababa, Ethiopia
	Textile & Wool
15	NBecky Leather Articles, P.O. Box 6456, Addis Ababa, Ethiopia
16	Gulele Garment Factory, P.O. Box 21769, Addis Ababa, Ethiopia
17	Abdusamed Takele Imp & Exp, P.O. Box 182992, Addis Ababa, Ethiopia
18	Abstrad International P.L.C., P.O. Box 2263, Addis Ababa, Ethiopia
19	Almeda Textile Factory P.L.C., P.O. Box 13383, Addis Ababa, Ethiopia
20	Gheta International Trading, P.O. Box 7391, Addis Ababa, Ethiopia
	Hides & Skins
21	Ethio-Leather Industry, P.O. Box 9281, Addis Ababa, Ethiopia
22	GAAFAR Enterprise Blue Nile Tannery P.L.C., P.O. Box 9339, Sebeta, Ethiopia
23	Hora Tannery P.L.C., P.O. Box 472, Addis Ababa, Ethiopia
24	Sheba Tannery P.L.C., P.O. Box 18313, Addis Ababa, Ethiopia
25	SHOA Tannery P.L.C., P.O. Box 26998, Addis Ababa, Ethiopia
26	WALLIA Tannery P.L.C., P.O. Box 8187, Addis Ababa, Ethiopia
	Food & Beverages
27	Dire Dawa Food Complex, P.L.C., P.O. Box 12674, Addis Ababa, Ethiopia
28	Ethio-Calgarian Trading P.L.C., P.O. Box 20701, Addis Ababa, Ethiopia
29	Huda Trading Import & Export, P.O. Box 8881, Addis Ababa, Ethiopia
30	Yoni International P.L.C., P.O. Box 8881, Addis Ababa, Ethiopia
31	Hiwot Agricultural Mechanization P.L.C., P.O. Box 101577, Addis Ababa, Ethiopia
32	GASCO Trading P.L.C., P.O. Box 130032, Addis Ababa, Ethiopia
33	Ghion Industrial & Commercial P.L.C., P.O. Box 7391, Addis Ababa, Ethiopia

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