



Faculty of Economics and Business

**RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND
PROFITABILITY OF TRADING/SERVICES SECTOR AND
CONSUMER PRODUCT SECTOR IN MALAYSIA**

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the requirements for Bachelor of Finance with Honours.

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Statement of Originality

The work described in this Final Year Project entitled

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ABSTRAK

HUBUNGAN ANTARA STRUKTUR MODAL DAN KEUNTUNGAN DALAM SEKTOR PERDAGANGAN / PERKHIDMATAN DAN SEKTOR PRODUK PENGGUNA DI MALAYSIA

Oleh

Nicholas Kho Tze Jia

Sejak Proposisi Modigliani dan Miller (M&M) pada 1958, isu struktur modal telah menarik banyak perhatian dan kontroversi. Proposisi tersebut telah mengutarakan bahawa nilai sesebuah firma adalah bebas daripada pengaruh struktur modalnya. Namun begitu, sebahagian besar kajian para cendekiawan lain mendapati bahawa nilai sesebuah firma adalah berkaitan dengan pengaruh struktur modalnya. Lantaran itu, kajian ini cuba mengatasi masalah kekurangan kajian dalam bidang struktur modal terutamanya terhadap firma-firma tempatan di Malaysia. Sejumlah 50 firma dari sektor perdagangan/perkhidmatan dan 50 firma dari sektor produk pengguna yang tersenarai pada Bursa Malaysia telah dikaji untuk jangka masa 5 tahun (2005 hingga 2009). Tiga pembolehubah dipakai untuk mewakili struktur modal iaitu nisbah hutang/ekuiti, nisbah aset tetap/jumlah aset, dan nisbah hutang semasa/ekuiti. Dua pembolehubah dipakai untuk mewakili struktur keuntungan firma iaitu pulangan ke atas ekuiti dan keuntungan bersih sesaham. Pembolehubah-pembolehubah dianalisis menggunakan statistik deskriptif, korelasi dan analisis regresi. Hasil kajian menunjukkan bahawa keuntungan adalah berkaitan secara signifikan dengan struktur modal. Kajian ini mendapati bahawa keuntungan berkadar songsang dengan liabiliti sesebuah firma.

ABSTRACT

RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND PROFITABILITY OF TRADING/SERVICES SECTOR AND CONSUMER PRODUCT SECTOR IN MALAYSIA

BY

Nicholas Kho Tze Jia

Since the Modigliani and Miller (M&M) propositions were made in 1958, the issue of capital structure has gained many controversies and also much interest. The propositions conclude that the value of a firm is not related to its capital structure. Other researchers have argued that profitability is in fact related to the capital structure of the firm. Therefore, this study aims to determine the relationship between capital structure and profitability of local firms in Malaysia. A total of 50 companies from the Trading/Services Sector and 50 companies from Consumer Products Sector that are listed on the Main Board of Bursa Malaysia were put under study for a period of five years (2005 to 2009). Three independent variables were used to indicate capital structure which is debt/equity ratio, fixed assets/total assets ratio, and current liabilities/net worth ratio. Two dependent variables were used to indicate profitability which is return on equity (ROE) and earnings per share (EPS). The variables were analyzed using descriptive statistics, correlation matrix and the ordinary least square (OLS) method. The result implied that profitability is significantly related to capital structure. Besides that, profitability is also found to have a negative relationship with liability of a firm.

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CHAPTER 1

INTRODUCTION

1.1 Context of the study

A firm's capital structure is the backbone of every firm's operations. Capital structure means the way a corporation finances its assets through the combinations of equity, debt or combinations of other securities. A firm's capital structure is the compilation and the way the firm mixes their assets and liabilities to operate the firm.

Capital can be divided into equity capital and debt capital. Each has its own benefits and drawbacks and a substantial part of wise corporate stewardship and management is attempting to find the perfect capital structure in terms of risk/reward payoff for shareholders.

Equity capital refers to money put up and owned by the shareholders (owners). Typically, equity capital consist retained earnings and contributed capital, which is the money that was originally invested in the business in exchange for shares of stocks or ownership. Equity capital can be the most expensive type of capital a company can utilize as it's "cost" is the return the firm must earn to attract investments.

Debt capital in a company's capital structure refers to borrowed money that is at work in the business. The safest type is generally considered long-term bonds because the company has years, if not decades, to come up with the principal to repay the debt.

Profitability of a firm shows the efficiency of the firm in using its capital structure to run the firm and at the same time to generate more income than their expenses.

The capital structure of a firm and the relativity of it towards the firm's profitability is very much a major subject in the corporate finance world. This issue was brought up the early years, as early as 1945, where Chudson (1945) raised this question in his field of research:

“In what way does the structure of assets and liabilities of a given concern reflect the kind of industry in which a concern is engaged, the concern's size and level of profitability?”

Chudson's research question shows that there might be a possibility of a relationship between the capital structure of a firm and the profitability of the firm. Chudson's work is mostly based on manufacturing, mining, trade and construction industries in 1937.

Besides that, the importance of capital structure was emphasized again on the international stage when the famous duo of Franco Modigliani and Merton Miller was awarded the Nobel Prize Committee awards. Franco Modigliani was awarded the prize for Economic Sciences in 1985 and Merton Miller in 1990.

Modigliani and Miller or better known as M&M created the famous Miller-Modigliani (M&M) Propositions in 1958 (Brigham & Houston, 2007). The M&M proposition is a capital structure theory that indicated that a firm's value would be unaffected by its capital structure. The firm's value in question here is the profitability of the firm as the value of a firm is also reflected in the profitability of the firm.

However, the issue of capital structure has not been widely explored and studied in Malaysia. Annuar and Shamsher (1993) states that,

“To date, there is hardly any evidence concerning the capital structure issue and its various aspects using data relating to Malaysian listed firms”

Relationship between capital structure and profitability can be found on international stages based on international firms' performance but not in Malaysia. As such, this study attempts to identify the relationship between capital structure and profitability on firms in a Malaysian context.

1.2 Background of Study

Corporate structure is an important area in finance and it remains the core of literature of studies for academicians. However, studies had focused on firms in developed countries and little attention on how firms in developing and emerging market decide on their capital structure strategy.

For the past fifty years after the influential theory of Modigliani and Miller (1958) on capital structure, academicians have debated rigorously on this capital structure theory through many empirical studies (Harris & Raviv, 1991).

The M&M propositions mentioned that payout policy does not matter in perfect capital markets, also showed that financing decisions does not matter in perfect markets. Their famous "Proposition 1" states that a firm cannot change the total value of its securities just by splitting its cash flows into different streams.

Proposition 1 also allows complete separation of investment and financing decisions. If their proposition is right, then if a firm uses a mixture of debt and equity financing, its overall cost of capital will be exactly the same as its cost of equity with all-equity only financing.

The theory of capital structure began with the celebrated paper of Modigliani and Miller (1958). They pointed in the direction that such theories must take by showing under what conditions capital structure is irrelevant. Since then, many economists have followed the path that they mapped.

A significant fraction of the effort of researchers over the last 10 years has been devoted to the models in which capital structure is determined by agency costs which are costs due to conflicts of interest between shareholders and managers. According to Harris and Raviv (1991), research in the area of agency cost was initiated by Jensen and Meckling in 1976.

Conflicts between shareholders and manager arise because managers hold less than 100% of the residual claim. Consequently, they do not capture the entire gain from their profit enhancement activities, but they do bear the entire cost of those activities. As a result, managers over indulge in these pursuits relative to the level that would maximize the firm's value.

This conflict raises the question as to how a firm should deploy their capital structure in a way that it can increase the firm's profit at the same time to maximize the shareholders' wealth.

1.3 Problem Statement

In the aftermath of the Asian financial crisis in 1997, efforts were focused on emerging countries to determine factors that caused the Asian market to crash in the region. Despite this attempt, there were only a few studies done due to the constraints on corporate financial data on the region (Fan & Wong, 2002).

Moreover, still very little is understood about the determinants of firms' financial structure outside the United States and major developed countries, with only a few researchers analyzing international data (Rajan & Zingales, 1995).

Capital structure decision remains one of the most important strategies to corporate manager because it affects the firm's value. Damodaran (2001) states that, if the objective in corporate finance is to maximize firm value, then firm value must be linked to the three decisions; investments; whereby the company decides how to invest with the capital available and in which way it best benefits the company, financing; the company finds ways and methods to finance their operations and dividend is where the company allocates certain amount of their profits to be paid to shareholders for the shares that they hold in the company.

The sudden currency crisis in 1997 has thrown many financially strong companies out of business as they were not able to face the challenges and the unexpected changes in the economy. The growing economy suddenly became an alien to them when depression took place in a split second. The capital structure of these firms was badly affected during the crisis as shareholders cash out during the crisis. As a result, many companies were forced into bankruptcy or become financially distressed companies when they were not able to pay their financial obligations due to inadequate cash flow (Nur Adiana Abdullah et. al., 2008)

Looking at the above situation, it is important to understand the reasons behind the collapse of a company. Knowing these reasons might hinder a company from being financially distress.

The economic crisis is a major problem for all countries and all firms. Thus, it is important for firms to have a strong capital structure to increase its profitability before and after the economic crisis cycle to maintain the firm's sustainability in the market.

1.4 Research Objectives

General Objective

The general objective of this study is to determine the effect of capital structure on profitability of firms in Trading/Services sector and Consumer Products sector listed on the Main Board of the Bursa Malaysia Stock Exchange.

Specific Objectives

The specific objectives of the study include the followings;

- i) to examine the capital structure that is being practiced by listed firms in Malaysia;
- ii) to examine the effect of capital structure on profitability of listed firms in Malaysia; and
- iii) to generate empirical evidence that profitability is related with capital structure of listed firms in Malaysia.

1.5 Significance of the Study

In the academic world, this study would shed some information regarding capital structure issues which has much been discussed since the M&M propositions. Research into the capital structure in Malaysia is still at the infancy stage and this study can further provide in depth knowledge of the capital structure of the firms in Malaysia. For practitioners, this study is very much relevant and of much interest towards financial managers, financial controllers and managing directors of those listed firms to know more about the capital structure of other listed firms in Malaysia and gain an idea as to whether capital structure has an effect on a firm's profitability.

CHAPTER 2

LITERATURE REVIEW

2.1 Capital Structure

Van Home and Wachowicz (1995) defined capital structure as the mix (or proportion) of a firm's permanent long-term financing represented by debt, preferred stock and common stock equity. The mix of long term sources of funds used by the firm is also called the firm's "capitalization". The relative total of each type of fund is emphasized and are defined by Petty, Keown, Scott and Martin (1993) as capital.

Masulis (1988) explains capital structure as,

"Capital structure encompasses a corporation's (including its subsidiaries) publicly issued securities, private placements, bank debt, trade debt, leasing contracts, tax liabilities, pension liabilities, deferred compensation to management and employees, performance guarantees, product warranties and other contingent liabilities. This list represents the major claims to a corporation's assets. Increases or reductions in any of these items represent a form of capital structure change."

The earliest research into capital structure of business was done by Chudson in 1945 in a cross section manufacturing, mining, trade and construction companies in the United States from 1931 to 1937.

M&M Propositions (Modigliani & Miller, 1958) was made after thirteen years since Chudson's findings. The proposition showed that any importance of capital structure in the real world might have steamed from market imperfections. M&M later on made two propositions. Proposition 1 state that the value of a firm is independent of its capital structure. Proposition 2 showed that when Proposition 1 is held, the cost of equity capital was a linear increasing function of the debt/equity ratio.

However, several researchers have disputed the propositions made by M&M. Four years later, Barges (1962) did a study and found that the cost of capital to a firm is unaffected by capital structure. Barges found that the propositions set by M&M will result in test which are biased in favor of their propositions and biased against the traditional views.

With that, Barges provided evidence on the existence of weaknesses in M&M's study. Barges concluded that,

“Thus, on the basis of the evidence presented herein, the hypothesis of independence between average cost and capital structure appears untenable”

Lamothe (1982) stated that bankruptcy and liquidity of a firm is related to its capital structure. In his study, he used a mathematical model to identify that there is and existence of an optimal capital structure of any firm.

Baskin (1985) indicated that capital structure is related to the riskiness of a firm. However, Baskin disputed the existence of an optimal capital structure. He argued that managers are more concerned with maintaining historical dividend policy, funding investments, and avoiding equity issues. Capital structure was a secondary issue to the managers.

Besides that, Kamma (1986) provided evidence to suggest the relationship between capital structure and the compensation practiced by a firm. Kamma stated that managers would practice an optimal capital structure not to actually maximize the value of the firm but at the same time to maximize their own personal wealth. Kamma had actually developed a model of capital structure in a principal and agent framework. This study has shown the crucial role that managers' play in choosing an optimal capital structure. Hence, capital structure that exists in a firm might not be practiced by the firm due to the managers' self interest.

2.2 Profitability

The term *profitability* is much more in use in the business world to the extent that the word refers to all kinds of measurements and indicators for a firm's success. According to Myers and Majluf (1984), irrespective of the firm's market power, it would still depend on internally generated funds for the firm's expansion since external generated funds involve higher costs.