

**THE RELATIONSHIP BETWEEN CAPITAL STRUCTURE
AND CONCENTRATED OWNERSHIP
(AGENCY-RELATED PROBLEMS)**

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**THE RELATIONSHIP BETWEEN CAPITAL STRUCTURE
AND CONCENTRATED OWNERSHIP
(AGENCY-RELATED PROBLEMS)**

by

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PERKAITAN DI ANTARA STRUKTUR MODAL DAN PEMILIKAN TERPUSAT (MASALAH BERKAITAN AGENSI)

ABSTRAK

Malaysia terkenal dengan pemilikan firma yang terpusat dan ini mempunyai kelebihan dalam mengurangkan masalah perbezaan maklumat tetapi membawa masalah berkaitan agensi seperti pemidahan risiko, pembinaan empayar dan kurang usaha. Untuk ini, kajian ini cuba memastikan sama ada tahap hutang (tahap struktur modal syarikat di Malaysia) dipengaruhi oleh masalah berkaitan agensi atau merupakan suatu mekanisma pemantauan yang berkesan. Kajian dari negara yang mempunyai struktur pemilikan yang hampir sama seperti Indonesia di mana pemantauan adalah kurang berkesan (Taridi, 1999) dan di Thailand pemantauan didapati berkesan (Wiwattanakantang, 1999) Malaysia memerlukan kajian khusus kerana undang-undang perlindungan pelabur adalah lebih ketat (La Porta, Lopez-de-Silanes, Shleifer and Vishny, 1998).

Tesis ini mengkaji hubungkait di antara struktur modal dan pemilikan terpusat (masalah berkaitan agensi). Dengan menggunakan kaedah analisis data panel, 179 firma yang disenaraikan di Papan Utama Bursa Malaysia di antara 1993 dan 2003 telah dikaji. Bukti daripada kajian ini menunjukkan bahawa pemilikan pihak pengurusan tidak mempunyai hubungkait yang signifikan dengan nisbah hutang dan ini bermaksud bahawa pemilikan pihak pengurusan tidak menggunakan hutang sebagai alat pemantauan dan tidak menggunakan hutang untuk mengekalkan kawalan mereka ke atas firma. Pemilikan pihak pengurusan yang lebih tinggi menghasilkan keuntungan yang lebih bagi firma dan ini menolak berlakunya masalah agensi Jenis II (konflik di antara pemilik selaku pengurus dan pemilikan yang kecil). Pemilikan terpusat yang sangat tinggi didapati berkesan di dalam memantau pihak pengurusan. Perkara yang sama juga didapati benar mengenai pemilikan pelabur asing. Bukti tentang masalah bahaya moral tidak di dapati tentang ketaraan aset. Kajian ini juga tidak mendapati kesan konflik agensi Jenis II melalui keuntungan. Juga tidak dapat dibuktikan bahawa berlakunya pemindahan kekayaan (satu lagi masalah agensi Jenis II) melalui dividen.

THE RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND CONCENTRATED OWNERSHIP (AGENCY-RELATED PROBLEMS)

ABSTRACT

Malaysia is known for its highly concentrated ownership structure. The highly concentrated ownership structure brings an advantage of having less asymmetric information but at the same time is said to be prone to agency-related problems such as risk shifting, empire building and shirking. Therefore, the study is undertaken to ascertain if the level of debt (capital structure level) of Malaysian companies are heavily influenced by the agency-related problems or create an efficient monitoring mechanism. Through previous studies from countries with similar ownership structure such as Indonesia (Taridi, 1999) and Thailand (Wiwattanakantang, 1999) show no monitoring mechanism and having monitoring mechanism respectively, Malaysia warrants a special investigation as her investor protection law is better than those of the two mentioned countries (La Porta, Lopez-de-Silanes, Shleifer and Vishny, 1998).

This study addresses the relationship between capital structure and concentrated ownership (agency-related problems). Using panel data analysis methodology, 179 Malaysian listed Main Board firms covering a period of 11 years from 1993 to 2003 were examined. Managerial ownership did not have a significant relationship with debt ratio implying that debt is not used as a monitoring device and at the same time debt was not used to maintain control over their firm. Evidence from this study suggests that managerial ownership resulted in higher profitability and this rejects the presence of Type II agency problems (conflicts between owner-manager and minority shareholders). High ownership concentration was found to be an effective control device. The same goes for foreign ownership. There was no evidence of moral hazard problems in the form of asset tangibility in this study. This study did not find the presence of Type II agency conflicts via measures like profitability. Also, there was no evidence of wealth transfer (a form of Type II agency problems) through dividends.

CHAPTER 1

INTRODUCTION

1.0 Introduction

This chapter gives an overview of the research agenda. The discussion begins with some background of the capital structure studies, problem statement, objectives of the study, research questions, contribution of the study, scope of the study and finally, the organization of the study.

According to Brealey, Myers and Allen (2006 p.445), capital structure is defined as the “firm’s mix of debt and equity financing”. Myers (2001) described capital structure as the mix of securities and financing sources used by corporations to finance real investment. Others like Megginson (1997) defined capital structure as the relative combination of debt and equity securities in the long-term financial structure of a firm. Shleifer and Vishny (1997) defined debt as a contract in which a borrower obtains some funds from the lender and promises to make pre-specified future payments to the lender.

Smith and Warner (1979) stated that in the case of debt, the borrower usually promises not to breach a range of covenants for example, maintaining the value of assets of the firm. An important feature of debt is that if the borrower fails to adhere to the debt contract, the transfer of some control rights from the borrower to the lender is triggered. In the context of this study, debt refers to the borrowings made by companies and their promise to make regular interest payments and to repay the principal or interest-bearing debt, in short.

On paper, there ought to be a separation between ownership and control for example companies in the West but this separation may not be as clear cut especially in developing countries owing to the existence of family-controlled firms. This is because the top management (or the directors) of the firm usually owns some of the equity in the firm they manage.

Ownership structure has been defined as the identities of the company's shareholders and the size of their shareholdings according to Denis and McConnell (2003). Bursa Malaysia defines equity as representing part ownership of the owner's capital in a business. Frank and Goyal (2003a) considered that from an outside investor's viewpoint equity is riskier than debt. Denis and McConnell (2003) argued that ownership structure is a potentially important determinant of corporate governance and hence capital structure.

The study of capital structure was initiated by Nobel laureates Modigliani and Miller (1958 and 1963) who propounded the irrelevance of capital structure and the tax shield advantage which later paved the way for the development of alternative theories and empirical studies. The alternative theories include the trade-off theory, pecking order hypothesis, agency theory and signalling theory. The study of capital structure seeks to increase our knowledge as to whether capital structure matters (that is whether the total market value of a firm can change by changing the mix of debt and equity).

In the mid-Nineties, several international studies on capital structure emerged but their studies had largely been confined to the developed countries especially in the United States, for example, Rajan and Zingales (1995) and Wald (1999). As for the developing countries like in South-East Asia, there is limited empirical research on capital structure for example, in

Indonesia, Malaysia, Singapore and Thailand. Booth, Aivazian, Demirguc-Kunt, and Maksimovic (2001) and Deesomsak, Paudyal and Pescetto (2004) were among the few international studies on capital structure focusing on developing countries.

1.1 Background

Table 1.1
External financing patterns in selected Asian and developed countries

	Internal finance	External finance	Bank finance	Equity	Operations finance	Others
China	67.38	32.62	10.67	2.56	3.95	15.44
Germany	52.59	47.41	14.30	19.85	1.43	11.83
Indonesia	79.53	20.47	16.09	0.00	2.19	2.19
Malaysia	42.39	57.61	16.27	10.88	24.57	5.88
Singapore	60.93	39.07	24.07	7.13	6.02	1.85
United Kingdom	60.88	39.12	14.53	9.49	9.61	5.50
United States	53.54	46.46	20.33	3.04	10.59	12.50

Figures are in percentages and firm averages from 1995-1999 for each country and they are the proportion of investment financed from each source. Internal finance sources includes retained earnings or funds from family and friends. External finance sources comprises financing from banks, equity, operations finance and others. Bank finance includes financing from domestic as well as foreign banks. Operations finance is the sum of leasing and supplier credit. Others include financing from development banks, money lenders, public sector and other sources.

Sources: Beck, Demirguc-Kunt and Maksimovic (2002) and The World Bank (1999).

Table 1.1 shows the external and internal financing patterns in several Asian and developed countries. Among the selected countries, Malaysia was the only country that used more external finance than internal finance between 1995 to 1999. This situation could be due to the mix between business and politics especially in Malaysia. Among the examples are listed

The New Straits Times Berhad which is controlled by the ruling United Malay National Organization (UMNO) party and another listed firm, Cahya Mata Sarawak Berhad, is a family company controlled by the Chief Minister of Sarawak. It is noted that Malaysian firms used the largest percentage of external funds (57.6%) mainly sourced from operations finance (leasing and supplier credit) and bank financing.

In Malaysia, internal finance made up the smaller proportion (42.39%) of total finance among the selected firms. Surprisingly, Indonesia used the largest proportion of internal finance (79.53%) in the sampled countries. Generally, developed countries used between 50%-60% of internal finance but the developing countries have a significant wider variation in the use of internal finance ranging from 42.4% (Malaysia) to as high as 79.5% (China). Bank financing was the most popular type of financing in Singapore while in China, bank financing was the least popular. In terms of equity financing, Malaysia was ranked the second highest (10.9%) after Germany (19.9%) whereas Indonesia was the lowest (0%). In terms of funding from operations finance, Malaysia was ranked the highest (24.6%) while Germany was ranked the lowest (1.4%).

Pedersen and Thomsen (2003) in their study of ownership structure identified two types of agency conflicts that is conflicts between managers (or directors) and shareholders and the conflicts between majority (or controlling) shareholders and minority shareholders which Chu (2007) also categorized as Type I and Type II agency conflicts respectively. Type I agency conflicts represent the conflicts that are prevalent in the Anglo-Saxon countries where the conflict of interest is mainly between managers who are powerful on one

hand and the dispersed shareholders on the other hand. The other type of conflict which is prevalent among the European and East Asian setting refers to the conflict between controlling majority shareholders (controlling owners) and the weak minority shareholders. This shows that different economic systems and other institutional background caused variations in ownership structure. In Malaysia, it is more likely that the Type II agency conflicts are more prevalent owing to the concentrated ownership structure where the majority shareholders are also involved in the management of the firms.

1.2 Problem Statement

Malaysia is considered as an emerging market with its unique multi-ethnic society. As a result of this unique identity, Malaysian firms have a distinctive ownership structure. The key features of Malaysian public listed firms are ownership by several major ethnic origins, high ownership concentration, relatively high foreign ownership and is dominated by family founded businesses (Claessens, Djankov and Lang, 1999). For example, Table 1.2 showed that Malaysia was ranked among the highest in terms of ownership concentration (58.8% based on top five shareholders in 1998) among the selected East Asian countries. The advantage of high ownership concentration is that there is less asymmetric problems due to the alignment of interests between managers and shareholders as propounded by Jensen and Meckling (1976). On the other hand, the existence of high ownership concentration could bring about a host of other agency problems or moral hazard behaviour and these could be in the form of risk shifting, empire

building, perquisite consumption and managerial entrenchment at the expense of shareholders and other stakeholders' wealth (Megginson, 1997).

Table 1.2
Ownership concentration in selected East Asian countries

Country	Concentration Ratio (%) ¹		Year end	Company coverage
	Largest shareholder	Top five shareholders		
Indonesia	48.2	67.5	1997	All PLCs
Korea	20.4	38.5	1998	81 non-financial PLCs ²
Malaysia	30.3	58.8	1998	All PLCs
Philippines	33.5	60.2	1997	All non-financial PLCs
Thailand	28.5	56.6	1997	All PLCs
China ³	N.A.	58.1	1995	316 PLCs

¹ Defined as the percentage of total issued shares of an average PLC owned by the largest or top five shareholders. The percentages are not weighted by market capitalization.

² Based on the ownership data from the Asian Development Bank survey of 81 non-financial PLCs. Comparable ownership data for the other countries are not available.

³ Based on Shanghai Stock Exchange only.

N.A. = Not available.

PLC refers to public listed companies.

Sources: Capulong, Edwards, Webb and Zhuang (2000 p.22) and Xu and Wang (1999).

Capital structure studies have examined the types of agency conflicts that confront countries with high ownership concentration. Typically there were instances when ownership concentration yielded was viewed positively (Wiwattanakantang, 1999) and there were instances when ownership concentration was viewed negatively due to asymmetric information arguments for example Taridi (1999) in the case of Indonesia and Alba, Claessens, and Djankov (1998) in the case of Thailand.

Studies on ownership structure and agency costs and its relationship with capital structure is important because it is closely linked to firm value. Unlike in the West, Malaysia being a developing country, the issue of agency-

related problems is likely to be greater than that of developed countries. This is because companies in Malaysia are mainly majority controlled by a small group of related parties and managed by owner-managers (The World Bank, 2005). As a result, the conflict of interests is not so much between managers (agents) and shareholders as in the West but is between the majority shareholders or inside managers and minority shareholders or Type II conflicts. The severity of agency-related problems is expected to be less than the other developing countries in South-East Asia such as Indonesia and Thailand due to better investor protection in Malaysia (La Porta, Lopez-de-Silanes, Shleifer and Vishny, 1997).

Thus, it is of interest to study if the decision to have more debt is influenced by the extent of the concentration in ownership among Malaysian companies. This will provide some answers with regards to the issues such as potential agency-related problems which are often associated with greater degree of ownership concentration.

It may also be interesting to empirically examine whether politically connected firms have a significant relationship on financing decisions. Anecdotal evidence suggests that owing to their strong ties with powerful ruling politicians, politically connected firms may be in a more favourable position than non-politically connected firms in terms of being given easier access to loans.

In summary, the study proposes to examine the potential agency-related problems arising out of concentrated ownership including political connections.

1.3 Objectives of the study

Currently, as far as can be gathered, there are few empirical research studies related to agency theory, ownership structure and capital structure decisions in Malaysia. The agency theory has been examined together with ownership structure on financing decisions (capital structure) as the two are interlinked. The existing empirical research on Malaysian capital structure have mainly focused on the effect of firm or industry characteristics on capital structure.

The effect of ownership structure on capital structure have also emerged recently but had not been thoroughly examined unlike in the West. For example, Pandey (2004) and Ahmad-Zaluki, Abdullah, Abidin, Ali and Arshad (2002) had incorporated ownership diffusion and managerial/directors' ownership respectively in their studies. Pandey (2004) used a crude measure of ownership concentration by using the number of shares instead of the more commonly used measures like the percentage of largest shareholder, the percentage of top five largest shareholder or percentage of the top ten largest shareholdings (Mehran, 1992). Ahmad-Zaluki et al. (2002) measured managerial/directors' ownership using only the direct directors' shareholdings and did not include managers' indirect shareholdings. Hence, there exist a gap in our knowledge of capital structure in a developing country like Malaysia as far as the effect of agency-related problems on capital structure is concerned. According to Pushner (1995 p.244), the effect of ownership structure on leverage is "still not clear" and that it is a "fertile topic for empirical testing". Hence, this study seeks to fill this gap in Malaysia.

As ownership is not dispersed but concentrated in the hands of a few large shareholders, this brings about agency problems. This study tries to examine if the differences in ownership structure in Malaysia which is the unique attribute differs from the Western companies have the same impact on corporate financing decisions.

This study has been motivated by ideas provided by Mehran (1992), Wiwattanakantang (1999), Capulong et al. (2000), Brailsford, Oliver and Pua (2002) and Pandey (2002). Mehran (1992) stressed that capital structure models that ignore agency costs/agency problems are incomplete. Pandey (2004) suggested a study be conducted on the role of ownership structure and agency costs problems (that is the conflicts between shareholders-managers and shareholders-debtholders) on debt policy among Malaysian firms. Capulong et al. (2000) argued that agency cost is a factor “related but slightly different” from other influences of corporate financing.

The research objectives of the study can be summarized as follows:

1. To investigate the relationship between managerial shareholdings and debt level (capital structure decisions).
2. To investigate the relationship between ownership concentration and debt level (capital structure decisions).
3. To examine the relationship between foreign ownership and debt level (capital structure decisions).
4. To examine the relationship between politically connected firms and debt level (capital structure decisions).

1.4 Research questions

This study seeks to identify agency problems or moral hazard behaviour and the effect of ownership structure on capital structure decisions that is:

1. What is the role of managerial shareholdings with respect to debt ratio?
2. Does ownership concentration affect the debt ratio?
3. Does foreign ownership affect debt ratio?
4. Does politically connected firms influence debt ratio?

Answers to all these questions will shed some light onto the relationship between agency-related problems and capital structure decisions.

1.5 Contribution of the study

A study of capital structure, ownership structure and agency costs could help to identify which factors are critical to the selection of a particular mix of capital structure. Corporate managers will then be able to obtain financing at the lowest possible cost and investors will be able to park their savings in financial markets and obtain maximum return from their investments. For the government, it could maximize the nation's output and ensure that its limited financial resources are optimally used.

Capulong et al. (2000) found that countries in East Asia including Malaysia have very concentrated corporate ownership (as measured by the concentration ratio of the largest shareholder and top five shareholders respectively). For example, as at end 1998, Malaysia's ownership concentration ratio based on the largest shareholder and the top five largest shareholders were 30.3% and 58.8% respectively and was ranked third

among the five Asian countries in the study. Hence, a study of the effect of ownership concentration on debt-equity choice could shed more light on this matter in Malaysia. The high ownership concentration setting in Malaysia and the emerging economies differ from the setting of widely dispersed share ownership structure in the West (Denis and McConnell, 2003) and as a result, the agency problems or conflicts in emerging economies and those in the West may differ. In the West, the setting as propounded by Jensen and Meckling (1976) focused on the premise of the conflict between managers and owners (which is sometimes known as Type I agency conflicts). In Malaysia, the setting is one of high ownership concentration and the predominantly family-owned who is usually also the top manager. Examples of such firms are Genting Berhad, Genting Malaysia (previously known as Resorts World Berhad, YTL Corporation Berhad, Tan Chong Moptor Holdings, Berjaya Corporation Berhad and Berjaya Land Berhad. Hence, this gives rise to conflicts between majority shareholders and minority shareholders (Pedersen and Thomsen, 2003) and is also known as Type II agency conflicts. Hence, this study provides an opportunity to examine if the majority shareholders are engaging in firm maximizing activities or expropriation activities and this study examines the effect of agency problems and ownership structure on capital structure.

A natural question that often arises is whether ownership concentration is beneficial or detrimental to the firm in the context of Malaysia. In particular, does ownership concentration fulfill the role of monitoring the firm. If the results of this study show that ownership concentration monitors management then it suggests that high ownership concentration has brought positive

results to the firm. However, ownership concentration may also give rise to management entrenchment situations whereby it enriches the self-servicing management but is detrimental to the company's minority shareholders. Hence, the results of this study could provide answers as to whether concentrated ownership brings about the desired monitoring of the management which will then result in the increase in firm value.

This study uses the panel data analysis technique which is rarely used in local capital structure studies at the date of writing. The panel data analysis technique is superior than the often used ordinary least squares (OLS) technique in that there are more data points and it combines the time and cross-section effect as compared with the OLS method which averages the values for cross-section or time series data.

In this study seeks mainly to examine the effect of ownership structure (for example, managerial shareholdings, ownership concentration, foreign ownership and some control variables (firm size, risk, etc.) on debt ratio, agency problems and firm performance. Effective monitoring by ownership variable will lead to less use of debt as a monitoring device, less agency problems and better firm performance.

1.6 Scope of the study

This study focuses on the Bursa Malaysia (formerly known as The Kuala Lumpur Stock Exchange) Main Board firms from 1993 to 2003 (covering over a lengthy period of 11 years). The main reason why the data set for this study was set from 1993 to 2003 is that data for one of the key

variables in this study (foreign ownership) was first became available in 1993 and the foreign ownership data ceased to be available after 2003.

In addition, during the 1993 to 2003 period, it encompasses three distinct scenarios of economic conditions that is a growth period (1993-1996), downturn period (1997-1998) and economic recovery period (1999-2003). Sample firms were used if it meets all the four criteria listed below:

- i) have complete and continuous data from 1993 to 2003,
- ii) does not have zero sales,
- iii) does not have negative shareholders funds and
- iv) were non-financial Main Board Malaysian listed firms.

1.7 Organization of the study

This dissertation is organized into seven chapters. Chapter 2 outlines the background to agency conflicts, corporate financing in Malaysia, external financing by the corporate sector, funds raised by Malaysian listed firms, debt ratio trends and views from practitioners in Malaysia.

Chapter 3 provides a detailed analysis of the several main theories that explain capital structure as well as the empirical literature that are relevant to the issues in this study. Issues addressed in this chapter include capital structure framework, theoretical models for capital structure, previous empirical studies on the relationship between leverage and firm characteristics, capital structure decisions in the Malaysian context and the measurement issues of capital structure.

Chapter 4 focuses on the research methodology. It includes the research framework, operational definitions and measurement of the

dependent and independent variables of the study, statistical methods for data analysis and the sample selection procedure.

Chapter 5 presents the findings pertaining to the panel data analysis conducted to examine the impact of ownership structure and agency costs on capital structure decisions. The hypotheses formulated for the study were tested using panel data analysis. The results of the statistical analysis were presented.

Chapter 6 provides the discussion on the findings of this study. The final chapter, Chapter 7, concludes the study by restating the research objectives, summarizing the conclusions and implications of the study. The limitations of the study are also discussed at the penultimate end of the chapter. In closing, suggestions for future research are provided.

CHAPTER 2

AGENCY CONFLICTS AND CAPITAL STRUCTURE PATTERNS IN MALAYSIA

2.0 Introduction

This chapter serves to provide some background information on agency conflicts and capital structure patterns in Malaysia. This chapter begins with an overview of the agency conflicts and is followed by an overview of corporate financing in Malaysia, then followed by external financing by the corporate sector, funds raised by listed Malaysian firms, debt ratio trends and finally, views from practitioners.

2.1 Agency conflicts

This section attempts to show that owing to the differences in ownership structure between the West and developing countries like Malaysia agency conflicts may differ. Owing to dispersed ownership in the West and the resultant asymmetric information problems, agency conflicts in the West is mainly between managers (or directors) and shareholders. As shown in Table 2.1, managerial ownership in the West (for example, the United States) of 8.4% in 1994 (Cho, 1998) is relatively lower than that of developing countries (27.0% in this study for Malaysia).

In developing countries like Malaysia, the agency conflicts may be different than that of the West and it may be the case of the conflicts between majority shareholders and minority shareholders or the Type II conflicts Faccio, Lang and Young (2001). This is because the majority shareholder in

developing countries is usually also the Chief Executive Officer or controls the board of directors who are the company's top management due to their significant voting power and the desire to take an active role in managing the firms in which they have dominant shareholdings. Hence, following these arguments, it can be concluded that in developing countries owing to the lack of separation between ownership and control, the problem of asymmetric information may not be as serious as those in the West where there is a clear separation of ownership and control.

In terms of ownership concentration, La Porta, Lopez-de-Silanes, Shleifer and Vishny (1998) documented that ownership concentration in Malaysia is more than twice that in the United States (54.0% and 20.0% respectively) based on ownership by the three largest shareholders. This supports the widely held view that Malaysian companies are usually controlled by a small group of related parties and managed by owner-managers. In addition, the position of Managing Director or Chief Executive Officer (CEO) is a member or nominee of the controlling family (The World Bank, 2005). This situation is also similar to that in Thailand and Singapore (Deesomsak et al. 2004). Hence, in Malaysia, the concentration of ownership and management that is in the hands of a few may result in high level of expropriation of minority stakeholders possibly resulting in Type II conflicts agency problems.

Table 2.1
Ownership structure in the United States and Malaysia

United States	Malaysia	Sources
Managerial ownership:		
16.1% (1988)	-	Bathala, Moon and Rao (1994)
8.4% (1994)	-	Cho (1994)
-	27.0% (1993-2003)	In this study
Institutional shareholding:		
38.8% (1988)	-	Bathala et al. (1994)
52.4% (1994)	-	Cho (1994)
Ownership concentration:		
20.0%*	54.0%*	La Porta et al. (1998)
-	64.8% (1998 only)	Suto (2003)
-	65.0% (1993-2003)	In this study

* based on three largest shareholders in non-financial domestic firms and mean values.

2.2 Corporate financing in Malaysia

Like the other Asian countries, Malaysia has a high savings rate (Suto, 2003) and uses this to support economic growth. This is also supported by Pomerleano (1998) who found that the Asian household sector saves about a third of Gross Domestic Product. Banks and social security funds (for example, Employees' Provident Fund) in Malaysia can be regarded as the twin pillars of the nation's financial system. The stock market acts as a channel to encourage increased Bumiputera participation in business. Under

the New Economic Policy, private savings was channelled to the public and private sector via banking institutions which follows closely to lending guidelines set by the government. The mortgage bond market was set up in 1987 and this was followed by the corporate debt securities market by end of the 1980s.

The 1990s marked the era of high growth in corporate debt securities. Please refer to Table 2.2. As a result, among the main financing tools available were loans and advances, equity issues and corporate debt securities. Suto (2003) noted that “lack of public issuance of corporate debt” impedes an active secondary market and there is no secondary market for corporate debt resulting them being held by social security funds and financial institutions.

2.3 External financing by the corporate sector

Table 2.2
External finance raised by the corporate sector

Year	Real GDP growth (%)	Loans & advances ¹	Equity ²	Debt securities ³
		RM million	RM million	RM million
1980	8.0	12,192.6	137.1	20.0
1981	6.9	21,031.1	901.8	0
1982	5.2	25,521.4	628.8	50.0
1983	5.9	29,665.6	1,262.3	136.9
1984	7.6	36,781.8	1,972.2	392.1
1985	-1.0	43,504.3	644.5	0
1986	1.2	48,981.7	188.6	0
1987	5.2	52,328.7	1,384.8	395.0
1988	8.7	52,180.7	931.2	1,880.7
1989	8.8	56,837.6	2,508.1	1,903.6
1990	9.8	67,141.7	8,649.6	2,602.7
1991	8.7	80,785.0	4,391.4	2,146.2
1992	7.8	97,206.1	9,181.5	4,383.9
1993	8.3	105,729.1	3,432.6	5,014.0
1994	9.2	117,235.5	8,457.9	10,266.1
1995	9.5	134,151.0	11,616.4	12,222.7
1996	8.6	175,007.4	15,924.4	17,048.7
1997	7.7	178,271.4	18,358.3	19,792.5
1998	-7.5	217,820.5	1,787.8	14,151.8
1999	5.8	284,621.6	6,096.2	27,775.5
2000	8.3	303,366.6	6,013.1	30,395.1
2001	0.4	244,321.1	6,123.5	37,932.3
2002	4.1	337,994.6	13,290.8	36,195.3
2003	5.3	355,470.0	7,771.5	50,975.3
2004	7.1	447,468.3	6,475.2	36,339.9

¹ Loans and advances refer to overdrafts, other advances, term loans and trade bills by local and foreign commercial banks.

² Equity consists of ordinary shares (initial public offers, rights issues, private placement/restricted offer for sale and special issues), preference shares and warrants.

³ Debt securities include straight bonds, bonds with warrants, convertible and Islamic bonds but excludes bonds issued by banking institutions.

Sources: Economic Report, Ministry of Finance, Malaysia and Monthly Statistical Bulletin, Bank Negara Malaysia, various issues.

Table 2.2 provides the information on Gross Domestic Product (GDP) growth rate, loans and advances by commercial banks and capital raised from the equity and debt securities both from the capital market. (Note: Capital market is defined by Bank Negara Malaysia as comprising of the government bond market, the stock market and the private debt securities market). From 1980 to 2004, the Malaysian economy had only 2 years of negative economic growth (as measured by the real GDP growth) of -1.0% in 1985 and -7.5% in 1998 due to 1985/86 recession and Asian financial crisis in July 1997. The end of the 1980s to mid 1990s, was a period of rapid economic growth with GDP growth ranging from 7.8% in 1992 to as high as 9.8% in 1990.

One notable feature between GDP growth and loans and advances by commercial banks was that during periods of negative GDP growth, there was negative relationship between the two. In fact, when GDP was negative, there was a spike in loans and advances, for example, in 1985 and 1998. Since 1980, 2001 was the only year in which there was a decline in loans and advances.

In terms of equity raised from the capital market, there was no upward trend like loans and advances. In general, equity issues was closely linked to periods of economics growth that is during periods of high economic growth for example, 1990 and 1994/95, there was a surge in equity issues. From the 1980s and early 1990s, capital raised from equity had been way ahead of funds raised from debt securities. However, since 1993, funds raised from debt securities far exceeded that of equity by a wide margin (almost six-fold) in 2004.

2.4 Funds raised by Malaysian listed firms

To get a clearer view on how Malaysian listed firms source capital in recent years (1998-2003), Table 2.3 provides the evidence. As the data source (Securities Commission of Malaysia) was formed in 1997, the data only for the post-financial crisis period. In the six year period from 1998 to 2003, Malaysian listed firms prefer debt than equity except for 2000 and 2003. The percentage of debt to total funds raised among listed companies ranged from as low as 36.0% in 2003 to as high as 80.5% in 2001. Within fund raising from debt, funds raised from pure debt far exceeded that from irredeemable cumulative unsecured loan stock.

Equity financing from listed local firms ranged from as low as 19.5% of the total funds raised in 2001 to as high as 73.7% in 1999. Within equity fund raising, ordinary share issue was the most popular source of equity funds followed by initial public offerings. During 1998 to 2003, the largest amount of funds raised by ordinary share issues were RM6.8 billion in 1999. Preference share issue was the least popular source of equity financing and the largest amount of funds raised was only RM800.0 million in 2001. In 1998, 2000, 2002 and 2003, no financing was obtained from preference shares. One of the possible reasons for the lack of interest in preference shares in Malaysia could be that preference shares only get preference or priority in terms of dividend payment but also participate in the profits of the firm but should the firm be wound up, preference shareholders are ranked after the creditors when it comes to distribution of assets.

Table 2.3
Funds raised by Malaysian listed firms (in RM million)

Type ¹	1998	1999	2000	2001	2002	2003
Equity ² :						
Initial public Offerings	473.9	931.8	3,286.6	887.4	2,377.5	3,275.3
Ordinary Shares	848.9	6,753.6	6,224.8	3,779.6	4,704.0	3,871.3
Preference Shares	0	6.8	0	800.0	0	0
Sub-total (1)	1,323.8	7,692.4	9,511.4	5,466.8	7,081.5	7,146.6
Debt:						
Pure debt	1,806.0	20,843.0	5,835.0	21,513.0	8,344.3	4,024.5
ICULS	949.3	738.6	679.4	1068.8	1,204.4	N.A.
Sub-total (2)	2,755.3	21,581.6	6,514.4	22,581.8	9,548.7	4,024.5
Total (1) + (2)	4,079.1	29,274.0	16,025.8	28,048.6	16,630.2	11,171.1
Equity as % of total	32.5	26.3	59.4	19.5	42.5	64.0
Debt as % of total	67.5	73.7	40.6	80.5	57.5	36.0

¹ Refers to each type of individual issues approved to be undertaken by listed firms.

² Excludes private placement and restricted issues.

Pure debt refers to debt without conversion features like ICULS.

ICULS is irredeemable cumulative unsecured loan stock.

Source: Securities Commission of Malaysia, Annual Report, various issues.

2.5 Debt ratio trends

Table 2.4 provides the mean debt-asset ratios in terms of book value which were then further sub-divided into three mean debt-equity ratios: total debt-to-total assets ratio (TD), short-term debt-to-total assets ratio (STD) and long-term debt-to total assets ratio (LTD). Note: Debt in this study refers to interest-bearing debts (for example, bank overdraft and bonds issued by the firm) and had been used by researchers such as Harijono, Ariff and Tanewski (2004).

An examination of Table 2.4 revealed that all three mean debt-to-asset ratios can be considered relatively low among Malaysian listed firms during the period from 1993 to 2003. Using all three debts ratios mentioned above, the highest debt ratio was 0.24 in 1998 and the lowest debt ratio was 0.05 in 1993. In terms of total debt to total asset ratio, the highest level was 0.24 in 1998 that just after the 1997 financial crisis and the lowest level was 0.15 in 1993. The mean book value short-term debt ratios range between 0.10 in 1993 to 0.13 in 1999 and 2000. The mean book value long-term debt ratios range between 0.05 in 1993 to 0.11 in 2003.

Table 2.4
Annual Trend of Debt Ratios

Year	Total debt to total assets ratio (TD)*	Short-term debt to total assets ratio (STD)*	Long-term debt to total assets ratio (LTD)*
1993	0.151	0.101	0.050 (lowest)
1994	0.160	0.106	0.054
1995	0.165	0.103	0.063
1996	0.173	0.101	0.072
1997	0.207	0.114	0.093
1998	0.235 (highest)	0.129	0.107
1999	0.228	0.130	0.098
2000	0.226	0.130	0.097
2001	0.227	0.125	0.102
2002	0.224	0.128	0.096
2003	0.229	0.118	0.110

* mean values.

Source: this study.

Table 2.4 also shows the annual trend of three debt ratios (based on book values) from 1993 to 2003 for the samples used in this study. From Table 2.4 and Figure 2.1, all three debt ratios indicate an increasing trend. In fact, all three debt ratios revealed a significant increase in debt ratios in 1997 mainly due to the aftermath of the Asian financial crisis in that year. For example, the mean total debt-to-total asset ratio increased sharply from 0.15

during 1993-1996 to 0.24 from 1997-1998 and had been about maintained at an average of 0.23 during the 1999-2003 period. A noteworthy feature is that mean debt levels (for all three measures of debt) has more or less been maintained at around 1997 financial crisis levels even after six years after the crisis in 2003.

Figure 2.1 shows that the mean yearly debt ratio trends in this study. As measured by book value of debt ratios (TD, STD and LTD), there has been an uptrend from 1993-2003. However, debt ratios increased sharply in 1997 as a result of the Asian financial crisis and has remained rather flat since 1998. This is probably the result of the financial crisis which caused many firms to incur losses and had to increase borrowings.

One striking feature that is observed is that from 1993 to 2003, STD had always been more than LTD that Malaysian firms use more short-term debt than long-term debt as they roll-over the short term debt (Pandey, 2004). However, in 2003, for the first time, it is interesting to note that the LTD ratios almost matched that of the STD ratio. One possible reason for this scenario is that firms have learnt their lesson from the past Asian financial crisis are using more long-term debt to finance their expansion rather than relying on short-term debt as in the past. Another reason could be firms could lock in the low interest rate for long-term debt rather to face the volatility of short-term interest rates if interest rates were to increase in future.