

**A COMPARISON STUDY ON FINANCIAL BEHAVIOR BETWEEN  
INDUSTRIAL PRODUCT AND TRADE AND SERVICES SECTORS IN  
MALAYSIA. DOES FIRM SIZE MATTER?**

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A COMPARISON STUDY ON FINANCIAL BEHAVIOR BETWEEN  
INDUSTRIAL PRODUCT AND TRADE AND SERVICES SECTORS IN  
MALAYSIA. DOES FIRM SIZE MATTER?

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Dedicated to my beloved parents for their endless support, affection, encouragement,  
and to those who stand still with me on completion of this dissertation.

اسب شرف از کنبه گردون بجماند	آن کس که بداند و بداند که بداند
میدار کنیدش که بسی خفته نماند	آن کس که بداند و نداند که بداند
لنگان خنک خمیش به مترل برساند	آن کس که نداند و بداند که نداند
در جهل مرکب ابدالدهر بماند	آن کس که نداند و نداند که نداند

**He who knows and knows that he knows is wise, follow him.**

**He who knows and knows not that he knows is asleep, wake him up.**

**He who knows not and knows that he knows not is a child, teach him**

**He who knows not and knows not that he knows not is a fool, shun him.**

**(Persian poetry)**

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## ABSTRACT

This study focuses on the sensitivity of different firm sizes on capital structure determinants within the Malaysian listed firms across two major sectors, i.e. Industrial product and trade and services during the pre and post the Global Financial Crisis in Malaysia. The dataset of 370 firms for the time period 2003 to 2012 were employed to check the robustness of these results. Based on pooled OLS, fixed-effect analysis and ANOVA, the findings of this study shows that the firm-level determinants, differ across sectors due to the nature or characteristics of each sectors. The result shows there is a relationship between capital structure determinants and leverage which is significantly influenced by the sector characteristics across different firm sizes become narrower. The impact of sectoral characteristics on leverage could be seen clearly as the model considers different firm sizes within each selected sector within different economic conditions in Malaysia. The chronology of the importance of each variable on leverage is appearing across selected sectors. The greater significant relationship between types of leverage and firm-level determinants respectively related to profitability, size, non-debt tax shield, tangibility and, liquidity differs across sectors. Nevertheless, the behavior of short-term and total debt on leverage determinants is similar, as total debt is highly controlled by the short-term debt mainly within medium-sized firms. The orientation between leverage and capital structure determinants varies across industrial product and trade and services sectors. The mechanism between capital structure determinants and leverage differs between and within medium-sized rather than large-size firms as the orientation is controlled mainly by the unique behavior of each sector. Finally, the applicability of capital structure theories such as the trade-off theory, the agency theory, and the pecking order theory survey separately across firm-sized, two sectors, and mentioned sub periods.

## ABSTRAK

Kajian ini memberi tumpuan kepada sensitiviti saiz firma yang berbeza pada penentu struktur modal dalam firma-firma yang tersenarai di Bursa Malaysia yang terbahagi kepada dua sektor utama, iaitu produk perindustrian dan perdagangan dan perkhidmatan sepanjang pra dan hantar Krisis Kewangan Global di Malaysia. Sebanyak 370 firma bagi tempoh 2003 hingga 2012 telah digunakan untuk memeriksa keteguhan keputusan ini. Berdasarkan OLS yang dikumpulkan, analisis kesan-tetap dan ANOVA; hasil kajian ini menunjukkan bahawa penentu firma-peringkat berbeza di seluruh sektor disebabkan oleh sifat atau ciri-ciri bagi setiap sektor. Keputusan menunjukkan terdapat hubung kait antara penentu struktur modal dan leverage yang ketara telah dipengaruhi oleh ciri-ciri sektor di seluruh saiz firma yang berbeza menjadi kecil. Kesan ciri-ciri sektor mengenai leverage boleh dilihat dengan jelas sebagai model yang difikirkan sesuai untuk mengukur keadaan firma yang berbeza saiz di dalam setiap sektor terpilih dalam ekonomi Malaysia. Kronologi kepentingan setiap pembolehubah pada leverage muncul di seluruh sektor terpilih. Terdapat hubungan yang signifikan antara jenis leverage dan penentu firma-tahap masing-masing yang berkaitan dengan keuntungan, saiz, bukan hutang-perisai cukai, sifat boleh disentuh dan kecairan berbeza antara sektor. Walau bagaimanapun, tingkah laku hutang jangka pendek dan jumlah di penentu leverage adalah sama, kerana jumlah hutang sangat dikawal oleh hutang jangka pendek terutamanya dalam firma sederhana. Orientasi antara leverage dan struktur modal penentu berbeza di seluruh sektor perdagangan dan perkhidmatan dan produk industri. Mekanisme antara penentu struktur modal dan leverage berbeza dikalangan firma tidak besar-saiz sebagai orientasi sederhana yang dikawal terutamanya oleh tingkah laku yang unik bagi setiap sektor. Akhir sekali penggunaan teori struktur modal seperti teori keseimbangan, teori agensi, dan kajian perintah mematu teori boleh digunakan secara berasingan di firma pelbagai saiz, dua sektor, dan pada sub tempoh.

## TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	<b>DECLARATION</b>	ii
	<b>DEDICATION</b>	iii
	<b>ACKNOWLEDGEMENT</b>	iv
	<b>ABSTRACT</b>	v
	<b>ABSTRAK</b>	vi
	<b>TABLE OF CONTENTS</b>	vii
	<b>LIST OF TABLES</b>	xi
	<b>LIST OF ABBREVIATION</b>	xiii
<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
	1.1 General Overview	1
	1.2 Background of The Study	2
	1.3 Background of The Problem	5
	1.4 Justification for choosing Malaysia	8
	1.5 Problem Statement	11
	1.6 Research Questions	12
	1.7 Objective of the Study	12
	1.8 Significance of The Study	13
	1.9 Scope of the Study	14
	1.10 Limitation of The Study	14
	1.11 Organization of the Thesis	15

<b>2</b>	<b>LITERATURE REVIEW</b>	<b>16</b>
2.1	Introduction	16
2.2	Capital structure theories	17
2.2.1	Modigliani-Miller – MM Theory	18
2.2.2	The Trade-off Theory	19
2.2.3	Agency Cost Theory	20
2.2.4	Pecking Order Theory	21
2.3	Capital Structure Determinants	23
2.4	Firm-Level Determinants	23
2.4.1	Profitability	24
2.4.2	Firm Size	25
2.4.3	Tangibility	27
2.4.4	Growth	28
2.4.5	Risk	28
2.4.6	Liquidity	29
2.4.7	Non-Tax Debt Shield	30
2.5	The effect of firm size on capital structure determinants	31
2.6	The effect of differing economy sub-periods on capital structure determinants	32
2.7	Conclusion	35
<b>3</b>	<b>METHODOLOGY</b>	<b>36</b>
3.1	Introduction	36
3.2	Research Formulation	37
3.3	Data Classification and Sampling Technique	37
3.3.1	Dependent Variables	38
3.3.2	Independent Variables	40
3.4	Models Determination and Hypothesis	43
3.4.1	ANOVA	43

	3.4.2	Ordinary Least Squares	45
	3.4.3	Fixed Effect Model	46
	3.5	Conclusion	47
<b>4</b>		<b>DATA ANALYSIS AND INTERPRETATION</b>	<b>49</b>
	4.1	Introduction	49
	4.2	Descriptive Summary and Correlation Matrix Analysis	49
	4.3	The Effect of Firm Size and Sector on Capital structure determinants (ANOVA multiple test)	52
	4.4	The Effect of Sector on Capital Structure Determinants	60
	4.5	The Effect of Large, Medium, and Small-sized firm on Capital Structure Determinants	69
	4.6	The Effect of Different Economic Sub-Periods on Capital Structure Determinants	84
	4.7	Conclusion	103
<b>5</b>		<b>DISCUSSION AND CONCLUSION</b>	<b>104</b>
	5.1	Introduction	104
	5.2	Recapitulation of Study	104
	5.3	Discussion of objective	105
	5.3.1	Significant Determinants across large, medium and small-listed firm within the industrial product and trade and services sector in Malaysia	105
	5.3.2	The significant determinants differ between these two selected sectors	107
	5.3.3	The effects of different economic Periods on the determinants of Capital Structure across different firm sizes	109
	5.4	Summary of key findings	111

5.5	Contribution of the Study	112
5.6	Limitation of the Study	113
5.7	Recommendation for Future Research	114
5.8	Conclusion	114
<b>REFERENCES</b>		<b>116</b>

## LIST OF TABLES

<b>TABLE NO.</b>	<b>TITLE</b>	<b>PAGE</b>
1.1	Malaysia Gross Domestic Product	8
1.2	Malaysia Strong Growth across Market Segmentation	10
2.1	Summary of empirical literature on firm-level determinants	34
3.1	Classification of dependent variables	40
3.2	Classification of independent variables at firm-level	42
4.1	Descriptive Statistics of Firm-level determinants based on dataset	51
4.2	Correlation Matrix of Firm-level determinants based on dataset	54
4.3	ANOVA multiple test for industrial product and trade and services	56
4.4	ANOVA t-test among overall sample within firm size	59
4.5	Pooled OLS regression based on firm-level determinants and leverage	63
4.6	Fixed Effect Analysis based on firm-level determinants and leverage	68
4.7	Pooled OLS Analysis based on firm-level determinants and leverage across firm-size	71
4.8	Fixed Effect Analysis based on firm-level determinants and leverage across firm-size	74
4.9	Pooled OLS and Fixed Effect Analysis based on Industrial Product sector	77
4.10	Pooled OLS and Fixed Effect Analysis based on Trade and Services sector across size	82
4.11	Firm-level Determinants Analysis based on overall sample with in period 2003-2007 and 2008-2012	85
4.12	Firm-level Determinants Analysis based on 228 firms in Industrial Product sector within 2003-2007	90
4.13	Firm-level Determinants Analysis based on 142 firms in Trade and Services sector within 2003-2007	92

4.14	Firm-level Determinants Analysis based on 228 firms in Industrial Product sector (2008-2012)	99
4.15	Firm-level Determinants Analysis based on 142 firms in trade and Services sector (2008-2012)	101

**LIST OF ABBREVIATIONS**

CMMP	Capital Market Master Plan
F	Future (prediction)
FE	Fixed Effect
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GRWTH	Growth Opportunities
GNI	Gross National Income
LIQ	Liquidity
MM	Modigliani and Miller
NDTS	Non-Debt Tax Shield
OLS	Ordinary Least Squares
PPP	Purchasing power parity
Profit	Profitability
RISK	Risk
Size	Firm Size
TANGIB	Tangibility

## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 General Overview**

Capital structure decisions are crucial for a firm's financial wealth. The fundamental framework of corporate finance in the area of capital structure has been established by Modigliani and Miller (1958) as pioneers in this field. The firm could use internal (retained earnings) or external (shares or borrowings) sources for financing based on its financial behaviours. Financing shows the composition of a company's long-term capital which consists of a mixture of debt and equity (Bevan & Danbolt, 2002). The way these firms finance their assets through some combination of equity, debt, or a mixture of securities. This behavior provides the infrastructure that serves as the basis of their capital structures and creates value for the firms (Voulgaris, Asteriou, & Agiomirgianakis, 2004). In reality, there are several different approaches that constitute the theory of capital structure. Capital structure decisions are significant for creating the value for the firm and they are a major, prominent measure of the firm's growth and performance (Voulgaris et al., 2004).

The capital structure leaders Modigliani and Miller (1958) focus on the analysis of certain firm characteristics and constructed a well-appointed foundation for their research on capital structure. The initial theory was based on the Modigliani and Miller (MM), and it mentioned that there were regulations related to the costs of financial distress or the risk of bankruptcy (Altman, 1984; DeAngelo & Masulis,

1980). Afterwards, the studies concentrated on Trade-off Theory, Pecking Order Theory, Market Timing Theory and Agency Cost Theories (Buferna, Bangassa, & Hodgkinson, 2005). In the classical version of the Trade-off hypothesis (Kraus & Litzenberger, 1973) a balance between the dead-weight costs of bankruptcy and the tax saving benefits of debt must be considered. The Pecking Order Theory postulates that the cost of financing increases with asymmetric information and financing sources (internal funds, debt and new equity) starting from the internal to external financing.

The body for the capital structure literature has grown especially for developed countries such as the United State. Studies have shifted their attention from European countries to developing and emerging economies. The majority of studies focus on firm-level factors followed by country-level characteristic, in line with the institutional differences across developed, emerging and developing countries. Several measurements are used to qualify the components of capital structure. Moreover, there are various factors that determine the capital structure such as equity, the size of a company, profitability, country characteristics, and sector uniqueness, etc. None of the capital structure theories mentioned above is universal, as each theory is conditional (Myers, 2003). Only a few studies have observed the effect of sector on the capital structure of a firm. Shah and Hijazi (2004) estimated that nature of each sectors requires different business environments. Moreover, environmental factors have the power to affect the firm-level characteristic and they should not be ignored (Kayo & Kimura, 2011). This issue will become a wide barrier to omit the nature of the sectors and how it affects the capital structure of the firm.

## **1.2 Background of the Study**

A valid capital structure decision will create additional value for the firm. Furthermore, financial distress, liquidation and bankruptcy are the ultimate consequences that lay ahead if any major miss judgment occurred following the

financing decision of the firm's activity. Prior to the traditional evaluation of the firms' characteristic and specific factors in measuring the leverage of a firms presented by Modigliani and Miller (1958) as a ground for capital structure theories. Currently, the majority of the studies focused on developed countries, in particularly the United States as discussed in some related studies (Harris & Raviv, 1991; Jalilvand & Harris, 1984; Lemmon, Roberts, & Zender, 2008; Myers, 2001; Titman & Wessels, 1988). The differences between countries are particularly due to institutional differences as observed by Wald (1999). A few studies approved mainly based on the specific non developed countries (De Miguel, Alberto Pindado, & Julio, 2001). Antoniou, Guney, and Paudyal (2002) found similarity between variations of the capital structure determinants across G-5 countries.

The results of various studies have led to the development of capital structure models such as Trade-off, Pecking Order and Agency Cost theories. The Trade-off Theory look at a mixture of debt and equity financing by balancing costs and benefits to illustrate that a firm achieves its optimal capital structure whenever the tax benefit of debt (tax shields) balances the leverage related financial distress costs (Altman, 1984; Baxter, 1967). Financial distress refers to bankruptcy risk (company insolvency and it inability to face its debt) and agency costs (the conflict between shareholders and management) which plays important role in the financial decision of firms (Baxter, 1967; Jensen & Meckling, 1976). The Pecking Order Theory was popularized by Myers and Majluf (1984) who observed that firms prefer to follow financial hierarchies that begin with retained earnings, followed by debt financing and finally, equity financing. The power of capital structure theories regarding different types of leverage was illustrated by Titman and Wessels (1988). The role of leverage as a way for investor to achieve useful data for monitoring their management was observed by Harris and Raviv (1991). In general, the result of several surveys showed that firms depend mostly on internal sources for funding but rely on debt financing whenever they face lack of internal funds. Equity financing is reserved as a last resort.

Many researchers have focused on several measurements to regulate capital structure components. There are also several factors determining the capital

structure such as equity, size, growth, profitability, risk and business environments (DeAngelo & Masulis, 1980; Harris & Raviv, 1991; Jalilvand & Harris, 1984; Kester, 1986; Myers, 2001; Titman & Wessels, 1988). A few studies have considered the firm-level factors and the diversity of firms' characteristics in developed countries but, the consequences of developed economy could not be extracted. For example Auerbach (1985) examined how different factors in American's firms influenced their tendency to borrow as their finance resource.

Recent studies have incorporated country-level characteristics into the traditional firm-level determinants to explain a firm's leverage (Booth, Aivazian, Demirguc-Kunt, & Maksimovic, 2001; Demirgüç-Kunt & Maksimovic, 1999; Hanousek & Shamshur, 2011; Rajan & Zingales, 1995). Rajan and Zingales (1995) determined what determinants of capital structure were suitable for the G-7 countries. Country characteristics such as inflation, GDP and capital market developments influence the firms' costs and benefits when determining capital structure (Booth et al., 2001). Jõeveer (2012) analysed the capital structure listed and unlisted companies in Eastern European, including Estonia, Latvia and Lithuania, during the period of 1995 to 2002, according to country, industry and firm-specific variables. Delcours (2007) observed determinants of the capital structure in four European transition economies, including Russia, during the period of 1996 to 2002 in publicly listed companies. Stankevičienė and Norvaišienė (2007) researched on Baltic listed companies from 2000 to 2005.

Over time, the focus of studies shifted from developed nations to emerging and developing countries. The empirical literature localizes on individual emerging and developing countries further to understand the relationship between the capital structure decisions and tests that are modified according to the different business environments found in that country (Chakraborty, 2010; Chen, 2004; Indra Pandey, 2001; Shah & Khan, 2007). The research includes different sized firm and listed companies that have easy access to financing and, greater leverage and higher debt maturities. In contrast, access to financing for small and private firms is more dependent on the conditions of the economic environment (Bas, Muradoglu, & Phylaktis, 2009).

Other theorists observed the homogeneity of the determinants across 10 developing countries, irrespective of institutional differences (Booth et al., 2001; Chen, 2004; IM Pandey & Chotigeat, 2004). However, the outcomes for developed countries could not be distributed across the developing countries. Different perspectives are significant and may be influenced by institutional setting, economic environment, quality of accounting practices, capital market development, and corporate governance that indirectly influences capital structure decisions (Deesomsak, Paudyal, & Pescetto, 2004).

There are a few studies that have taken an interest in the effect of sectors on the capital structure of firms. The effect of external factors that are driven by industrial power is increasing (Kayo & Kimura, 2011; Ramakrishnan, 2012). Additionally industry factors such as quantity, research and development, competition, and advertising differ across industries and they affect the decisions on capital structures (Brander & Lewis, 1986).

### **1.3 Background of the Problem**

Most of the studies on capital structure concentrate on firm-level factors as high level characteristics for determining the capital structure of the firm. A few studies consider the effect of related sectors. Financial behavior also has an effect on firms' characteristic related to size, business economy, competitiveness and growth which have influences in determining their capital structures. Important studies in capital structure concentrated on the developed countries. For example four countries determinants were proposed by Remmers, Stonehill, Wright, and Beekhuisen (1974). Rajan and Zingales (1995) studied G-7 countries and a survey of European countries was conducted by Antoniou et al. (2002). Over time, the focuses of studies shifted to developing countries. Example include; Booth et al. (2001) who considered the determinants of the capital structure in ten developing countries and; Chen (2004) who collected data in evidence from China and Chakraborty (2010) observes emerging India stock market.

More recently, a few studies have examined the effect of sectors on the capital structure of firms across industries. In addition, the capital structure of firms across sectors under common institutional settings may be affected by the unique characteristics of each sector or industry. In line with these surveys, Wang, Lee, and Huang (2003) observe that industry effects perform better than the country effects among Asian markets. Kayo and Kimura (2011) had specific survey on the power of sector-level factors to influence the firm-level determinants of capital structure. Recent study in these areas which belongs to Ramakrishnan (2012) examine the effect of sector/industry on the capital structure determinants across emerging market and found that it was more powerful than the firm-level determinates. Moreover, a few studies (Pettit & Singer, 1985; Scherr & Hulburt, 2001) among others have promoted the relationship between firm size and industry. Das and Roy (2012) argue that variations in capital structure as measureable to firm size and industry classification, though it is attributed to the nature of the industry. However, their focus is not on the indirect impact of industry on the relationship between capital structure determinants and leverage for large and small firms across sectors.

Pioneer researcher of the firm size characteristic is Mason (1939) who postulated that the size of a firm influences its competitive policies. Related studies have shown that there is a difference in financial structure across firms' size exists (Ayyagari, Beck, & Demirguc-Kunt, 2007; Bas et al., 2009; Beck, Demirgüç-Kunt, & Maksimovic, 2008; Chittenden, Hall, & Hutchinson, 1996; Demirgüç-Kunt & Maksimovic, 1999; Gupta, 1969; Michaelas, Chittenden, & Poutziouris, 1999; Titman & Wessels, 1988; Voulgaris et al., 2004). For example, Remmers et al. (1974) observe that larger firms are more diversified to creating a barrier to risk and could use greater amount of leverage. In a study carried by Gupta (1969), it is found that small firms tend to utilize inaccessible funds such as internal funds more than external funds. Afterwards, Remmers et al. (1974) based their arguments on the fact that large-sized firms are less risky as compared to smaller firms because of their diversifying power with regards to multi-product businesses.

The results of some surveys show that large firms have more debt compared to small-sized firms since they depend on single-product lines thus they carry lower

amounts of debt. In addition, Demirgüç-Kunt and Maksimovic (1999) find that there are large variations in the use of long-term debt between large and small firms across the developed and developing countries. Beck, Demirguc, Laeven, and Levine (2008) explain the theory behind these findings by considering more details on the behaviour of small firms from an international point of view. They argue that the financing patterns of small firms are strongly dependent on the institutional environment within each economy. It was also discovered that small firms operating under a developed institution and financial market framework make use of banks for their external financing. Nevertheless, as their underlying institutional settings are under-developed, the small firms make use of other easily accessible financial sources.

The role of sectors/industries of illustrating the financing pattern of firm is to highlight capital structure area during the 2007 global financial crises (Zarebski & Dimovski, 2012). Before the global financial crises, few studies investigated the effect of financial downturn is strongly tied with the need of firms on the matched of external funds and its affect changes across industries (Braun & Larrain, 2005; Deesomsak et al., 2004). Recent research shows that the global financial crisis had a significant effect on the behaviour of firm but none of the researcher explored the effect on capital structure determinants of the firm across sectors. More recently, studies have considered the influence of the global financial crisis on the financial behaviour of a firm across industries because particular behaviours can have different affection on capital structure during various economic periods (Bancel & Mittoo, 2011; Fosberg, 2010; Zarebski & Dimovski, 2012).

The studies as described above provide a structure for investigating how the determinants of capital structure related to the size of the firms across sectors. In line with this, the following section is based on the Malaysian economic investigation as the main aim for determining the effect of the capital structures as observed across industrial product and trade and services sectors during different economic periods.

## 1.4 Justification for Choosing Malaysia

According to the economic report of world Indicators (2012) Malaysia has experienced rapid growth and a relatively open state-oriented and newly industrialized market economy. The FTSE Global Equity Index (2012) reported that Malaysia has become an advanced emerging economy with an upper-middle income economy with a developed capital market. It is a highly open economy (exports comprise over 100% of GDP) and a leading exporter of electrical appliances, electronic parts and components, palm oil, and natural gas. Malaysia is also externally competitive, ranking 12th (out of 135 economies) in the World Indicators (2012) report. According to major credit rating institute, Malaysia has A- credit rating in standard and poor and is recognized as an advanced emerging economy with a well-developed capital market duo to word bank Indicators (2012) report. In 2007, the economy of Malaysia was the 3rd largest economy in South East Asia and 28th largest economy in the world in terms of purchasing power parity (PPP) with gross domestic product (GDP) for 2008 of \$230 billion. It has grown from 4.8% to 6.3% since 2007. In 2010, the gross national income (GNI) of Malaysia stands at US\$14,770 and the GDP per capita was \$287 billion in 2011 (Agarwal, 2012), as shown in Table 1.1.

**Table 1.1:** Malaysia Gross Domestic Product

<b>World bank database of Malaysia</b>	2007	2008	2009	2010	2011	2012
<b>GNI per capita, PPP (current international \$)</b>	13,650	14,230	14,030	14,770	15,720	16,530
<b>GDP (current US\$) (in billions)</b>	193.5	230.9	202.2	246.8	287.9	303.5
<b>GDP growth (annual %)</b>	6.3	4.8	-1.5	7.2	5.1	5.6

Source: World Development Indicators

The Malaysian Government issued Malaysian Securities in the late 1980s to raise funds for public sector investments. However, Malaysian firms were afraid to switch from banking loans as a result of the long and delayed approval process related to bond issuance (Harwood, 1993). As a result, the bond market was less attractive during that period. The Capital Market Master Plan introduced by the Malaysian government is a significant initiative to develop capital market soon after the financial crisis. This strategy defined the growth and governance plans used to develop capital market by improving product regulation to manage risk, facilitating internationalization, promoting capital formation, and enlarging intermediation efficiency and scope. Major structural improvement took place with regard to capital market mediators with the introduction of investment banking in 2006.

Malaysia's well-developed bond markets increased the efficiency and competitiveness of financial systems and created alternatives to traditional banks extending the financing alternatives available to businesses. Despite the challenging global economic environment, the Malaysian economy has recorded growth rates averaging around 4.5 percent per year over the past five years. The size of the capital market in Malaysia has grown from US \$ 239 billion in 2000 to US \$ 667 billion in 2010 with witnessed annual growth of 11.1% in stock market capitalization from 2000 till 2012. In the same period, bond market evident had a striking growth of 10.8% and had placed Malaysia as the third largest market in Asia and the largest in ASEAN. Table 1.2 shows the Malaysian market growth across all market segments, as stated above.

The advancement and vibrancy of Malaysia's financial markets, particularly its bond market, can be seen when it is exposed to other emerging markets, and is mainly due to the implementation of the Capital Market Plan in 2001. Furthermore, to the best of my knowledge, none of the studies focuses on the impact of sectoral behaviour and the power of firm size on capital structure determinants across the Malaysian listed firms using the largest number of observations. Moreover, this is the first extensive study across developing countries that look at the nature of sectors and their impact on the capital structure decision-making. The influence of the firm size on capital structure decision-making is probably to disagree across developing

countries due to its large institutional differences, exclusively among the emerging markets. The developments of emerging capital markets as well as modifications across countries which donate to the rank of availability of funds as firms become more dependent on external funds.

**Table 1.2:** Malaysia strong growth across Market Segmentation

<b>Market Segments</b>	<b>2000 (RM bil)</b>	<b>2010 (RM bil)</b>	<b>CAGR (%)</b>	<b>2020 f (RM bil)</b>
<b>Debt securities outstanding (Bond market)</b>	273.1	758.6	10.8	2,053.5
<b>Stock market capitalization</b>	444.41	1,275.3	11.1	2,430.2
<b>Islamic capital market</b>	293.7	1,050.1	13.6	2,882.6
<b>Derivatives (notional value traded)</b>	84.0	512.1	19.8	4,169.5
<b>Investment management (assets under management)</b>	55.2	377.4	21.2	1,610

Source: Securities Commission Malaysia (2012)

Malaysia has progressed from being a producer of raw materials, such as tin and rubber, in the 1970s to being a diversified economy that grew on average 7.3% between 1985 and 1995. After the Asian financial crisis in 1997-1998, Malaysia has continued to post solid growth rates, averaging 5.5% per year from 2000 to 2008. Their growth was accompanied by a dramatic reduction in poverty, from 12.3% in 1984 to 2.3% in 2009. However, pockets of poverty exist and income inequality remains high relative to the developed countries Malaysia aspires to emulate. Indicators (2012) Malaysia's economic transformation from 2009 to 2011 that shows more positive signs than its political development. The country was strongly affected by the global crisis, but its economy recovered and gained strong momentum in 2010. In 2010, Malaysia launched the New Economic Model (NEM), which aims Malaysia to reach high income status by 2020 while ensuring that growth is also sustainable and inclusive. The NEM envisions economic growth that is primarily

driven by the private sector and moves the Malaysian economy into higher value-added activities in both the industry product and trade and services sectors. To achieve these goals, Malaysia will require better skills, more competition, a leaner public sector, a better knowledge base, smarter cities, and greater efforts to ensure environmental sustainability (Indicators, 2012).

The Malaysians' industries are categorized into different sectors. Over the course of this study, only two of these sectors will be investigated namely, industrial product and trade and services. The major contributors of industrial product in manufacturing industry are the electronic and electrical sub-sectors. The demand for electronic products increased in growth after the crisis period from 2007 by expanding their output through positive developments such as sale increment, exportation and etc. Furthermore, a raise in the amount of product being manufactured developed export-oriented industries leading increased industrial output. As a result, the sales value of the products manufactured increased the value of the price as well as external demand by domestic-oriented (companies or industries). In comparison with manufacturing, the trade and services such as banking and tourism, there was a raise in overall GDP from 2003 despite the negative effects of a global virus and the Middle East war that contributed to the reduction of tourist arrival. On the other hand, transportation, retail and insurance services increased in growth in line with industrial growth after 2004. In addition, the banking industry raised a smooth growth to lend to the trade and services to their improvement which affected the banking development.

## **1.5 Problem Statement**

The majority of the studies on capital structure focus on developed countries. This study will attempt to fill the gap in the experimental document in the emerging countries from three particular points of view. Since business environment sectors create different level of competitiveness, growth and market combinations are created; thus, the focus of this study will be on how the nature of a sector could

affect the capital structure of firms across sectors in emerging countries. In line with this, the study will mark the differences of important capital structure determinants across sectors. As discussed in the back ground of study, the effect of different firm size on capital structure determinants across sectors will investigated. However, until now, only one study has observed capital structure determinants across sectors or industries in Malaysia (Ramakrishnan, 2012). With regards to this issue the study captured the differences between capital structure determinants for large firms, medium firms and small firms across sectors. So far, a few studies were conducted in different firm's size in Malaysia but they do not compare the different economy periods, hence, this study highlights the difference of capital structure determinants across sectors during pre and post global financial crisis (2008).

## **1.6 Research Questions**

The research questions in this study are:

- a) What are the significant determinants for large, medium and small firm size within the industrial product and trade and services sector in Malaysia?
- b) Do the determinants differ between these two selected sectors?
- c) What are the effects of different economic periods on the determinants of capital structure for large, medium and small firm size within the industrial product and tread and services sectors in Malaysia?

## **1.7 Objective of the Study**

The examination is reasonable to be more effective as this study extracts a particular country from the Asian markets that has been strongly influenced by the Global financial crisis (2007). Malaysia was the best choice based on this scale and it is a unique example because it provides an opportunity to accomplish the following objectives:

- a) To investigate the significant determinants for large, medium and small firm size within the industrial product and trade and services sectors in Malaysia.
- b) To clarify who significant determinants difference between these two selected sectors.
- c) To examine the effects of different economic periods (pre and post global crisis) on the determinants of capital structure within the ensembles of Malaysian listed firm across large, medium and small firms.

## **1.8 Significance of the Study**

The aim of this study is to analyse the significant capital structure determinants of the Malaysian listed firms on the Bursa Malaysia across two sectors with respect to the firm's size and different economic periods that create different impacts on the firm's financial behaviour. This study also discussed the effect of short term and long term debt across sectors with respect to valuable factors which carry effective relationship between leverage and capital structure determinants. Meanwhile the contest to this point has focused on emerging markets, and there is a need to assess the evidence from the capital market research in Malaysia in the remainder of the paper. In this study we concentrate on the Malaysian financing behavior using mainstream ideas in finance across the determinants of the capital structure for industry product and trade and services firms by examining various alternative characteristics and measurements.

This study used panel data from a span of ten years during the pre and post global financial crisis (2007-2008). Period from 2002 to 2007 covers the years before global financial crisis and 2008 to 2012 present the post-global crisis period. The realistic that determines the periods of study is that the economy of Malaysia has validated a terrific GDP growth during the period of 2002-2007, before the crash of global financial crisis in 2008. After the occurrence of the global financial crisis, the economy of Malaysia faced downtown. According to the Bursa Malaysia, the GDP growth rate reduced from 6.3% in 2007 to 4.8% in 2008 and followed by -1.5% in

2009 to 7.2% in 2010. The global crisis result shows effect of different economic periods on the capital structure of firms due to sectors. In this study, sector specific lending mechanisms in line with the size of a company from financial institutions were used to investigate the effect of economic periods on capital structure.

## **1.9 Scope of the Study**

This study examines the importance of the capital structure determinants of Malaysian firms listed across two different sectors. The industrial product and trade and services sectors that have been listed on the Bursa Malaysia will be tested by admiring the firms' size and economic environment, bring about different influence on the firms' financial behavior. To determine how the firm size effected capital structure determinants, the firms are divided into three categories which are the large firms (main board), the medium firms (second board), and the small firms (MESDAQ) based on the Bursa Malaysia's listed firms and paid-up capital requirements within the balanced panel data. Based on fiscal year, the data covers 10 years period from 2003 to 2012. Moreover the study will emphasize short term and long term debt across sectors as well as other factors that show the relationship between capital structure determinants and leverage.

## **1.10 Limitation of the study**

The main limitation of this study is related to difficulties faced capturing data for every firm for specific variables during the different time periods. As a result, all firms with missing data are excluded from the study. Moreover, not every company was covered by panel data analysis because there were some firms or the time period of the study has been reduced and some companies went in and out during the selected periods. The quantity of samples or variables will decrease even whether the number of firms could be raised. Moreover, it did not represent other sectors which

exist in the Bursa Malaysia because the other sectors are not generalized as same sectors in other countries either developing emerging countries. On the other hand, industry product and trade and services are the best two sectors among listed firms. One of them is product base and the other is service base, and they are the best two major contributors in the Malaysian economy and business environment.

### **1.11 Organization of the Thesis**

However, the majority of studies concentrate on the developed countries. By contrast, this study will provide further evidence of the capital structure hypothesis applied to emerging economy and examine the impact of various capital structure determinants by analysing capital structure question with reference to the country's financial environment. This thesis will be arranged as follows: Chapter Two will discuss the literature review on the capital structure theories and their determinants which allocate two major titles: firm-level determinants across the industry product and trade and services firms. Eventually the study will provide a general survey of size as the important determinant on the capital structure of Malaysian firms.

Chapter Three will discuss the methodology used for different economic conditions and firm sizes in relation to capital structure determinants across sectors. This study employs the econometric techniques related to panel data analysis such as static models: pooled OLS, fixed effect analysis and ANOVA for capturing and analysing the determinants differences among variables. Chapter Four discuss the findings of hypotheses that concentrate on three outcomes: the differences of significant capital structure determinants across sectors, the differences of significant capital structure determinants across firm size, and the differences of significant capital structure determinants across pre and post global crisis conditions in Malaysia. Finally, Chapter Five concludes the research findings and discusses the contributions it made, its limitations and future research recommendations.

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