

**CAPITAL STRUCTURE, CAPITAL INVESTMENT AND PROFITABILITY  
AMONG MALAYSIAN LISTED FIRMS**

**YAMUNAH A/P VAICONDAM**

**UNIVERSITI TEKNOLOGI MALAYSIA**

CAPITAL STRUCTURE, CAPITAL INVESTMENT AND PROFITABILITY  
AMONG MALAYSIAN LISTED FIRMS

YAMUNAH A/P VAICONDAM

A thesis submitted in the fulfilment of the  
requirements for the award of the degree of  
Doctor of Philosophy (Management)

Faculty of Management  
Universiti Teknologi Malaysia

FEBRUARY 2018

*Dedicated to those who stand still with me on completion of this thesis.*

*A little thing from you always a great deal for me forever.*

*Special dedication to Late Associate Professor Dr. Melati Ahmad Anuar*

## ACKNOWLEDGEMENT

First and foremost, I would like to thank my supervisors Dr. Suresh Ramakrishnan and the Late Associate Professor Dr. Melati Ahmad Anuar who encouraged and guided me through the entire process of this thesis. This thesis could not have been completed without my supervisor's guidance and the cooperation is much indeed appreciated.

Secondly, my appreciation is to my family members; Rajayaspri, Renuga, Vijayandran, Narresh and Saadhana for being my backbone always. Thank you to the one above all of us, the omnipresent God, for answering my prayers by giving me the strength to face the challenges.

Last but not the least, I would like to thank my friends Hishan Shanker, Arslan Umar and Shehzad Khan who were assisting me this far. I'm grateful for their contribution on completion of this thesis. I would like to express my gratitude to Prof. Dr. Zainab Khalifah, the former dean of faculty of management, lecturers and administrative staff; Madam Azlina Gombak of the faculty of management, UTM. I thank you for the assistance throughout my study.

## ABSTRACT

Capital investments are referred as a critical managerial decision on firm's fixed asset for generating profitability. However, the empirical finding shows that not every capital investment has a significant positive effect on profitability. Literature indicates mixed results of examining the capital investment relationship with firm's profitability, which vary in respects to the debt structure. On the other hand, strong government reinforcement has pushed Malaysia up as one of the top ten countries with robust private capital investment in the year 2004. Since the capital investments are typically irreversible and hypothesized as profit's generator, the first aim of this study is to examine the effect of the capital investment on the firm's profitability across firms and sectors. The second aim is to examine the moderating effect of capital structure on the relationship between capital investment and profitability across firms and sectors. This study utilized pooled ordinary least squares and fixed effect analysis across 708 non-financial Malaysian listed firms. The unbalanced datasets for the period 2001 to 2015 were employed to check the robustness of these results. This study suggested that capital investment has strong significant positive effect on profitability measurements across Malaysian listed firms in non-financial sectors. On the other hand, the significant negative moderating effect of capital structure on the relationship between capital investment and return on capital across Malaysian listed firms reflected the perspective of empire building theory. In addition, the independent sample test engaged across sectors affirmed that moderating effect of capital structure are different across sectors. Thus, this study concluded the existence of moderating effect of capital structure on the relationship between capital investment and profitability. This study addressed the knowledge gap on the moderating effect of capital structure based on empire building theory.

## ABSTRAK

Pelaburan modal dirujuk sebagai keputusan pengurusan yang kritikal terhadap aset tetap firma untuk menjana keuntungan. Walau bagaimanapun, hasil kajian empirikal menunjukkan bahawa tidak semua pelaburan modal memberi kesan positif yang signifikan terhadap keuntungan. Kajian lepas menunjukkan terdapat keputusan yang berbeza bagi kajian hubungan pelaburan modal dengan keuntungan perusahaan iaitu berdasarkan struktur hutang. Sebaliknya, penguatkuasaan kukuh oleh sektor kerajaan telah mendorong Malaysia menjadi 10 negara teratas dalam pelaburan modal swasta yang teguh pada tahun 2004. Oleh kerana pelaburan modal biasanya tidak dapat dijana balik dan dihipotesis sebagai penjana keuntungan, maka objektif pertama kajian ini ialah untuk mengkaji kesan pelaburan modal ke atas keuntungan syarikat dalam kalangan firma dan sektor. Objektif kedua ialah mengkaji peranan struktur modal sebagai moderator terhadap hubungan antara pelaburan modal dan keuntungan dalam kalangan firma dan sektor. Kajian ini menggunakan gabungan analisis *pooled ordinary least squares* dan *fixed effect* terhadap 708 buah syarikat tersenarai bukan kewangan di Malaysia. Data yang tidak seimbang bagi tempoh 2001 hingga 2015 telah digunakan untuk menyemak keberkesanan kajian ini. Kajian ini menyimpulkan bahawa pelaburan modal mempunyai kesan positif yang signifikan terhadap pengukuran keuntungan di seluruh firma tersenarai Malaysia dalam sektor bukan kewangan. Sebaliknya, pengaruh moderator struktur modal terhadap hubungan antara pelaburan modal dan pulangan modal dalam kalangan firma tersenarai di Malaysia menggambarkan perspektif Teori *Empire Building*. Di samping itu, ujian sampel bebas yang terlibat antara sektor menegaskan bahawa kesan penyederhanaan struktur modal adalah berbeza antara sektor tersebut. Oleh itu, kajian ini menyimpulkan wujudnya kesan moderator terhadap hubungan antara pelaburan modal dan keuntungan. Kajian ini turut membincangkan jurang pengetahuan mengenai kesan moderator struktur modal berdasarkan Teori *Empire Building*.

## 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>	xiv
	<b>LIST OF FIGURES</b>	xvi
	<b>LIST OF ABBREVIATIONS</b>	xvii
<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
	1.1 General Overview	1
	1.2 Background of Study	3
	1.3 Background of Problem	5
	1.4 Problem Statement	11
	1.5 Research Question	13
	1.6 Research Objective	14
	1.7 Significance of Study	14
	1.7.1 Body of Knowledge	14
	1.7.2 Policy Implementation	16
	1.8 Scope of Study	18
	1.9 Operational Definition	19
	1.10 Organisation of the Thesis	20

<b>2</b>	<b>LITERATURE REVIEW</b>	<b>22</b>
2.1	Introduction	22
2.2	Rationale of Firm's Profitability	23
2.3	Determinants of Profitability	24
2.3.1	Return on Asset (ROA)	25
2.3.2	Return on Equity (ROE)	26
2.3.3	Return On Investment (ROI)	27
2.3.4	Net Income before Extraordinary Item (NIBX)	28
2.3.5	Return On Capital Employed (ROCE)	29
2.3.6	Return On Capital (ROC)	29
2.4	Reasoning of Capital Investment	30
2.5	Stages of Capital Investment	32
2.6	Elements of Capital Investment	34
2.6.1	Tangible Asset	35
2.6.2	Intangible Asset	36
2.7	Determinants of Capital Investment	36
2.7.1	Investment-to-Assets (IA)	37
2.7.2	Capital Expenditure Ratio (CE)	38
2.7.3	Current Capital Expenditure (CCE)	40
2.8	Rationale of Capital Structure	41
2.9	Modigliani and Miller Theory	43
2.10	Determinants of Capital Structure	44
2.10.1	Total Debt (TD)	44
2.10.2	Short-Term Debt to Total Debt (STDTD)	45
2.10.3	Long-Term Debt to Total Debt (LTDTD)	45
2.10.4	Target Leverage Ratio	46
2.10.5	Cash Flow Ratio	47
2.11	Firm Size	48
2.12	Financial Crisis	49
2.13	Relationship between Capital Investment and Capital Structure	50
2.14	Relationship between Capital Investment and Financing	51



2.15	Relationship between Debt and Profitability	52
2.16	Relationship of Capital Investment and Profitability	53
2.17	Underlying Theories of Study	58
2.17.1	Static Trade-Off Theory	59
2.17.2	Dynamic Trade-off Theory	59
2.17.3	Pecking Order Theory	60
2.17.4	Market Timing Theory	62
2.17.5	Empire-Building Theory	63
2.18	Emerging Country	69
2.19	Capital Market Masterplan Malaysia	70
2.19.1	To be the Preferred Fund-Raising Centre	71
2.19.2	To Promote an Effective Investment Management Industry	71
2.19.3	To Enhance the Competitive Position	72
2.19.4	To Develop a Strong and Competitive Environment	72
2.19.5	To Ensure a Stronger and More Facilitative Regulatory Regime	73
2.19.6	To Establish Malaysia as an International Islamic Capital Market Center	73
2.20	Summary of Empirical Studies	74
2.21	Conceptual Framework	77
2.22	Summary	77
<b>3</b>	<b>RESEARCH METHODOLOGY</b>	<b>78</b>
3.1	Introduction	78
3.2	Research Process	78
3.3	Research Design	80
3.3.1	Research Philosophy	81
3.3.2	Research Approach	81
3.3.3	Research Strategy	82
3.3.4	Research Method	83
3.3.4.1	Longitudinal Study	83
3.3.4.2	Panel Data Study	83

3.4	Population and Sampling Technique	85
3.5	Data Collection Method	86
3.6	Formulation of Variables	87
3.7	Hypothesis	89
3.8	Data Analysis	92
3.9	Descriptive Analysis	93
3.9.1	Mean	93
3.9.2	Standard Deviation	94
3.9.3	Maximum and Minimum	94
3.9.4	Pearson Correlation Analysis	94
3.10	One Way Variance Analysis	96
3.11	Diagnostic Test for Multiple Linear Regressions	96
3.11.1	The Normality of Distribution	96
3.11.2	The Linearity of Relationship	97
3.11.3	Multicollinearity	97
3.11.4	Homoscedasticity	98
3.12	Model Specification and Estimations of Multiple Regression	98
3.12.1	Pooled Ordinary Least Square (OLS) Estimation	99
3.12.2	Fixed Effect Estimation	101
3.13	Model Specification and Estimations of Moderated Multiple Regression	103
3.13.1	Moderated Pooled Ordinary least (OLS) Square Estimation	105
3.13.2	Moderated Fixed Effect Estimation	109
3.14	Summary	113
<b>4</b>	<b>DATA ANALYSIS AND INTERPRETATION</b>	<b>114</b>
4.1	Introduction	114
4.2	Descriptive Statistic Analysis	115
4.2.1	Descriptive Statistic Analysis of Dependent Variables	115

4.2.2	Descriptive Statistic Analysis of Independent Variables	120
4.2.3	Descriptive Statistic Analysis of Moderating Variables	123
4.3	Diagnostic Test in Applying Multiple Regression Analysis	127
4.3.1	The Normality of Distribution	127
4.3.2	The Linearity of Relationship	129
4.3.3	The Multicollinearity	132
4.3.4	The Homoscedasticity	133
4.4	Correlation Analysis	134
4.5	Independent Variables Difference by means of ANOVA	142
4.6	Effect of Capital Investment on Profitability	142
4.6.1	Effect of Capital Investment on Profitability based on Pooled OLS	143
4.6.2	Effect of Capital Investment on Profitability based on Fixed Effect Analysis	145
4.7	Moderating Variable Difference by means of ANOVA	147
4.8	Moderating Effect of Capital Structure across Firms	147
4.8.1	Moderating Effect of Short-Term Debt Across Firms	147
4.8.2	Moderating Effect of Long -Term Debt Across Firms	148
4.9	Moderating Effect of Capital Structure Across Sectors	150
4.9.1	Moderating Effect of Capital Structure Across Industrial Products Sector	150
4.9.2	Moderating Effect of Capital Structure Across Trading and Services Sector	154
4.9.3	Moderating Effect of Capital Structure Across Consumer Products Sector	155

4.9.4	Moderating Effect of Capital Structure Across Technology Sector	157
4.9.5	Moderating Effect of Capital Structure Across Properties Sector	159
4.9.6	Moderating Effect of Capital Structure Across Construction Sector	161
4.9.7	Moderating Effect of Capital Structure Across Plantation Sector	163
4.9.8	Moderating Effect of Capital Structure Across REITs Sector	165
4.10	Summary of Hypotheses Testing Findings	168
4.11	Summary	170
<b>5</b>	<b>CONCLUSION AND RECOMMENDATIONS</b>	<b>171</b>
5.1	Introduction	171
5.2	Recapitulation of Study	171
5.3	Key Findings	173
5.3.1	Research Objective One: To Examine the Effects of Capital Investment on the Profitability across Listed Firms in Malaysia	173
5.3.2	Research Objective Two: To Examine the Effects of Capital Investment on the Profitability across Sectors of Listed Firms in Malaysia	175
5.3.3	Research Objective Three: To Investigate the Moderating Effects of Capital Structure on the Relationship between Capital Investment and Profitability across Listed Firms in Malaysia	176
5.3.4	Research Objective Four: To Examine the Moderating Effects of Capital Structure on the Relationship between Capital	

	Investment and Profitability across Sectors of Listed Firms in Malaysia	179
5.4	Contributions of this study	182
5.5	Limitations of Study	184
5.6	Recommendation for Future Studies	185
	<b>REFERENCES</b>	<b>186</b>

## LIST OF TABLES

<b>TABLE NO.</b>	<b>TITLE</b>	<b>PAGE</b>
1.1	Distribution of Global Equity Market Capitalization	18
2.1	Summary of Empirical Studies	75
3.1	List of Non-Financial Sectors in Bursa Malaysia	84
3.2	Variable Formulations	88
3.3	Rule of Thumb on Correlation Coefficient	95
4.1	Descriptive Statistic Analysis of Dependent Variables	119
4.2	Descriptive Statistic Analysis of Independent Variables	122
4.3	Descriptive Statistic Analysis of Moderating Variables	126
4.4	Normal Distribution	128
4.5	VIF of Multiple Regression Analysis	132
4.6	Pearson's Correlation Across Firms	137
4.7	Pearson's Correlation Across Industrial Product Sector	137
4.8	Pearson's Correlation Across Trading & Service Sector	138
4.9	Pearson's Correlation Across Consumer Product Sector	138
4.10	Pearson's Correlation Across Technology Sector	139
4.11	Pearson's Correlation Across Properties Sector	139
4.12	Pearson's Correlation Across Construction Sector	140
4.13	Pearson's Correlation Across Plantation Sector	140
4.14	Pearson's Correlation Across Real Estate Investment Trust Sector	141
4.15	One Way ANOVA of Independent Variables	142
4.16	Effect of Capital Investment on Profitability based on Pooled OLS	144

4.17	Effect of Capital Investment on Profitability based on Fixed Effect Analysis	146
4.18	One Way ANOVA of Moderating Variables	147
4.19	Moderating Effect of Capital Structure Across Firms	149
4.20	Moderating Effect of Capital Structure Across Industrial Products Sector	152
4.21	Moderating Effect of Capital Structure Across Trading & Service Sector	153
4.22	Moderating Effect of Capital Structure Across Consumer Products Sector	156
4.23	Moderating Effect of Capital Structure Across Technology Sector	158
4.24	Moderating Effect of Capital Structure Across Properties Sector	160
4.25	Moderating Effect of Capital Structure Across Construction Sector	162
4.26	Moderating Effect of Capital Structure Across Plantation Sector	164
4.27	Moderating Effect of Capital Structure Across REITs Sector	167
4.28	Summary of Hypotheses Based on Fixed Effect Analysis	168

**LIST OF FIGURES**

<b>FIGURE NO.</b>	<b>TITLE</b>	<b>PAGE</b>
1.1	Malaysia Capital Investment, in Dollars	7
2.1	Phases of Capital Market Master Plan 1	74
2.2	Research Framework	77
3.1	Research Process	80
3.2	Research Design	84
3.3	Path Model of Moderation Analysis	104
4.1	P-P Plot of ROA and all other Variables	129
4.2	Residual Plot of ROA and all other Variables	130
4.3	P-P Plot of ROCE and all other Variables	130
4.4	Residual Plot of ROCE and all other Variables	131
4.5	P-P Plot of ROC and all other Variables	131
4.6	Residual Plot of ROC and all other Variables	132



**LIST OF ABBREVIATIONS**

CCE	-	Current Capital Expenditure
CE	-	Capital Expenditure
CI	-	Capital Investment
CMP1	-	Capital Market Masterplan 1
CMP2	-	Capital Market Masterplan 2
CRISIS		Financial Crisis
EPS	-	Earning Per Share
ETP	-	Economic Transformation Plan
IA	-	Investment-to-Asset
NEM	-	New Economic Model
NIBX	-	Net Income before Extraordinary Item
R&D	-	Research and Development
REITs	-	Real Estate Investment Trust
ROA	-	Return on Asset
ROC	-	Return on Capital
ROCE	-	Return on Capital Employed
ROE	-	Return on Equity
ROI	-	Return on Investment
SC	-	Securities Commission
SIZE	-	Firm Size
STD	-	Short-term Debt
STDTD		Short-term Debt to Total Debt
LTD	-	Long-term Debt
LTDTD		Long-term Debt to Total Debt
TD	-	Total Debt

## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 General Overview**

Financial ratio analysis is generally used as a general measure of a firm's overall financial performance over a given period that compares similar firm's performance across the same industry or to between industries or sectors in an aggregation (Marozzi and Cozzucolib, 2016). There are various ways to measure financial performance and the five major categories of financial performance measures namely liquidity, asset management, profitability, debt management and market ratios. Profitability ratios are essential to measure the returns generated over the amount of capital or asset, which is an independent measure of how well a firm can use capital or assets from its primary mode of business to generate revenues.

Meanwhile, profit is an unconditional amount determined by the amount of revenue after the expenditures incurred by a firm (Gomes, 2001). Although profit and profitability are used interchangeably, they are not the same. Scholars have proposed inconsistent indication of profit concept on logical implication (Howard, 1983; Desai 2008). In a non-inflationary family business, measuring the profit is based on the specific capital inputs with no taxes or debt. It would be relatively straightforward by deducting expenses from the revenue. However, a corporation operates with long-term assets with various maturities, price changes, cost of debt and taxation where the two bookkeeping techniques diverged to measure profitability of family business and corporations (Knight, 1984).

In general accounting, profit is a purely summed surplus derived from the business enterprise that can be distributed to the shareholders (Clark *et al.*, 1979). On the other hand, profitability is the firm's performance stimulated from business investment (Eisner, 1964), which is the corporation's highest priority financial performance (Chirwa, 2003; Da Silva, 2013). It is closely related to the firm's efficiency measurement (Bronfenbrenner, 1960) and the ability of a firm to produce the return or benefit from the investment based on its resources compared to an alternative investment (Solomon, 1956; Bourgeois *et al.*, 2014). Profitability realisation is one of a corporation's objectives (Chamberlian and Gordon, 1989). In another study by Echevarria (1998), profitability is referred to as a product mix that optimises the input and output rates to a maximum return of the firm. Similarly, in managerial finance, the major concern is the cost of financing and the return from the investment to achieve maximum profitability for a corporation (Chandra, 1989). Thus, firm's profitability is interrelated with cost and return from firm's investment activity.

However, variation exists between the value created for shareholder's wealth and firm's profitability maximisation (Woolridge and Snow, 1990). Maximization principle in economic theory is defined as the overall firm's profitability generated from capital investment (Eisner, 1964). Meanwhile, the perception of maximum shareholder's wealth creation is the distributed earning to the shareholders based on the overall profitability of the firm (Howard, 1983). Therefore, the following section treats profitability as the return generated by the firm from investment and operation activities.

Based on the agency theory, the primary objective of a firm is to maximise shareholder's wealth. This underlying assumption leads to little previous studies on the effects of capital investment concentration in opposition toward capital investment evaluation (Fisher, 1930; Christenson, 1955; Hirshleifer, 1958). The proper investment criteria are rationalised for generating medium and long-term benefit from capital investment for the firm and eventually for national economic growth (Hawkins and Pearce, 1971; Ashford, 1988). In the numerous ensuing studies, discussion is more focused on the effects of capital investment on firm's

profitability (Echevarria, 2000; Kim, 2001) and working capital management (Appuhami, 2008; Raheman *et al.*, 2012; Valipour *et al.*, 2012).

## 1.2 Background of Study

Capital investment decisions are often listed as the essential register in corporation's annual capital budgeting (Brealey *et al.*, 2011). As reported by Erden (2002), the specific project on fixed asset for a productive purpose is recognised as capital investment. The term "productive" refers to the value generation from the capital investment. Meanwhile, capital investment is the fixed asset investment that generates future benefit (Levy and Sarnat, 1994). The capital investment on tangible and intangible assets usually has long life span with measurable monetary value to carry out business operation (Biddle and Hillary, 2006). According to Brealey *et al.* (2011), the distant future benefit of capital investment often generates cash return to recover the initial outlay of investment and to provide adequate profitability from the investment.

Previous studies related to corporate capital investments basically concentrate on two areas; one group of studies analyses investment decision and appraisal due to disagreement on measures of capital budgeting that would essentially maximise firm's profitability (Fisher, 1930; Christenson, 1955; Hirshleifer, 1958). The other group of studies traces the impact of firm's prospect capital investment's announcement on share prices. Later, the literature developed by exploring the effects of capital investment on firm value (Mc Conell and Muscarella, 1985; Pegels, 1991; Abel and Eberly, 1996) as the corporate financial manager's objective is to ensure the minimum cost of capital that maximises the wealth of shareholders (Shah and Khan, 2007).

However, the general expectation of capital investment is to maximise the firm's overall profitability based on neoclassical theory (Tarascio, 1993). Chung *et al.* (1998) demonstrated a positive relationship between capital investment announcements and firm's return. Furthermore, markets perceived cumulative

increase in capital investment as a valuable signal for investment opportunities. In addition, the Lev and Thiagrajan (1993) pointed out that capital investment represents a fundamental signal claimed by analysts to be useful in predicting profitability. Capital investment is assumed to increase the operating efficiency and decrease total operating cost. Thus, the lower operating cost should acquire higher profitability level. Therefore, the higher operating efficiency allows higher productivity and competitive pricing (Echevarria, 1998). Fama and French (1995) inferred profitability and capital investment relationship as a linear relationship.

In the global economy, capital investment is an indicator of current economic strength for future prospects. According to Luporini and Alves (2010), firms in developed countries take advantage of this economic expansion to continue implementing large-scale projects by investing in new plants or increasing the capacity of existing plants. Therefore, the economic growth is stimulated by capital investment and directed to wide investment opportunities (Giambiagi, 2008). This is consistent with the study of Jorgenson (1963) mentioning that firms in developed countries pursue to maximise profitability through capital investment.

Subsequently, the background of capital investment related to profitability is enlightened based on studies in developed countries. Studies conducted across firms identified a positive relationship between capital investment and profitability in the developed countries (Fama and French, 1995; Bryan, 1997; Kim, 2001; Chan *et al.*, 2003; Anderson and Garcia-Feijoo, 2006; Kumar and Li, 2013). Meanwhile, several firm level studies have documented a negative relationship between capital investment and profitability in the developed countries (Bar-Yossef *et al.*, 1987; Jensen, 1986; Berk *et al.*, 1999; Christopher *et al.*, 2006; Lipson *et al.*, 2011). However, the study on capital investment with profitability in developing countries is inadequate.

A few studies have been conducted at firm level of developing countries to evaluate the relationship between capital investment and profitability. Jiang *et al.* (2006) and Navarro *et al.* (2013) acknowledged the existence of positive relationship in capital investment with profitability for studies conducted at Taiwan and Brazil.

However, the firm level negative relationship between capital investment and profitability is still lacking in the developing countries. Given the huge amount of capital investment by corporate companies in emerging countries too (Li, 2004), it is surprising that there are just few studies addressing the effects of capital investment on profitability for past years. Emerging market performance has lagged the developed markets performance significantly (Copra, 2016). Moreover, the state of capital markets in many emerging economies looks particularly poor despite the huge effort undertaken to improve the macroeconomic environment and reform the institutions that are believed to foster financial development.

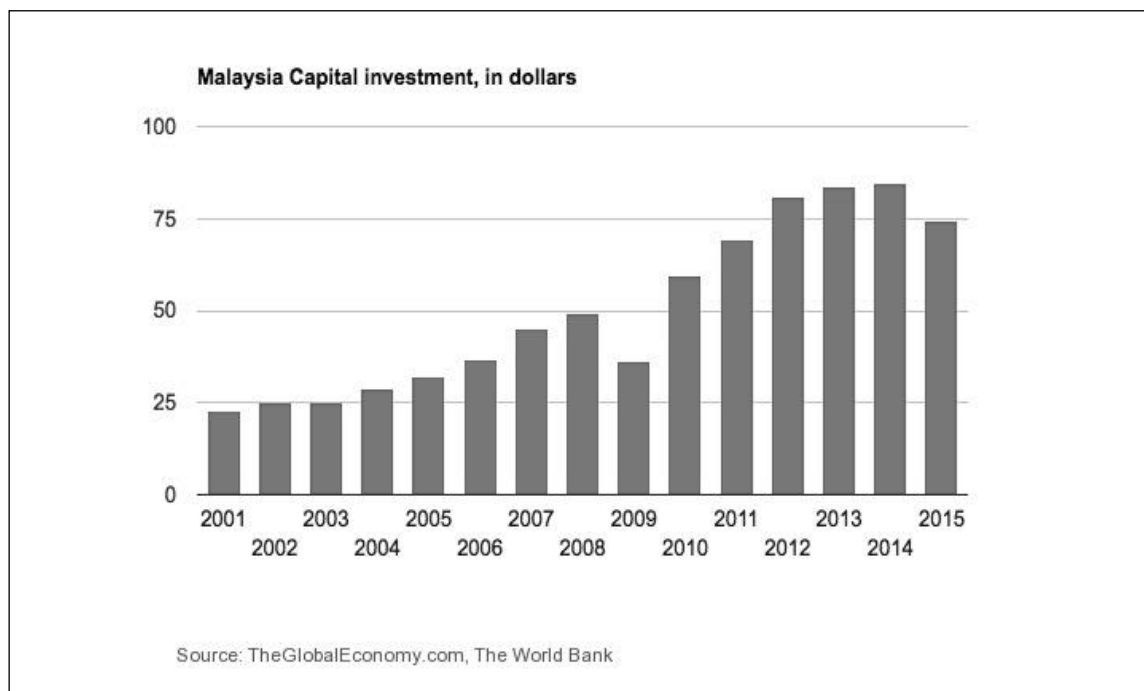
### **1.3 Background of Problem**

Malaysia as an emerging country has strategised several actions to increase the nation's economy; for example, the privatisation programme, Capital Market Masterplan 1 (CMP1), Economic Transformation Programme (ETP), New Economic Model (NEM) and Capital Market Masterplan 2 (CMP2). The privatisation programme has a significant contribution to the increased capital investment and is able to boost Malaysian economic growth since its commencement on 1983 (KLSE, 1992). In addition, the CMP1 was implemented to support capital investment needs via strong regulatory that increases investor's confidence in the Malaysia's capital market (Security Commissions, 2001). Following the strong reinforcement by the government sector on tax incentive and allowances, Malaysia has become one of the top 10 countries with robust private capital investment flow on 2004 (De La Torre and Schmukler, 2004). In addition, the ETP enhances private capital investment to increase the nation's income and to achieve the developed nation status by 2020 (Department of Statistics Malaysia, 2009).

There is a strong need of capital investment for the Malaysian firms to support a long-term sustainable growth of the economy and to further boost its competitiveness (Puah *et al.*, 2013). Malaysia's growth continues in total factor productivity through innovation activities and human capital investment (Economic Report, 2014) where the capital accumulation for investment in fixed asset became

an important component of growth in Malaysia (Massa and Testa, 2008). Constant return from capital investment permitted Malaysia to remain on track of its fiscal economic strength (Agarwal *et al.*, 2011). In 2009, when the total capital investment by private and public limited companies in Malaysia was decreased, the economy hit a recession where the total capital investment by large private and public limited companies has dropped by 31% in 2009 (Department of Statistic, 2010). However, the drop in the capital investment was reversed in 2010 when it began to show a rising trend, which is in line with the wide-ranging recovery of the Malaysia's economy.

Further to the above, the launch of NEM in 2010 was a Malaysian government's concern to transform Malaysia into a high-income economy country. This policy is adding to existing Vision 2020 to promote Malaysia's growth in an inclusive and sustainable manner. The NEM has triggered Malaysia's economy into a new phase where the private sectors are expected to grow in the global market and attract more foreign corporation's shareholders or partners. In the subsequent years, overall capital stock displayed an increasing trend from 2005 to 2012 reflecting the accumulated investment increase from RM1.7 trillion in 2005 to RM3.0 trillion in 2012 (Economic Report, 2013). However, the previous studies on Malaysia firms' capital investments have essentially emphasised capital investment practices (Ann *et al.*, 1987; Hamidi *et al.*, 2013). The increasing trend of capital investment is supported by Figure 1.1, which demonstrates the Malaysia's capital investment in dollar value from the year 2001 to year 2015 with increasing trend from the year 2001 to 2008 and a downfall on the year 2009. Later, from the year 2010 to the year 2014, the increasing trend continues until its fall on the year 2015. However, the fall is not below the growth rate of year 2001, which proved the growing trend of capital investment in Malaysia. However, fewer attempts have been made investigating the issue of large capital investment and its effects on the profitability among Malaysian listed firms in the context of developing country. Therefore, the first issue investigated by this study is the effects of capital investment on profitability across the listed firms in Malaysia.



**Figure 1.1:** Malaysia Capital Investment in Dollars  
Source: The Global Economy, The World Bank

Even though several studies have proposed results on how capital investment affects the firm's profitability and the relationship between variables at firm level, less number of studies has been conducted across sectors. The study across sectors is a requirement to identify the unique behaviour of each sector in responding to various result obtained by scholars on the relationship between capital investment and profitability. The extent of capital investment examination is to find out whether the different activities of each sector can be systematically related to the capital intensity, which may lead to the variance on profitability level of each sector. Thus, due to the characteristics of the business activity, the data are diverse between sectors. The data obtained by McGahan's (1992) showed that firms within industries vary in profitability as a function of relative size for each firm. This study further demonstrates the uniqueness of capital structure decisions and practices that may vary across sectors due to the different leverage level needs across sectors and similarities within an industry with respect to the financial structure (Harris and Raviv, 1991, Ramakrishnan, 2012). Consequently, the second issue of this study addresses the effects of capital investment on profitability across sectors in Malaysia.



During the 19<sup>th</sup> century, most corporations are owned and controlled by the proprietors. The ownership and power to control these corporations are operating as one entity. At the beginning of 20<sup>th</sup> century, the ownership and management control have been gradually detached as two units that work distinctly (Luporini and Alves, 2010). The separation of management and ownership creates the potential for management to engage in empire-building behaviour (Opler *et al.*, 1999). Managers are assumed to have an "empire building" tendency where they enjoy private benefits from controlling more capitals and managing higher quality projects (Harris and Raviv, 1996, 1998; Bernardo *et al.*, 2001). Managers are the empire builders that continue to choose capital investment even after all positive net present value (NPV) projects have been taken. Titman *et al.* (2003) argued that empire-building managers may have an incentive to put the best spin on their investment opportunities as well as on their overall business when they make high capital investments.

Firms with investment discretion are known with having high cash flow with low leverage (Jensen, 1986). Excessive free cash flow enables managers to invest in negative NPV projects after exhausting positive NPV projects (Blanchard *et al.*, 1994; Richardson, 2002). This greater investment discretion is more likely to promote over investment in capital investment based on agency cost in the context of empire building theory. The agency cost hypothesis predicts that managers, when not monitored by shareholders, will make self-maximising decisions, which may not necessarily be in the best interest of shareholders. Initial study on empire building emphasised by Donaldson (1984) and Jensen (1986) has suggested that manager's decisions include aggressively growing the firm by capital investment.

Firms reinvest their accumulated substantial wealth and free cash flow to commence capital investment (Jensen and Meckling, 1976; Titman *et al.*, 2004). However, the firm's internal resources are not sufficient to finance the continuous growth opportunity (Al-Thuneibat *et al.*, 2015). On the other hand, when firms have a cash short fall, the possibility of overinvestment is mitigated because they are forced to raise funds through external markets that provide a monitoring role. Thus, the external debt financing becomes the best alternative method of financing without the owner involved in his or her own funding contribution. Consequently, the

demand for bank debt instruments increased since these instruments do not reduce the owner's shareholding (Singh and Ramann, 2014). However, the debt financing is limited to an extent to maintain the competitive advantage and benefit gained from the economies of scale due to a high cost of financing (Singh and Ramann, 2014). Lumbering capital investment is related to lumpy capital structure adjustment due to different financing policies (Li, 2004; Strebulaev, 2007). Meanwhile, the changes in capital investment are caused by the investment and financing policy based on the empire building theory that demands additional investigation in the context of adjustment in leverage that may lead to changes in profitability level.

Capital structure decision is one of the firm's characteristics besides environment and tradition in which the firm operates (Antoniou *et al.*, 2002). On the other hand, empire building theory is one of the essential theories identified under agency cost theory in capital structure (Tirole, 2006). The mixture of liability and equity to finance investment in maximising return is referred to as capital structure (Abor, 2005). According to Parrino and Kidwell (2009), an optimal capital structure is achieved when a firm minimises the cost of financing and maximises its total value. Raising short-term or long-term funds from internal or external source are the financial decisions concerned in capital structure, which is one of the important issues in corporate finance (Frank and Goyal, 2009).

Empirical studies documented that highly cash liquid firm is more likely to engage in value decreasing projects particularly when managers are poorly governed (Harford, 1999; Dittmar and Smith, 2007; Harford *et al.*, 2008). Based on this underlying assumption, the managers prefer to expand their corporations faster than they should (Sullivan and Zhang, 2011). Firms with excessive investment may face deteriorating profitability due to over investment. Results demonstrated that the associations are indeed aggravated when firms have high free cash flows and low leverage, which is consistent with management empire-building motivations.

Debt could potentially mitigate the over-investment problem. It restricts the use of internal funds generated by a firm by forcing the managers to use cash flow to meet contractual financial obligations (Jensen, 1986; Stulz 1990). Managers' empire-

building incentives may be constrained by creditors' legal rights to reorganise or even liquidate the firm in case of default. Thus, the negative association between investment and profitability could reasonably be expected to be weaker in firms with high debt as the manager's tendency is to use the firm's internal fund to build the empire. However, debt cannot perfectly allow managers to invest optimally (Grinblatt and Titman, 1998; Lyandres and Zhdanov, 2003). High level of debt also brings potential costs including bankruptcy cost. Consistent with Jensen (1986), the negative association is stronger when firms have greater investment discretion for those firms with higher free cash flow and lower leverage.

This reinforces Jensen (1986)'s and Titman *et al.* (2003)'s notion that empire-building incentives can drive the negative association between capital investment and profitability. Their results are consistent with recent findings in the study by Hennessy and Levy (2002) that empire-building incentives appeared to be the dominant issue in the capital structure. Profitability is inherently linked to a company's capital spending decisions in emerging countries, which is the management's effectiveness at investing in projects that add value (Copra, 2016). Trends in corporate capital spending revealed that emerging market firms had invested more than the developed markets. Ultimately, fundamental investors suggest that improved profitability can emerge from differentiation at the company level capital structure. Thus, the aim of this study is to bring novelty by involving capital structure as moderating variable on the relationship between capital investment and profitability. Based on the author's best knowledge, the moderating effects of capital structure on the relationship between capital investment and profitability remain untapped with empire building theory did not receive much attention in literature. Hence, the third issue of this study is to investigate the moderating effects of capital structure on the relationship between capital investment and firm's profitability.

The Malaysian economy has solidly recovered since the 1997 to 1998 financial crisis where the recovery was made possible by numerous reforms as well as favourable external conditions. The share of government capital investment in GDP is positively and significantly correlated with economic growth (Bose *et al.*,

2007) whereby the Malaysian government plays a vital role in public and private capital investments in Malaysia. Internally, the capital investment activity has fostered the growth of sectors. Moreover, the reduction in corporate tax effective on 2009 and the economic transformation programme have increased the capital investment activity of Malaysian firms. To encourage the development of capital intensive projects, the regulations were made granting a 60% annual investment allowance on qualifying capital expenditure incurred in conjunction with a qualifying project for certain encouraged sectors such as projects in respect of enhanced oil recovery, high carbon dioxide gas, infrastructure asset, agricultural, mining and quarrying, manufacturing, construction as well as service sectors. Besides, certain selected industries received 100% tax allowances for pioneer status capital investment. The sectors that showed a significant increase in capital investment since 2010 in Malaysia included transport and communication sector, real estate and business sector, construction and manufacturing sectors (Economic Report, 2013). In addition, the unique behaviour of capital structure at sector-level is not identical within and between countries (Ramakrishnan, 2012). However, only a few studies have been conducted focusing on the effects of capital investment on profitability across sectors in Malaysia. Hence, further study is certainly needed to examine the moderating effects of capital structure across sectors. Therefore, the fourth issue of this study is extended to investigate the moderating effects of capital structure on the relationship between capital investment and profitability across sectors in Malaysia.

#### **1.4 Problem Statement**

Studies have been conducted to examine the effects of capital investment on profitability and identify a correlation between the variables. The past literatures have similarly stressed on the effects of capital investment on firm's profitability across the firms in developed (Chung *et al.*, 1998; Kim, 2001; Anderson and Garcia-Feijoo, 2006; Kumar and Li, 2013) and developing countries (Jiang *et al.*, 2006; Navarro *et al.*, 2013). The extensive reinforcement by the Malaysia government such as ETP and NEM policy privatisation programme had gave a significant contribution to the increased capital investment and Malaysian economic growth since its

commencement on 1983. However, the encouragement to involve in capital investment may place the firms to insolvency. Therefore, the first issue of this study is concentrated in analysing the effects of capital investment on profitability across listed firms in Malaysia.

The overall sample could not be generalized to all listed firms in Malaysia, as one does not fit all nature of business. The vigorous nature or content has been seen varied across sectors for capital investment in developing countries (Rajan and Zingales, 1995; Chen and Hammes, 2003). Accordingly, the raising capital investment trend in Malaysia since the year 2010 to boost economy growth upon 2009 recession (Economic Report, 2013) varies across sectors in Malaysia. Besides, the tax incentive and allowances to promote capital investment differ according to encouraged sectors (MIDA, 2015). Thus, it may create varying results between capital investment and profitability across sectors in Malaysia. Hence, the second issue of this study attempts to examine the effects of capital investment on profitability across sectors in Malaysia.

The third issue of this study is on examining the moderating effects of capital structure on the relationship between capital investment and profitability in accordance to empire building theory. Malaysia is one of the countries with strong capital investment activity based on the robust government's encouragement via few economic policies. This was mainly employed to enhance the overall country's economic growth via the support from strong capital market. The empirical study evidenced by Myers and Majluf (1984) and Eisdorfer *et al.* (2013) indicated efficient capital structure as an important element for the firms to be sustainable in the market. Nevertheless, the third issues of this study is to investigate the moderating effects of capital structure respective to varying relationship between capital investment and profitability across listed firms in Malaysia.

Public expenditure policies shape the growth prospect for developing countries (Bose *et al.*, 2007). The Malaysian government drives economic transformation whereby the 10<sup>th</sup> Malaysia Plan pursues a smart partnership between the public and private sectors. The 10<sup>th</sup> Malaysia Plan is an important economic

development blueprint involving structural reform in Malaysian economy to achieve a developed nation status. One of the pillars is to achieve the goal of 10<sup>th</sup> Malaysia plan via supporting an effective and smart partnership. A facilitation fund of RM20 billion has been established to promote investments in nationally strategic areas. The new privatisation plans promote capital investment in private sectors with high growth and potential competitiveness. These plans also support the private sectors in driving industry development particularly in human capital development and R&D by providing special financing schemes grounded on capital market master plan. On that account, the fourth issue of this study attempts to investigate the moderating effects of capital structure on the relationship between capital investment and profitability across sectors in Malaysia.

### **1.5 Research Question**

The research questions of this study were developed based on the mentioned four issues in the problem statement. Hence, the focal research questions are addressed as follow:

1. Does capital investment affects profitability across listed firms in Malaysia?
2. Does capital investment affects profitability across sectors of listed firms in Malaysia?
3. Does capital structure have moderating effects on the relationship between capital investment and profitability across listed firms in Malaysia?
4. Does capital structure have moderating effects on the relationship between capital investment and profitability across sectors of listed firms in Malaysia?

## **1.6 Research Objective**

The objectives of this study are based on four research questions mentioned as follow:

1. To examine the effects of capital investment on profitability across the listed firms in Malaysia.
2. To examine the effects of capital investment on profitability across sectors of listed firms in Malaysia.
3. To investigate the moderating effects of capital structure on the relationship between capital investment and profitability across the listed firms in Malaysia.
4. To investigate the moderating effects of capital structure on the relationship between capital investment and profitability across sectors of listed firms in Malaysia.

## **1.7 Significance of Study**

The findings of this study can contribute to the empire building theory by recognising large capital investment of listed firms in Malaysia to investigate the moderating effects of capital structure on the relationship between capital investment and profitability of listed firms in Malaysia. Significance of study is presented in two sections namely the body of knowledge and policy implementation.

### **1.7.1 Body of Knowledge**

In relation to the body of knowledge, this study is distinctive in four aspects. The first aspect reflects the investigation across firms and sectors of listed firms in Malaysia. This is responding to gaps in corporate finance literature through assessing the association between capital investment, capital structure and firm's profitability.

Studies found a significant relationship between capital investment and profitability. Inci *et al.* (2009) anticipated that the effects of capital investment to profitability are strongly positive for firms in countries with developed financial markets. This is because the degree of financial development is able to influence the efficiency of capital allocation (Rajan and Zingales, 1998; Wurgler, 2000). However, as further investigation is required across firms in developing countries to the extent of author's knowledge, no study has been employed to examine the firm-level effects of capital investment on profitability of developing countries. Thus, this study is significant as it examines the effects of capital investment on profitability for Malaysian across firms.

The second significance of study is on the across sectors analysis, which is essential to identify the unique behaviour of each sector in responding to the effects of capital investment on profitability and the moderating effects of capital structure on the abovementioned relationship. The significance of study further exhibits the uniqueness of the capital structure decisions and practices that may vary across sectors due to their different leverage level requirement. The sensitivity of capital investment to capital structure is different for financially constrained sectors (Drakos *et al.*, 2007) as the cost of capital is varied to the nature of firms (Stanley, 1990). Besides, the significant effects of capital investment and capital structure vary between sectors based on capital intensity of the firms (Kumar and Li, 2013).

The third aspect based on the body of knowledge significance is the investigation on the theory application for moderating effects of capital structure on the relationship between capital investment and profitability. The positive effects of capital investment on profitability are related to the degree of financial development of a country (Inci *et al.*, 2009). However, negative relationship may appear between capital investment and profitability as a result from empire building theory (Jensen, 1986). The empire building theory under agency cost theory motivates the over investment action by the managers (Jensen, 1986; Biddle and Hilary, 2006), which may lead the firm to generate loss or decline in profitability due to the cost of financing and low liquidity level. Thus, based on empire building as underlying theory, this study attempts to examine the moderating effects of capital structure on



the relationship between capital investment and profitability. The global financial state and significant changes for the past few decades have stretched the global financial institutions and security markets to a new dimension of financial service instruments (Adam, 2009). Debt financing instruments are preferred compared to the equity financing instruments as the debt cost lesser than equity cost and for tax advantage. On the contrary, large percentage of the capital investment projects was financed by internal funds and later debt was extended by local and foreign bank debt (Belderbost *et al.*, 2013). However, the firms faced negative relationship between capital structure and profitability when they depend on debt financing with capital investment became less profitable projects.

### **1.7.2 Policy Implementation**

This study signifies policy implementation to the government, security commission, corporate sector and financial institutions. Over 30 years, Malaysia has made a transition to a successful middle-income economy and later as an emerging country, which is currently on the threshold of a final momentum towards “developed economy” status. The financial sector played an important role in facilitating growth until the Asian financial crisis in 2007. Macroeconomic stability and gradualism approach to financial liberalisation helped to insulate the economy from the global financial markets. Despite several policy initiatives to develop venture capital industry, the capital investments in knowledge-based firms are yet to gain attraction. Henceforth, the banking sector is still fragmented with capital-intensive sectors. Thus, the significance of this study on the policy implementation may directly promote the governance in recognising the need of capital market facility to encourage capital investments in every sector.

Profitability in emerging markets has been on a downward trend over the last five years. The opposite has occurred in developed markets, thus closing the gap observed historically when companies in emerging markets delivered higher returns on capital than their developed markets peers (Copra, 2016). In turn, the performance of emerging markets has lagged the developed world. Similarly, the corporate

investment decisions are inherently linked to profitability in developed nations alone. As such, capital investment trends have been at the centre of several reports by prominent institutions such as the international monetary fund (IMF) and organisation for economic co-operation and development (OECD). Thus, the evaluation of profitability components (ROE) in this study could lead to a better understanding of the trend in the implementation of emerging nation policy to monitor the signs of profit margin stabilisation.

The falling rate of capital formation has stalled the growth of capital markets in emerging country. In respect to that, the comprehensive policy has mapped the direction of the Malaysian capital market implemented. The CMP1 established to guide the development of Malaysia capital market from 2001 to 2010. Following the implementation, the CMP1 has facilitated the stock market and bond market expansion in 10 years. Hence, the CMP1 ensured that the capital market is well positioned to support national economic growth and to meet future challenges from regional competition and globalisation. It articulates the vision, objectives and strategic initiatives for the Malaysian capital market to successfully meet future challenges. The CMP1 set out 152 detailed recommendations to achieve its objectives and outlines the framework for their implementation. Later, the CMP2 formed another vital contribution to the collective and coordinated efforts by invigorating the economy through the expansion of the capital market's role in financing the country's development.

The analysis of 15 years data after the CMP1 and five years after CMP2 implementation can provide findings on the capital investment trend and its ways of affecting the profitability as firms changes their capital structure. This could create awareness to the Malaysia's policy maker on overinvestment/underinvestment position prior setting a new policy or guideline on strong private capital investment activities. The best model practices from the findings of this study may provide significant insights for the policy maker on growth strategies. Besides, policy implementation on capital investment and the effects of such investment on firm's profitability are essential to sustain growth strategies.

Furthermore, the strong encouragement to undertake capital investment by policy maker should not place the firms at overinvestment position that eventually decreases the profitability level. In addition, the findings of this study are expected to provide a notification to the financial institutions on the existence of firm's extensive capital investment activities and the effects of these activities on capital structure and profitability.

## 1.8 Scope of Study

This study focuses on the moderating effects of capital structure on the relationship between capital investment and profitability across firms and sectors in Malaysia. The designated time period to achieve the objectives of this study is from the year 2001 until 2015. The data initiated began from 2001 upon Malaysia's CMP1 implementation. Malaysian listed firms have devoted more comprehensive and advance capital market since 2001 leaning on CMP1 policy implementation. CMP1 is established to build a capital market that meets the country's capital resource and investment needs. As a result, the capital market was expanded by 11% growth rate from the year 2001 to 2010 (Securities Commission Malaysia, 2011). Hence, data from the year 2001 is informative due to expanded capital market that boosts the increases in capital investment. In addition, Table 1.1 shows the increase in global equity market capitalisation correspondingly to the nation's strategy. Emerging countries spread the equity market capitalisation more rapidly from the year 1990, hence portraying that capital market efficiency is in an increasing trend.

**Table 1.1:** Distribution of Global Equity Market Capitalisation

<b>Countries</b>	<b>1990</b>	<b>2010</b>
Developed	87%	76%
Emerging	13%	24%
Total	US\$10.4 Trillion	US\$ 67.3 Trillion

Source: Securities Commission Malaysia (2011)

Subsequently, CMP2 layout plans to transform the competitive dynamics of capital market and strengthen the capital allocation efficiency. Meanwhile, private

sectors are targeted as the foundation to achieve this strategy from the year 2011 to 2020. The policy formed the continuous growth of capital investment in Malaysia. Hence, this study is intended to continue the scope of study until the year 2015, which is until the possible accessible available data for this study. Furthermore, the period of 15 years may have considered any infrequent events that might exist in the firms, whereas the short period of time is not appropriate to generalise and conclude the findings.

Besides, this study focused on panel data analysis of Malaysian listed non-financial 708 firms in Bursa Malaysia. The firms in the financial sector were excluded from this study as they have different financial characteristics. This is mainly due to the inconsistent financial reporting of the financial sector and other sectors in Bursa Malaysia. The census sampling application will determine the number of observations based on Malaysian listed firms' data from the year 2001 to 2015 for eight sectors concurring to sectors listing in Bursa Malaysia.

## 1.9 Operational Definition

**Assets** - items owned by a firm that can be converted to cash.

**Acquisition** - an action by a firm to assume control of another target firm.

**Capital Budgeting** - planning process employed to determine a firm's long term investments.

**Capital Investment** –Investment in fixed assets with economical benefit for more than a year and a monetary value.

**Capital Structure** - referred to how a company is structured and financed.

**Debt** - the amount owed by a firm to other parties with repayment obligation.

**Empire Building** - the practice of obtaining more fixed assets, more power, responsibility and staff within an organisation for self-aggrandisement.

**Equity** - the value of ownership interest in a business after deducting liabilities from assets.

**Free Cash Flow** – the amount of cash possessed by a firm after deducting the cost of its operations and spending on capital.

***Intangible Assets*** - the assets held by a firm that are not physical in nature.

***Return on Assets*** - an indicator of how profitable a company is relatively to its total assets.

***Return on Capital*** - an indicator of how profitable a company is relatively to its investment generated for capital contributors.

***Return on Capital Employed*** - an indicator of how profitable a company is relatively to use all its capital resources including debt and equity.

## **1.10 Organisation of the Thesis**

This chapter introduces the thesis, which begins with the general overview on firm's profitability as a dependent variable. The background of the study discusses the capital investment as an independent variable as well as the relationship of capital investment and profitability. Later, in the same section, the capital structure association with firm's profitability is discussed. This is followed by the presentation of the background of problems illuminating the context of capital investment with capital structure and the new insights of moderating effects of capital structure. Subsequently, the problem statement established is followed by the research questions and research objectives based on problem statement of this study. Consequently, the significance of the study is recognised for the body of knowledge and policy implication together with the scope of study elements. The next chapter of this study reviews, compares, discusses and summarises the studies previously carried out as well as those recently conducted on capital investment, capital structure and profitability.

Chapter 2 starts with the literature review on profitability. This is then followed by factors and importance of capital investment and capital structure. The review involves existing literature on the relationship of capital investment and capital structure as well as capital structure with firm's profitability. It also enumerates the relevant empirical studies by comparing and discussing the findings. Subsequently, the development of hypothesis is conducted based on the review of each relationship between variables. The chapter is enfolded with the research

framework that describes the flow of study between variables based on extensive literature review.

Chapter 3 discusses the research methodology of this study. The research process is presented followed by the research design of this study. Later, the population and sampling is designed to enlighten following the data collection method. The variables formulated are listed with the type of analysis explained in detail. Finally, the data analysis and model specification is illustrated comprehensively.

Chapter 4 enlightens the data analysis procedure and the description of findings. The first part of this chapter deliberates the descriptive statistics findings of this study followed by the diagnostic test in applying multiple regression analysis. The second part of data analysis and findings is demonstrated to answer the research questions. The correlation analysis was conducted to examine the relationship between variables, multiple regression analysis and to identify the strength of effects between variables and one-way ANOVA test to identify the differences in the sectors. Later, these findings are brought into the context of the study. Finally, these findings are summarised and critically evaluated.

The final Chapter of this study establishes the association of research findings with the literature reviewed in Chapter 2. The summary of the research process and findings is demonstrated in this chapter. The chapter finally recommends suggestions and outlines the foundations for future studies.

## REFERENCES

- Abarbanell, J. and Bushee, B. (1997). Fundamental Analysis, Future Earnings, and Stock Prices. *Journal of Accounting Research*, 1(35), 1-24.
- Abel, A., and Eberly, J. (1996). Optimal Investment with Costly Reversibility. *Review of Economic Studies*, 63, 581–593.
- Abdeljawad, I., Nor, F.M., Ibrahim, I., and Abdul, R. (2013). Dynamic Capital Structure Trade-off Theory : Evidence from Malaysia. *Proceedings of 3<sup>rd</sup> Global Accounting, Finance and Economics Conference*. 5 - 7 May 2013. Rydges Melbourne, Australia,1–10.
- Abidin and Rasiah (2009). *The Global Financial Crisis and the Malaysian Economy: Impact and Responses*. United Nations Development Programme (UNDP)
- Abolgasim, A. L. (2008). *Classification of Capital Expenditure and Revenue Expenditure Using Neutral Network Model*. PhD Dissertation, University Utara Malaysia.
- Abor, J. (2005). The Effect of Capital Structure on Profitability: An Empirical Analysis of Listed Firms in Ghana. *The Journal of Risk Finance*, 6(5), 438–445.
- Abzari, M., Fathi, S., and Nematizadeh, F. (2012). Analyzing the Impact of Financial Managers' Perception of Macroeconomic Variables on Capital Structure of Firms Listed in Tehran Stock Exchange. *International Journal of Academic Research in Economics and Management Sciences*, 1(3), 131-141.
- Adam, T. (2009). Capital Expenditures, Financial Constraints, and the Use of Options. *Journal of Financial Economics*, 92(2), 238–251.
- Adewale, M., and Ajibola, O. (2013). Does Capital Structure Enhance Firm Performance? Evidence from Nigeria. *IUP Journal of Accounting Research & Audit Practices*, 12(4), 43–55.

- Adkins, L.C and Hill, R.C. (2007). *Using Stata: For Principles of Econometrics* (3<sup>rd</sup> Edition). John Wiley and Sons, Inc.
- Agarwal, S., Chiu, I., Souphom, V., and Yamashiro, G. M. (2011). The Efficiency of Internal Capital Markets: Evidence from the Annual Capital Expenditure Survey. *The Quarterly Review of Economics and Finance*, 51(2), 162-172.
- Aivazian, V. A., Ge, Y., and Qiu, J. (2005). Debt Maturity Structure and Firm Investment. *Financial Management*, 34(4), 107–119.
- Alan, Y. and Gaur, V. (2017). Operational Investment and Capital Structure Under Asset-Based Lending.
- Albul, B. (2012). *Essays on Corporate Capital Structure*. PhD Disertation, University of California, Berkeley.
- Ali, A. (1992). *Malaysia's Industrialization: The Quest for Technology*. Oxford University Press.
- Al-Thuneibat, A. A., Al-Rehaily, A. S., and Basodan, Y. A. (2015). The impact of internal control requirements on profitability of Saudi shareholding companies. *International Journal of Commerce and Management*, 25(2), 196-217.
- Anatolyev, S. A., and Ovtcharova, G. E. (2001). *Capital Expenditures Financing in Russia*. Working paper WP/01/30, New Economic School.
- Anderson, C.W. and Garcia-Feijoo, L. (2006). Empirical Evidence on Capital Investment , Growth Options , and Security Returns. *The Journal of Finance*, 61 (1), 171-194.
- Ann, W. K., Farragher, E. J., and Leung, R. K. C. (1987). Capital Investment Practices: A Survey of Large Corporations in Malaysia, Singapore and Hong Kong. *Asia Pacific Journal of Management*, 4(2), 112–123.
- Anthony, J., and Ramesh, K. (1992), Association Between Accounting Performance Measures and Stock Prices: A Test of the Life Cycle Hypothesis. *Journal of Accounting and Economics*, 15, 203-27.
- Antoniou, A., and Paudyal, K. (2002). *Determinants of Corporate Capital Structure : Evidence from European Countries*. Working Paper, University of Durham, 1–33.
- Arasteh, F., Nourbakhsh, M.M., and Mohammad Reza Pourali, M. R. (2013). The Study of Relationship between Capital Structure, Firm Growth and Financial Strength with Financial Leverage of the Company Listed in Tehran Stock



- Exchange. *Interdisciplinary Journal of Contemporary Research in Business*, 5(7), 480–491.
- Atiase, R. (1985). Predisclosure Information, Firm Capitalization, and Security Price Behavior Around Earnings Announcements. *Journal of Accounting Research*, 23, 21–36.
- Ayuso, S., Rodriguez, M. A., Garcia-Castro, R., and Arino, M. A.(2012). Maximizing Stakeholders' Interests: An Empirical Analysis of the Stakeholder Approach to Corporate Governance. *Business & Society*, 53(3), 414–439.
- Azhagaiah, R., and Gavoury, C. (2011). The Impact of Capital Structure on Profitability with Special Reference to IT Industry in India. *Managing Global Transitions*, 9 (4), 371–392.
- Baker, M., and Wurgler, J. (2002). Market Timing and Capital Structure. *The Journal of Finance*, 57(1), 1-32.
- Banerjee, S., Almas, H., and Wihlborg, C. (2004). The Dynamics of Capital Structure. In Bagella, M., Becchetti, L. I., Hasan and Hunter, W. C. (Eds.). *Research in Banking and Finance*, 4, 275-298.
- Bangueses, R.J.P. (2013). *The Relevance of the Seed Capital Investment in a Technology Based Company Case Study Analysis of Paydiant*. Master of Science Degree Thesis, Tecnico Lisboa.
- Banos-Caballero, S., Garcia-Teruel, P. J., and Martinez-Solano, P. (2014). Working Capital Management, Corporate Performance, and Financial Constraints. *Journal of Business Research*, 67(3), 332–338.
- Barclay, M. J., and Smith, C. W. (2005). The Capital Structure Puzzle: The Evidence Revisited. *Journal of Applied Corporate Finance*, 17, 8-17.
- Baron, R. M., and Kenny, D. A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.
- Bar-Yossef, S., Callend, J., and Livnat, J. (1987). Autoregressive Modeling of Earnings Investment Causality. *Journal of Finance*, 42, 11-28.
- Baum, C. F., Stephan, A., and Talavera, O. (2009). The Effects of Uncertainty on the Leverage of Non-financial firms. *Economic Inquiry*, 47(2), 216-225.

- Bayless, M., Chaplinsky, S. (1990). Expectations of Security Type and the Information Content of Debt and Equity Offers. *Journal of Financial Intermediation* 1, 195-214.
- Baxter, N. (1967). Leverage Risk of Ruin, and The Cost of Capital. *Journal of Finance*, 22 (3), 395-403.
- Beaver, W., Lambert, R., and Morse, D. (1980). The Information Content of Security Prices. *Journal of Accounting and Economics*, 2(1), 3–28
- Belderbost, R., Fukao, K., Ito, K., and Letterie, W. (2013). Global Fixed Capital Investment by Multinational Firms. *Economica*, 80(318), 274–299.
- Bell, K., and Vos, E. (2009). SME Capital Structure: The Dominance of Demand Factors. *22nd Australasian Finance and Banking Conference 2009*, 1-39.
- Bellouma, M. (2011). Effects of Capital Investment on Working Capital Management: Evidence on Tunisian Export Small and Medium Enterprises (SMEs). *African Journal of Business Management*, 5(30), 12133-12137.
- Behrman, J. N. (1960). Promoting Free World Economic Development Through Direct Investment. *Papers and Proceedings of the Seventy-second Annual Meeting of the American Economic Association*, 50 ( 2), 271- 281.
- Beneish, M. D., Lee, C. M. C., and Tarpley, R. L. (2001). Contextual Fundamental Analysis Through the Prediction of Extreme Returns. *Review of Accounting Studies*, 6, 165–189.
- Berger, A., and Bonaccorsi, D. E. (2006). Capital Structure and Firm Performance: A New Approach to Testing Agency Theory and An Application to the Banking Industry. *Journal of Banking and Finance*, 30,1065-102.
- Bharadwaj, A. S., Bharadwaj, S. G., and Konsynski, B. R. (1999). Information Technology Effects on Firm Performance as Measured by Tobin's q. *Management Science*, 45, 1008-1024.
- Biddle, G.C., and Hilary, G. (2006). Accounting Quality and Firm-Level Capital Investment. *The Accounting Review*, 81(5), 963-982.
- Blanchard, O., Rhee, C., and Summers, L. (1993). The Stock Market, Profit, and Investment. *Quarterly Journal of Economics*, 108, 77-114.
- Booth, L., Aivazian, N., Demirgüç-Kunt, A., and Maksimovic, A. (2001). Capital Structure in Developing Countries. *The Journal of Finance*, 56 (1), 89-130.
- Bourgeois, J., Ganz, L., Gonce, A., and Nedell, K. (2014). Profitability of Industries and Firms Over Time. *Journal of Strategy and Management*, 7(3), 210–225.

- Bradley, M., Jarrell, G. and Kim, E.H. (1984). On the Existence of an Optimal Capital Structure: Theory and Evidence. *Journal of Finance*, 39, 857-878.
- Brealey, R. A., Myers, S., and Marcus, A. (2011). *Fundamentals of Corporate Finance* (7<sup>th</sup> Ed.). McGraw-Hill Companies Incorporated.
- Bronfenbrenner, M. (1960). A Reformulation of Naive Profit Theory. *Southern Economic Journal*, 26(4), 300-309.
- Bryan, S. (1997). Incremental Information Content of Required Disclosures in Management Discussion and Analysis. *The Accounting Review*, 72 (April), 285-301.
- Bui, Y. (2009). *How to Write a Master's Thesis*. Sage Publication Inc.
- Bursa Malaysia. Retrieved on September 12, 2014, from: <http://www.bursamalaysia.com/market/>
- Brunnermeier, M. K. AND Oehmke, M. (2013). The Maturity Rat Race. *The Journal of Finance*, 68(2), 483-521
- Calvo, G. A., and Mendoza, E. G. (1996). Mexico's Balance-of-Payments Crisis: A Chronicle of a Death Foretold. *Journal of International Economics*, 41(3), 235-264.
- Campbell, J., Hilscher, J., Szilagyi, J. (2008). In Search of Distress Risk. *Journal of Finance*, 63, 2899–2939.
- Carpenter, R. (1994). *Finance Constraint or Free Cash Flow? The Impact of Asymmetric Information on Investment*. Working paper, Emory University.
- Carpenter, R. E., and Petersen, B. C. (2000). *Capital Market Imperfections, High-Tech Investment, and New Equity Financing*. Working Paper, Washington University, 1-40.
- Carpenter, R.E., and Peterson, B.C. (2002). Capital Market Imperfections, High-Tech Investment and New Equity Financing. *Economic Journal*, 112, 54–72.
- Callen, J., Livnat, J., and Ryan, S.(1996). Capital Expenditures: Value Relevance and Fourth-Quarter Effects. *Journal of Financial Statement Analysis*, (Spring), 13-24.
- Cassar, G. and Holmes, S. (2003). Capital Structure and Financing of SMEs: Australian Evidence. *Accounting & Finance*, 43(2), 123-147.
- Cekrezi, A. (2013). Analyzing the Impact of Firm's Specific Factors and Macroeconomic Factors on Capital Structure : A Case of Small. *Research Journal of Finance and Accounting*, 4(8), 90–96.

- Chamberlain, T. W., and Gordon, M. J. (1989). Liquidity, Profitability, and Long-Run Survival: Theory and Evidence on Business Investment. *Journal of Post Keynesian Economics*, 11(4), 589-610.
- Chan, K., Chan, K.C., Jegadeesh, N., and Lakonishok, J. (2003). Earnings Quality and Stock Returns: The Evidence from Accruals. *Journal of Business*, 79, 1041–1082.
- Chandra. P. (1989). *Financial Management: Theory and Practice* (2<sup>nd</sup> Edition). Tata McGraw-Hill Publishing Company Limited, New Delhi.
- Chang, R., and Velasco, A. (2001). A Model of Financial Crises in Emerging Markets. *The Quarterly Journal of Economics*, 116(2), 489-517.
- Chen, Y., and Hammes, K. (2003). *Capital Structure: Theories and Empirical Results - A Panel Data Analysis*. Gothenburg University, 1–32.
- Chen, J. G., Smith, D., & Wirth, C. (2017). How is investment efficiency related to investment transparency?(URL:[http://econfin.massey.ac.nz/school/documents/seminarseries/manawatu/Paper%20plus%20tables%20draft4\\_2017\\_05\\_11](http://econfin.massey.ac.nz/school/documents/seminarseries/manawatu/Paper%20plus%20tables%20draft4_2017_05_11))
- Chen, S.S., and Su, X.Q. (2010). Market Reaction to Entry Timing of Corporate Capital Investment Announcement: Evidence from Announcement Period Abnormal Returns and Analysts' Earnings Forecast Revisions. *Review of Pacific Basin Financial Markets and Policies*, 13(4), 495–515.
- Chen, P., and Zhang, G. (2007). How Do Accounting Variables Explain Stock Price Movements? Theory and Evidence. *Journal of Accounting and Economics*, 43(2-3), 219–244.
- Chester, A. N. (1994). Aligning Technology With Business Strategy. *Research Technology Management*, 37(1), 25–32.
- Chisti, K. A., Ali, K., and Sangmi, M. D. (2013). Impact of Capital Structure on Profitability of Listed Companies ( Evidence From India ), *The USV Annals of Economics and Public Administration* 13(1), 183–191.
- Choi, J., Yoo, S., Kim, J., and Kim, J. (2014). Capital Structure Determinants among Construction Companies in South Korea : A Quantile Regression Approach. *Journal of Asian Architecture and Building Engineering*, 100, 93–100.
- Chung, K.H., Wright, P. and Charoenwong, C. (1998) Investment opportunities and market reaction to capital expenditure decisions, *Journal of Banking and Finance*, 22, 41–60.

- Christenson, C. (1955). Construction of Present Value Tables for Use in Evaluating Capital Investment Opportunities. *The Accounting Review*, 30(4), 666-672.
- Clark, P. K. (1979). Investment in the 1970s: Theory, Performance, and Prediction. *Brookings Papers on Economic Activity*, 1, 73-113.
- Cochrane, J. H. (1996). A Cross-Sectional Test of an Investment-Based Asset Pricing Model. *Journal of Political Economy*, 104, 572-621.
- Coleman, S., and Robb, A. M. (2011). Financing Strategies of New Technology-Based Firms. *Review of Economics and Finance*, 4, 1-18.
- Combs, J. G., and Ketchen, D. J. (1999). Can Capital Scarcity Help Agency Theory Explain Franchising? Revisiting the Capital Scarcity Hypothesis. *Academy of Management Journal*, 42(2), 196-207.
- Cooper, R. W., and Haltiwanger, J. C. (2006). On the Nature of Capital Adjustment Costs. *Review of Economic Studies*, 73(3), 611-633.
- Daskalakis, N., and Psillaki, M. (2008). Do Country or Firm Factors Explain Capital Structure? Evidence from SMEs in France and Greece. *Applied Financial Economics*, 18(2), 87-97.
- Da Silva, A.F., Vieira, A.M.C., Navarro, A.C. and Parisi, C. (2013). *Decisions On Investment And Profitability: An Empirical Study Using Generalized Linear Mixed Models In Non-Financial Brazilian Companies*. Universidade De Brasília: Brazil
- DeAngelo, H., and Masulis, R.W. (1980) .Optimal Capital Structure Under Corporate and Personal Taxation. *Journal of Financial Economics*, 8, 3-29.
- De La Torre, A., and Schmukler, S. (2004). Coping with Risks through Mismatches: Domestic and International Financial Contracts for Emerging Economies. *International Finance*, 7 (3), 349-90.
- De Jong, A., Kabir, R., and Nguyen, T. T. (2008). Capital Structure Around the World: The Roles of Firm and Country Specific Determinants. *Journal of Banking & Finance*, 32(9), 1954-1969.
- Demirguc-Kunt, A., and Maksimovic, V. (1998). Law, Finance and Firm Growth. *Journal of Finance*, 53, 2107-2137.
- Department of Statistics (2013). *Malaysia Press Release National Accounts Capital Stock Statistics 2005-2012*. Summary Findings December, 2013.
- Desai, M. (2008). *Profit and Profit Theory*. The New Palgrave Dictionary of Economics Online, 1-11.

- Dittmar, A., Smith, M. J. (2007). Corporate Governance and the Value of Cash Holdings. *Journal of Financial Economics*, 83, 599-634.
- Dixit, A., and Pindyck, R. (1995). The Options Approach to Capital Investment. *Harvard Business Review*. May-June, 105-107.
- Doms, M., and Dunne, T. (1998). Capital Adjustment Patterns in Manufacturing Plants. *Review of Economic Dynamics*, 1, 409-429.
- Donaldson, G. (1961). *Corporate Debt Capacity: A Study of Corporate Debt Policy and the Determination of Corporate Debt Capacity*. Division of Research, Harvard School of Business Administration, Boston.
- Dunning, J. H. (1988). The Theory of International Production. *The International Trade Journal*, 3(1), 21-66.
- Durand, D. (1959). The Cost of Capital, Corporation Finance, and the Theory of Investment. *The American Economic Review*, 49(4), 639-655.
- Easterbrook, F. (1984). Two Agency-Cost Explanations of Dividends. *The American Economic Review*, 74, 650-659.
- Echevarria, D. P. (1998). Capital Investment and the Profitability of Fortune 500 Industrials: 1971–1990. *Studies in Economics and Finance*, 18(2), 3-35.
- Economic Report. (Various Issues, 2001-2014). Ministry of Finance, Kuala Lumpur: National Printers, Malaysia.
- Eisner, R. (1964). Capital Expenditures , Profits , and the Acceleration Principle. *The Econometric Society* (Vol. I).
- Eisner, R. (1967). A Permanent Income Theory for Investment. *The American Economic Review*, 57(3), 363-390.
- Elifson, K. W., Runyon, R. P., and Haber, A. (1998). *Fundamentals of Social Statistics* (3<sup>rd</sup> Ed.). McGraw-Hill Companies Inc.
- Emmanuel, C., Harris, E., and Komakech, S. (2010). Towards A Better Understanding of Capital Investment Decisions. *Journal of Accounting & Organizational Change*, 6(4), 477–504.
- Erden, L. (2002). *The Impact of Public Capital Investment on Private Investment Under Uncertainty: A Panel Data Analysis of Developing Countries*. PhD Dissertation, Florida.
- Esfahani, H. S., and Ramirez, M. T. (2003). Institutions, Infrastructure, and Economic Growth. *Journal of Development Economics*, 70(2), 443–477.

- Fairfield, P., Whisenant, J., and Yohn, T. (2003). The Differential Persistence of Accruals and Cash Flows for Future Operating Income Versus Future Profitability. *Review of Accounting Studies*, 8, 221–243.
- Fama, E., and M. H. Miller, M.H. (1972). *The Theory of Finance* (Dryden Press, Hinsdale, IL).
- Fama, E. F. (1998). Market Efficiency, Long-Term Returns, and Behavioral Finance. *Journal of Financial Economics*, 49(3), 283–306.
- Fama, E., and French, K. R. (2005). Financing Decisions: Who Issues Stock? *Journal of Financial Economics*, 76, 549-582.
- Fama, E. F., and French, K. R. (2006). Profitability, Investment and Average Returns. *Journal of Financial Economics*, 82(3), 491-555.
- Fareed, Z., Aziz, S., Naz, S., Shahzad, F., and Arshad, M. (2014). Testing the Relationship Between Profitability and Capital Structure of Textile Industry of Pakistan, 29(5), 605–609.
- Fazzari, S., Hubbard, G., and Petersen, B.(1988). Finance Constraints and Corporate Investment. *Brookings papers on Economic Activity*, 2, 141-195.
- Feidakis, A., and Rovolis, A. (2007). Capital Structure Choice in European Union: Evidence from the Construction Industry. *Applied Financial Economics*, 17 (12), 989-1002.
- Frank, M., Goyal, V. (2003). Testing the Pecking Order Theory of Capital Structure. *Journal Finance Economic*, 67, 217–248.
- Frank, M. Z., and Goyal, V. K. (2009). Capital Structure Decisions: Which Factors are Reliably Important?. *Financial Management*, 38(1), 1-37.
- Fielding, J. and Gilbert, N. (2006). *Understanding Social Statistics* (2<sup>nd</sup> Ed.). London: Sage Publication Ltd.
- Fisher, I. (1930). *The Theory of Interest, as Determined by Impatience to Spend Income and Opportunity to Invest it*. Maccillan, New York.
- Fisher, I. (1933). The Debt-Deflation Theory of Great Depressions. *Econometrica: Journal of the Econometric Society*, 1 (4 ), 337-357.
- Fischer, E. O., Heinkel, H., and Zechner, J. (1989). Dynamic Capital Structure Choice: Theory and Tests. *Journal of Finance*, 44, 19- 40.
- Gujarati, D.N. (2003). *Basic Econometrics* ( 4th Ed.).McGraw-Hill. Singapore.

- Garner, J. L., Nam, J., and Ottoo, R. E. (2002). Determinants of Corporate Growth Opportunities of Emerging Firms. *Journal of Economics and Business*, 54(1), 73–93.
- Gilchrist, S., and Himmelberg, C. P. (1995). Evidence on the Role of Cash Flow for Investment. *Journal of Monetary Economics*, 36(3), 541-572.
- Gill, A., Singh, M., Mathur, N., and Mand, H. S. (2014). The Impact of Operational Efficiency on the Future Performance of Indian Manufacturing Firms. *International Journal of Economics and Finance*, 6(10), 259–269.
- Ghosh, D., and Wu, A. (2007). Intellectual Capital and Capital Markets: Additional Evidences. *The International Journal of Learning and Intellectual Capital*, 4(2), 216-235.
- Gomes, J. F. (2001). Financing Investment. *The American Economic Review*, 91(5), 1263-1285.
- Gorton, G. (2010). *Slapped by the Invisible Hand: The Panic of 2007*. Oxford University Press, USA.
- Gracia, L. J. and Mira, S. F. (2008). Testing Trade-off and Pecking Order Theories Financing SMEs. *Small Business Economics*, 31(2), 117-136.
- Graham, J. R. (1996). Proxies for the Corporate Marginal Tax Rate. *Journal of Financial Economics*, 42, 187-221.
- Graham, J. R. (2000). How Big Are the Tax Benefits of Debt? *The Journal of Finance*, 55(5), 1901-1941.
- Greenwood, R., Hanson, S., and Stein, J.C. (2010). A Gap-Filling Theory of Corporate Debt Maturity Choice. *Journal of Finance*, 65 (3 ), 993-1010.
- Hair, J.F., Babin, R.E. Anderson and R.L. Tatham. (2006) (6<sup>th</sup> Ed.) *Multivariate Data Analysis*. 6th Edition. Prentice Hall. USA.
- Handtke, K. E. (2014). *The Profit Theory is False Since Adam Smith. What About the True Distribution Theory?* MPRA Paper No. 59411, 1-23
- Haniffa, R., and Hudaib, M. (2006). Corporate Governance Structure and Performance of Malaysian Listed Companies. *Journal of Business Finance Accounting*, 33(7-8), 1034–1062.
- Hamada, S.R. (1972). The Effect of the Firm's Capital Structure on the Systematic Risk of Common Stocks. *The Journal of Finance*, 27(2), 435-452.



- Hamidi, M., Mansor N., and Asid, R. (2013). Capital Expenditure Decisions: A of Malaysian Listed Companies Using An Ordered Logistic Regression Analysis. *Journal of the Asian Academy of Applied Business*, 2(1), 66-81.
- Harford, J. (1999). Corporate Cash Reserves and Acquisitions. *Journal of Finance*, 54,1967-1997.
- Harford, J., Mansi, S., Maxwell, W. (2008). Corporate Governance and Firm Cash Holdings in the U.S. *Journal of Financial Economics*, 87(3), 535-555.
- Harris, M., and Raviv, A. (1991). The Theory of Capital Structure. *The Journal of Finance*, 46(1), 297–355.
- Harvey, C., Lins, K., and Roper, A. (2004). The Effect of Capital Structure When Expected Agency Costs are Extreme. *Journal of Financial Economics*, 74, 3–30
- Hassan,N., and Manshor,T.A. (1991). *Capital Intensive and High-Technology Industries in Malaysia*. Siri Seminar Perancangan 5 SPBW Ke- 10. (1991/1992). Faculty Alam Bina, UTM.
- Hayn, C. (1995). The Information Content of Losses, *Journal of Accounting and Economics*, 20, 125-153.
- Helfert, E. A. (1960). Checkpoint for Administering Capital Expenditure. *California Management Review*, 84-98.
- Hennessy, C. A., and Levy, A. (2002). *A Unified Model of Distorted Investment: Theory and Evidence*. Working Paper, University of California at Berkeley.
- Hill, H. G. (1955). Capital Expenditure Management. *The Journal of Business*, 28(4), 285-290.
- Hillman, A. J., and Keim, G. D. (2001). Shareholder value, stakeholder management, and social issues: what's the bottom line?. *Strategic management journal*, 125-139.
- Hirshleifer, J. (1958). On the Theory of Optimal Investment Decision. *Journal of Political Economy*, 66(4), 329-352.
- Holz, C.A. (2002). The Impact of the Liability-Asset Ratio on Profitability in China's Industrial State-Owned Enterprises. *China Economy Review*, 13, 1-26.
- Holmbeck, G. N. (1997). Toward Terminological, Conceptual, and Statistical Slarity in the Study of Mediators and Moderators: Examples from the Child-Clinical and Pediatric Psychology Literatures. *Journal of Consulting and Clinical Psychology*, 4, 599–610.

- Hoshi, T., Kashyap, A.K., and Scharfstein, D. (1991). Corporate Structure, Liquidity, and Investment: Evidence from Japanese Panel Data. *Quarterly Journal of Economics*, 106, 33-60.
- Howard, M.C., 1983. *Profits in economic theory*. Macmillan.
- Huang, D., and Wang, F. (2009). Cash, Investments and Asset Returns. *Journal of Banking & Finance*, 33(12), 2301–2311.
- Hubbard, R. G. (1998), Association Capital-Market Imperfections and Investment. *Journal of Economic Literature*, 36(1) 193-225.
- Hung, C. Y., Albert, C. P. C., and Eddie, H. C. M. (2002). Capital Structure and Profitability of the Property and Construction Sectors in Hong Kong. *Journal of Property Investment & Finance*, 20(6), 434–453.
- Hussain, T. (2015). Does Capital Structure Effects Profitability of The Firms (Evidence from Firms Listed at KSE 100 Index). *Research Journal of Finance and Accounting*, 6(5), 116–124.
- Hausman, J. A. (1978). Specification Tests in Econometrics. *Econometrica*, 46 (6), 1251-1271.
- Hyman, H. H. (1972). *Secondary Analysis of Sample Surveys: Principles, Procedures and Potentialities*. London: John Wiley & Sons.
- Jackson, W. (1995). *Methods: Doing Social Research*. Canada: Prentice-Hall.
- Jensen, M. C., and Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(4), 305–360.
- Jensen, M. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeover. *American Economic Review*, 76, 323-329.
- Jensen, M. (1993). The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems. *Journal of Finance* 48, 831- 880.
- Jensen, M. (2001). Value Maximisation, Stakeholder Theory, and the Corporate Objective Function. *European Financial Management*, 7(3), 297-317.
- Jian, M., and Lee, K. W. (2011). Does CEO Reputation Matter for Capital Investments? *Journal of Corporate Finance*, 17, 929–946.
- Jiang, C., Chen, H., and Huang, Y. (2006). Capital Expenditures and Corporate Earnings Evidence from the Taiwan Stock Exchange. *Managerial Finance*, 32(11), 853–861.

- Jibrān, S., Wajid, S. A., Waheed, I. and Muhammed, T. M. (2012). Pecking at Pecking Order Theory: Evidence from Pakistan's Nonfinancial Sector. *Journal of Competitiveness*, 4, 4, 86- 95.
- Jonker, J., and Pennink, B. (2010). *The Essence of Research Methodology: A Concise Guide For Master and PhD Students in Management science*. Springer Science & Business Media.
- Jose, P. E. (2013). *Doing Statistical Mediation and Moderation*. Guilford Press.
- Jorgenson, D. W., (1963). Capital Theory and Investment Behavior. *American Economic Review*, (Papers and Proceedings), 53(2), 247-59.
- Kang, C. (2006). Analyzing for Production Efficiency the in Telecommunications Industry: The Taiwan case. *The Business Review*, 5(1), 111-120.
- Kang, J. K., and Stulz, R. M. (1996). How Different Is Japanese Corporate Finance? An Investigation of the Information Content of New Security Issues. *Review of Financial Studies*, 9 , 109-139.
- Kaplan, S. (1989). The Effect of Management Buyout on Operating Performance and Value. *Journal of Financial Economics*, 24, 217-254.
- Kaplan, S., and Zingales, L. (1997). Do Investment-Cashflow Sensitivities Provide Useful Measures of Financial Constraints? *Quarterly Journal of Economics*, 112(1), 169-215.
- Karjalainen, P. (2008). R&D Investments: The Effects of Different Financial Environments on Firm Profitability. *Journal of multinational financial management*, 18(2), 79-93.
- Kayhan, A., and Titman, S. (2007). Firms' Histories and their Capital Structures. *Journal of Financial Economics*, 83(1), 1-32.
- Keats, B. W., and Hitt, M. A. (1988). A Causal Model of Linkages Among Environmental Dimensions, Macro Organizational Characteristics, and Performance. *Academy of Management Journal*, 31(3), 570-598.
- Kerstein, J. and Kim, S. (1995). The Incremental Information Content of Capital Expenditures. *Accounting Review*, 513-526.
- Khale, K.M. and Stulz, R. M. (2013). Access to Capital, Investment and the Financial Crisis. *Journal of Financial Economics*, 110, 280-299.
- Khan, A., Kaleem, P. A., and Nazir, M. S. (2012). Impact of Financial Leverage on Agency Cost of Free Cash Flow : Evidence from the Manufacturing Sector of Pakistan. *Journal of Basic and Applied Scientific Research*, 2(7), 6694-6700.

- Kim, E. H. (1978). A Mean-Variance Theory of Optimal Capital Structure and Corporate Debt Policy. *Journal of Finance*, 33 (March), 45-64.
- Kim, J. (1987). *The E/P Effect and the Earnings Forecast Error Effort: A Comparison of Two Stock Market Anomalies*. PhD Dissertation, University of California, Berkeley.
- Kim, H. and Berger, P. D. (2008). A Comparison of Capital Structure Determinants: The United States and the Republic of Korea. *The Multinational Business Review* 16, 79-100.
- Kim, S., Pilotte, E., and Yang, J. S. (2013). Agency Costs and the Short-Run Stock Price Response to Capital Expenditures. *Financial Review*, 47(2), 375–399.
- Kim, S. (2001). The Near-Term Financial Performance of Capital Expenditures: A Managerial Perspective. *Managerial Finance*, 27(8), 48–62.
- King, A. M. (1994). *Total Cash Management: A Company-Wide System for Forecasting, Managing, and Improving Cash Flow*. McGraw-Hill, Inc.
- KLSE. (1992). *Malaysia The Rising Star: Business and Investment Opportunities and Challenges Towards 2020*. The Kuala Lumpur Stock Exchange (KLSE) and Malaysia Strategic Consultany Sdn Bhd.
- Knight, F. H. (1984). Profit. *Encyclopedia Sciences*, 12, New York: Macmillan.
- Kogan, L., and Tian, M. (2013). Characteristics and Empirical Factor Models : A Data-Mining Experiment. *European Summer symposium in Financial Markets*. 15-26 July 2013, Study Center Gerzensee.
- Kotler, P., Kartajaya, H., and Young, S. D. (2004). *Attracting Investors: A Marketing Approach to Finding Funds for Your Business*. John Willey & Sons, Inc, Hoboken, New Jersey.
- Kothari, C.R. (2004). *Research Methodology: Methods and Techniques*. New Delhi: New Age International.
- Kraus, A., and Litzenberger, R.H. (1973), A State-Preference Model of Optimal Financial Leverage, *Journal of Finance*, 28, 911-922.
- Kujansivu, P., and Lonnqvist, A. (2007). How Do Investments in Intellectual Capital Create Profits. *The International Journal of Learning and Intellectual Capital*, 4(3), 256- 275.
- Kumar, P., and Li, D. (2013). *Capital investment, Option Generation, and Stock Returns*. Working paper, University of California, San Diego, 1- 43.

- Kumar, R. (2005). *Research Methodology: A Step-by-Step Guide for Beginners*(2<sup>nd</sup> Ed.). Sage Publication.
- Kumar, M., Talib, S.A., and Ramayah, T. (2013). *Business Research Method*. Oxford Fajar.
- Lang, H. J. (1989). *Cost Analysis for Capital Investment Decisions*. Marcel Dekker. Inc.
- Lang, L., Stulz, R., and Walkling, R. (1991). A Test of the Free Cash Flow Hypothesis, The Case of Bidder Returns. *Journal of Financial Economics*, 29, 315-335.
- Lang, L., Ofek, E., and Stulz, R. (1996). Leverage, Investment, and Firm Growth. *Journal of Financial Economics*, 40, 3-29.
- La Porta, R., Silanes, L. F., Shleifer, A., and Vishny, R. (2000). Investor Protection and Corporate Governance. *Journal of Financial Economics*, 58, 3–27.
- Lehn, K., and Poulsen, A. (1989). Free Cash Flow and Stockholder Gains in Going Private Transactions. *Journal of Finance*, 44, 771–787.
- Lester, G., Telser, L. G. (1959). A Theory of Speculation Relating Profitability and Stability. *The Review of Economics and Statistics*, 41(3), 295–301.
- Lev, B., and Thiagarajan, R. (1993). Fundamental Information Analysis. *Journal of Accounting Research*, 31, 191-215.
- Lev, B., Sougiannis, T. (1996). The Capitalization, Amortization, and Value-Relevance of R&D. *Journal of Accounting and Economics*, 21, 107–138.
- Levy, H., and Sarnat, M. (1994). *Capital Investment and Financial Decisions* (5<sup>th</sup> Ed.) Prentice Hall.
- Leary, M. T., and Roberts, M. R. (2005). Do Firms Rebalance their Capital Structures? *Journal of Finance*, 60(6), 2575–2619.
- Liao, Z., and Cheung, M. T. (2002). Do Competitive Strategies Drive R&D? An Empirical Investigation of Japanese High-Technology Corporations. *The Journal of High Technology Management Research*, 13, 143–156.
- Li, D (2004). *The Implications of Capital Investment for Future Profitability and Stock Returns an Over-investment Perspective*. PhD Thesis, University of California, Berkeley.
- Li, D. (2011). Financial Constraints, R&D Investment, and Stock Returns. *Review of Financial Studies*, 24(9), 2974–3007.

- Liu, J. (2013). Fixed Investment, Liquidity, and Access to Capital Markets: New Evidence. *International Review of Financial Analysis*, 29, 189–201.
- Lina, S. (2014). The Peculiarities of Capital Investment in the Baltic States. *Economics and Business*, 26, 82–87.
- Little, I.M.D. (1962). *Higgledy Piggledy Growth*. Bulletin of the Oxford University Institute of Economics and Statistics, 24(4), 387–412.
- Livnat, J., and Zarowin, P. (1990). The Incremental Information Content of Cash-Flow Components. *Journal of Accounting and Economics*, 13(1), 25-46.
- Luo, M. (2011). A Bright Side of Financial Constraints in Cash Management. *Journal of Corporate Finance*, 17(5), 1430–1444.
- Lyandres, E., Sun, L., and Zhang, L. (2008). The New Issues Puzzle: Testing the Investment - Based Explanation. *Review of Financial Studies*, 21 (6), 2825–2855.
- Lynch, B. (2002). Maximising FM's Contribution to Shareholder Value Part 1: Can the Capital Expenditure Process for Fixed Asset be Improved? *Journal of Facilities Management*, 1(1), 48-55.
- MacKie-Mason, J. (1990). Do Taxes Affect Corporate Financing Decisions? *Journal of Finance*, 45,1471-1493.
- Madah, N.A., Sultan, K., and Farooq, K. (2013). *Effect of Capital Structure on Profitability. An Empirical Study of Non-Financial Firms Listed in Karachi Stock Exchange in Pakistan*. Working Paper.
- Majumdar, S., and Chhibber, P. (1999). Capital Structure and Performance: Evidence From a Transition Economy on an Aspect of Corporate Governance. *Public Choice*, 98, 287-305.
- Margaritis, D. and Psillaki, M. (2010). Capital Structure, Equity Ownership and Firm Performance. *Journal of Banking and Finance*, 34(3), 621-632.
- Marr, B., Schiuma, G., and Neely, A. (2004). Intellectual Capital: Defining Key Performance Indicators for Intangible Assets. *Business Process Management Journal*, 11(5), 551-569.
- Matemilola, B. T., Bany-Ariffin, a. N., and B. McGowan, C. (2013). Unobservable Effects and Firm's Capital Structure Determinants. *Managerial Finance*, 39(12), 1124–1137.

- Massa, S., and Testa, S. (2008). Innovation and SMEs: Mis-aligned Perspectives and Goals among Entrepreneurs, Academics and Policy Makers. *Technovation*, 28(7), 393-407.
- McConnell, J. J., and Muscarella, C. J. (1985). Corporate Capital Expenditure Decisions and the Market Value of the Firm. *Journal of Financial Economics*, 14, 399-422.
- McGahan, A. (1992). *Selected Profitability Data on US Industries and Companies*. Intercollegiate Case Clearing House No. 9, 792-066, Harvard Business School, Boston, MA.
- Miller, M. (1977). Debt and Taxes. *Journal of Finance*, 32, 261-275.
- Modigliani, F., and Miller, M. H. (1958). The Cost of Capital, Corporate Finance and the Theory of Investment. *American Economic Review*, 48, 261-97.
- Modigliani, F., and Miller, M. H. (1963). Corporate Income Taxes and the Cost of Capital: A Correction. *American Economic Review*, 53, 433-43.
- Mohan, S., and Elangovan, R. (2007). *Research Methodology in Commerce*. New Delhi: Deep and Deep Publication Pvt. Ltd.
- Murad, A. (1953). Questions for Profit Theory. *American Journal of Economics and Sociology*, 13(1): 1-14.
- Murad, A. (1953). Questions for Profit Theory. *American Journal of Economics and Sociology*, 13(1): 1-14.
- Mushtaq, N. (2015). Capital Structure Effect on Firm's Profitability (A Case of Service Industries Listed in KSE Pakistan). *Journal for Studies in Management and Planning*, 1(2), 209-223.
- Myers, S. C. (1984). The Capital Structure Puzzle. *The Journal of Finance*, 39(3), 575-592.
- Myers, S. and Majluf, N. (1984). Corporate Financing and Investing Decisions When Firms Have Information that Investors Do Not Have. *Journal of Financial Economics*, 13, 187-221.
- Myles, S. J. (2011). The Benefits of Geographic Sales Diversification: How Exporting Facilitates Capital Investment. *Strategic Management Journal*, 32(10), 1046-1060.
- Neveu, R.P. (1989). *Fundamentals of Managerial Finance* (3<sup>rd</sup> Edition). South-Western Publishing Co. Ohio.

- Neter, J., Johnson, J. R., and Leitch, R. A. (1985). Characteristics of dollar-unit taints and error rates in accounts receivable and inventory. *Accounting Review*, 488-499.
- Nazir, M. S., and Afza, T. (2009). Impact of Aggressive Working Capital Management Policy on Firm's Profitability. *The IUP Journal of Applied Finance*, 15(8), 19–30.
- Nimalathasan, B., Brabete, V. (2010). Capital Structure and its Impact on Profitability: A Study of Listed Manufacturing Companies in Sri Lanka. *Finance - Accounting*, 7-16.
- Opler, T., Pinkowitz, L., Stulz, R., Williamson, R. (1999). The Determinants and Implications of Corporate Cash Holdings. *Journal of Financial Economics*, 52, 3-46.
- Ou, J. A. (1990). The Information Content of Nonearnings Accounting Numbers as Earnings Predictors. *Journal of Accounting Research*, 28 (1 ), 144-163.
- Ou, J., and Penman, S. (1989). Financial Statement Analysis and the Prediction of Stock Returns. *Journal of Accounting and Economics*, 11, 295-329.
- Owolabi, S. A., and Obida, S. S. (2012). Liquidity Management and Corporate Profitability : Case Study of Selected Manufacturing Companies Listed on the Nigerian Stock Exchange. *Business Management Dynamics*, 2(2), 10–25.
- Pallant, J. (2007). A Step-by-Step Guide to Data Analysis Using SPSS for Windows (Version 15), 3rd Edition. Allen and Unwin, Sydney.
- Pandey ,I. (2002). *Capital Structure and Market Power Interaction: Evidence from Malaysia*. Working Paper, Indian Institute of Management.
- Parrino, R., and Kidwell, D. S.(2009). *Fundamentals of Corporate Finance*. New York, NY, John Wiley & Sons.
- Peck, R., and Devore, J. L. (2011). *Statistics: The exploration & analysis of data*. Cengage Learning.
- Pegels, C.C (1991) Alternative Methods of Evaluating Capital Investments in Logistics. *International Journal of Physical Distribution and Logistics Management*, 21(2), 19-25.
- Penman, S. (1991). Return to Fundamentals. *Journal of Accounting, Auditing and Finance*, 7(4), 465-484.
- Polk, C., and Sapienza, P.(2008). The Stock Market and Corporate Investment: A Test of Catering Theory. *Review of Financial Studies*, 22(1), 187–217.



- Porter, R. B. (2005). Connecting Optimal Capital Investment and Equity Returns. *Financial Management*, 34(2), 63–98.
- Pratt, R.W. (2012). Is Capital Structure Relevant? *An Empirical Examination of Capital Structure Choices*. PhD Dissertation, The University of Texas-Pan American.
- Puah, C.H., Wong, S. S.L., and Liew, V. K.S. (2013). Testing Rational Expectations Hypothesis in the Manufacturing Sector in Malaysia. *Journal of Business Economics and Management*, 14(2), 303–316.
- Qureshi, M. A., Akhtar, W., and Imdadullah, M.(2012). Does Diversification Affect Capital Structure and Profitability in Pakistan? *Asian Social Science*, 8(4), 30-43.
- Rajan, R., and Zingales, L. (1995). What Do We Know about Capital Structure? Some Evidence from International Data. *Journal of Finance*, 50, 1421–1460.
- Ramlall, I. (2009). Determinants of Capital Structure Among Non-Quoted Mauritian Firms Under Specificity of Leverage: Looking for a Modified Pecking Order Theory. *International Research Journal of Finance and Economics*, 31, 84-92
- Ramon, P. D., and Robotti, C. (2007). Financial Market Frictions. *Economic Review*. 3<sup>rd</sup> Quarter 2007, Federal Reserve Bank of Atlanta, 11–16.
- Ranson, R. D., and Babin, C. E. (1978). What's Holding Up the Capital Investment Boom?. *Financial Analysts Journal*, 34(5), 30-41.
- Reilly, F., and Brown, K. (2011). *Investment Analysis and Portfolio Management*. Cengage Learning.
- Ross, S. A., Westerfield, R. W., and Jordan, B. D. (2007) *Fundamentals of Corporate Finance* (4<sup>th</sup> Ed.). Australia: McGraw-Hill Australia Ptd Ltd.
- Rozeff, M. (1982). Growth, Beta and Agency Costs as Determinants of Dividend Payout Ratios. *Journal of Financial Research*, 5, 249–259.
- Ryan, B., Scapens, R. W., and Theobald, M. (2002). *Research Method and Methodology in Finance and Accounting* (2<sup>nd</sup> Ed.). British Library Cataloguing-in-Publication Data.
- Saad, N. M. (2010). Corporate Governance Compliance and the Effects to Capital Structure in Malaysia. *International Journal of Economics and Finance*, 2(1), 105-114.
- Saunders, M., Lewis, P. and Thornhill, A. (2003). *Research Methods for Business Students* (3<sup>rd</sup> Ed.). Essex: Pearson Education Limited.

- Securities Commission Malaysia (2011). *Capital Market Masterplan 2*, Malaysia: Perpustakaan Negara Malaysia.
- Seitz, N., and Ellision, M. (1995). *Capital Budgeting and Long-term Financing Decisions* (2<sup>nd</sup> Ed.). USA: The Dryden press.
- Shah, A., and Khan, S., 2007. Determinants of capital structure: Evidence from Pakistani panel data. *International review of business research papers*, 3(4), pp.265-282.
- Sheikh, N. A., and Wang, Z. (2011). Determinants of Capital Structure: An Empirical Study of Firms in Manufacturing Industry of Pakistan. *Managerial Finance*, 37(2), 117-133.
- Shin, H., and Stulz, R. (1996). *An Analysis of Divisional Investment Policies*. NBER Working Paper.
- Shin, H., and Stulz, R.M. (2000). *Firm Value, Risk and Growth Opportunities*. Cambridge: National Bureau of Economic Research, July, NBER Technical Working Paper 7808.
- Shleifer, A., and Vishny, R. W. (2010). Unstable Banking. *Journal of Financial Economics*, 97(3), 306-318.
- Shubita, M. F., and Alswalhah, J. M. (2012). The Relationship between Capital Structure and Profitability. *International Journal of Business and Social Science*, 3(16), 104–112.
- Silvola, H. (2006). Low-Intensity R&D and Capital Budgeting Decisions in it Firms. *Advances in Management Accounting*, 15(06), 21–49.
- Singh, M. K., and Ramann, S. (2014). *User Right as a Mezzanine Capital Investment : Innovations in Infrastructure Debt Financing*. Working Paper, Indira Gandhi Institute of Development Research, Mumbai, 1-33.
- Slavin, A., and Reynolds, S. N. (1975). *Basic Accounting* (3<sup>rd</sup> Ed.). USA: The Dryden Press.
- Sloan, R. (1996). Do Stock Prices Fully Reflect Information in Accruals and Cash Flows About Future Earnings? *The Accounting Review*, 71, 289-315.
- Stanley, M. T. (1990). Cost of Capital of Capital in Capital Budgeting for Foreign Direct Investment. *Managerial Finance*, 16(2), 13-16.
- Stein, J. C. (1997). Internal Capital Markets and the Competition for Corporate Resources. *Journal of Finance*, 52, 111-133.

- Stiglitz, J. E. (1973). Taxation, Corporate Financial Policy, and the Cost of Capital. *Journal of Public Economics*, 2, 1–34.
- Stulz, R. (1990). Management Discretion and Optimal Financing Policies. *Journal of Financial Economics*, 26(1), 3-27.
- Sullivan, M., and Zhang, A. (2011). Are Investment and Financing Anomalies Two Sides of the Same Coin? *Journal of Empirical Finance*, 18(4), 616–633.
- Shyam-Sunder, L. and Myers, S. C. (1999). Testing Static Tradeoff Against Pecking Order Models of Capital Structure. *Journal of financial economics*, 51(2), 219-244.
- Tabachnick, B. G. and Fidell, L.S. (2013). *Using Multivariate Statistics* (6<sup>th</sup> Ed.). Pearson Education Inc.
- Tan, P. H., Plowman, D., and Hancock, P. (2007). Intellectual Capital and Financial Returns of Companies. *Journal of Intellectual Capital*, 8(1), 76-95.
- Toraman, C., Kilic, Y., and Reis, S. (2013). The Effects of Capital Structure Decisions on Firm Performance: Evidence From Turkey. *Proceeding of the International Conference on Economic and Social Studies (ICESoS'13)*, 137-145.
- Tarascio, V.J. (1993). Towards a Unified Theory of the Firm: An Historical Approach. *Atlantic Economic Journal*, 21, 1-17.
- Telser, L. G. (1959). A theory of speculation relating profitability and stability. *The Review of Economics and Statistics*, 295-301.
- Tirole, J. (2006). *The Theory of Corporate Finance*. Princeton University Press.
- Titman, S., and Wessels, R. (1988). The Determinants of Capital Structure Choice. *The Journal of finance*, 43(1), 1-19.
- Titman, S., Wei, K., and Xie, F. (2002). *Corporate Groups, Capital Investments and Stock Returns in Japan*. NBER working Paper.
- Titman, S., Wei, K., and Xie, F. (2004). Capital Investments and Stock Returns. *The Journal of Financial and Quantitative Analysis*, 39(4) 677-700.
- Tobin, J. (1969). A General Equilibrium Approach To Monetary Theory. *Journal of Money, Credit and Banking*, 1 (1), 15-29.
- Tobin, J., Brainard, W.C. (1977). Assets Markets and the Cost of Capital. In: Nelson, R., Balassa, B. (Eds.), *Economic Progress, Private Values and Public Policy: Essays In Honor Of William Fellner*. North Holland, Amsterdam, 235–262.

- Tobin, R. L. (1999). A Fast Interactive Solution Method for Large Capital Expenditure Selection Problem. *European Journal of Operational Research*, 116, 1-15.
- Trueman, B. (1986). Why Do Managers Voluntarily Release Earnings Forecasts? *Journal of Accounting and Economics*, 8(1), 53–71.
- Tsoufidis, L., Alexiou, C., and Parthenidis, T. (2015). Revisiting Profit Persistence and the Stock Market in Japan. *Structural Change and Economic Dynamics*, 33, 10-24.
- Valipour, H., Moradi, J., and Karimi, K. (2012). The Impact of Capital Expenditure on Working Capital Management: Empirical Evidences from Tehran Stock Exchange. *International Research Journal of Finance and Economics*, 85, 14-25.
- Velnampy, T., and Niresh, J. A. (2012). The Relationship between Capital Structure and Profitability. *International Journal of Business and Social Science*, 3(16), 104–112.
- Vogt, S. (1997). Cash Flow and Capital Spending: Evidence from Capital Expenditure Announcement. *Financial Management*, 26, 44-57.
- Waddock, S. A., and Graves, S. B. (1997). Quality of management and quality of stakeholder relations: are they synonymous?. *Business & Society*, 36(3), 250-279.
- Wagner, H.M. (1984). Profit Wonders, Investment Blunders. *Harvard Business Review*, 62, 121–135.
- Wald John K. (1999). How Firm Characteristics Affect Capital Structure: An International Comparison. *Journal of Financial Research*, 22(2), 161-187
- Warokka, A., Herrera, J.J.D., and Abdullah, H.H. (2011). East Asian Corporate Governance: A Test of the Relation Between Capital Structure and Firm Performance. *International Journal of Economic and Finance Studies*, 3(2), 1-10.
- Wei, K. C. J., and Zhang, Y. (2008). Ownership Structure, Cash Flow, and Capital Investment: Evidence from East Asian Economies before the Financial Crisis. *Journal of Corporate Finance*, 14(2), 118–132.
- Wen, Y.F. (2010). Capital Investment Decision, Corporate Governance, and Prospect Theory. *Procedia-Social and Behavioral Sciences*, 5(2), 116–126.

- Wernerfelt, B., and Montgomery, C. A. (1988). Tobin's q and the Importance of Focus in Firm Performance. *The American Economic Review*, 78(1), 246-250.
- Weston, J. F. (1973). Investment Decision Using the Capital Asset Pricing Model. *Financial Management*, 2(1), 25-33.
- Williams, A. C., and Nassar, J. I. (1966). Financial Measurement of Capital Investments. *Management Science*, 12 (11), 851-864.
- Woolridge, J. R. and Snow, C. (1990). Stock Market Reaction to Strategic Investment Decisions. *Strategic Management Journal*, 11, 353-63.
- Yang, F. (2013). Investment Shocks and the Commodity Basis Spread. *Journal of Financial Economics*, 110(1), 164-184.
- Yegon, C., Cheruiyot, J., and Cheruiyot, J. S. P. K. (2014). The Effects of Capital Structure on Firm's Profitability: Evidence from Kenya's Banking Sector. *Research Journal of Finance and Accounting*, 5(9), 152-159.
- Young, W. and Wu, C. C. (2017). Abnormal Investment, Changes in Institutional Ownership and SEO Long-run Performance. *Managerial Finance*, 43(8), 842-864.
- Zadeh, F. O., and Eskandari, A. (2012). Firm Size As Company's Characteristic and Level of Risk Disclosure: Review on Theories and Literatures. *International Journal of Business and Social Science*, 3(17).
- Zhang, X. J. (2000). Conservative Accounting and Equity Valuation. *Journal of Accounting and Economics*, 29(1), 125-149.
- Zwiebel, J. (1996). Dynamic Capital Structure Under Managerial Entrenchment, *American Economic Review*, 86, 1197-1215.