

# Study of Financing Preferences and Capital Structure among Malaysian SMEs: Evidence from Enterprise 50 Award Winners

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## ABSTRACT

Increasing importance of economic contributions of small and medium sized enterprises (SMEs) around the world particularly in developing countries necessitates better understanding of financial practices among SMEs. This research investigates the financial practices among SMEs in Malaysia among SMEs within the list of Enterprise 50 award winners from 1998 to 2010, focuses on SMEs managers' level of financing preferences towards available sources of financing, and firm's capital structure. Electronic surveys were conducted with a response rate of 29.5%. SMEs managers are found to have a higher preference towards debt financing from banking institutions. Results also show that the average debt-to-equity ratio among these SMEs is 57 to 43. Factors affecting manager's financing preferences and firm's capital structure are investigated through selected manager's and firm's characteristics. Focuses are on the possible association between these characteristics with managers' level of financing preferences and firm's capital structure, respectively. The analysis revealed that manager's business ownership status and level of education have a statistically significant association with their level of financing preferences. Non-debt tax shields, tangibility of assets and firm's level of liquidity, on the other hand were found to have a statistically significant relationship with firm's capital structure. This research enhances the existing body of knowledge of financial practices of SMEs, particularly within the context Malaysian SMEs by providing the information on manager's level of financing preferences and firm's capital structure.

**Keywords:** Financing preferences; Capital Structure; SMEs, Malaysia

## I INTRODUCTION

SMEs are important to almost all economies in the world, but especially to those in developing countries. SMEs in total constitute a large proportion of the economic activity and considered to be an engine of growth in both developed and developing countries (Boocock and Shariff, 2005). In developing countries, concern on the role of SMEs in the development process continues to be

in the forefront of policy debates (Cook, 2001) as they comprise a majority of the business population in most countries and therefore play a crucial role in the economy (Mitchell and Reid, 2000). Mac an Bhaird (2010) added that the realization of the significant economic contribution of SMEs has resulted in increased attention focused on the sector from policy makers as well as academics. The economic potential of the SME sector makes SME development as an important Government agenda. Their contribution is crucial and remains as an integral part of economic development of the country. The role of SMEs in promoting endogenous sources of growth and strengthening the infrastructure for enhanced economic expansion and development in Malaysia has been acknowledged (Aris, 2007).

## II SME FINANCING

The role of finance has been viewed as a critical element for the development of SMEs (Cook, 2001). As is widely recognized, lack of sufficient finance and access to credit are often cited as major handicaps to the development of SMEs in many parts of the world (UNDP, 2007). In the case of Malaysia, SMEs generally face difficulties in obtaining financing with lack of collateral, insufficient documents to support loan application and lack of financial track record being the constraints faced by Malaysian SMEs in accessing financing (Aris, 2007). Study by Ab. Wahab and Buyong (2008) on financing practices and challenges among technology based SMEs in Malaysia revealed that 84.3% of respondent had experienced difficulties in obtaining external financing. Within this figures, duration of loan offered was too short, insufficient amount of finance and difficulty in providing collateral are among difficulties faced by Malaysian SMEs.

The availability of financing for Malaysian SMEs is not an issue as the sources of finance seems abundant, however the main issue is the accessibility and adequacy of those funds which were found to be limited and fragmented (Abdullah and Ab. Manan, 2009). Accessibility to finance is a major factor affecting the growth and success of SMEs (Hall, 2003). Consequently, adequate access

to financing is critical to enable SMEs to contribute to the economic development of the nation with initiatives have been developed in addressing the financing gaps (BNM Annual Report, 2008). Given the importance of finance and the existence of constraints related to the access to financing among Malaysian SMEs, it is crucial to investigate the financial practices among SMEs to increase a better understanding of their financing behavior.

Another concern that motivated the investigation on the topic of financial practices among SMEs particularly in Malaysia is the paucity of research into the topic of financing preferences and capital structure among SMEs. General studies on SME financing were primarily conducted by related institutions, either domestic or international, and focused mainly on the issues of provision of funds for SMEs. Mac an Bhaird (2010) indicates that early studies investigating SME financing are predominantly comprised government-sponsored surveys and reports which concentrating largely on potential deficiencies and obstacles to the sustainability and development of the sector.

Existing literatures on Malaysian SMEs mainly captures development of SMEs in general (includes issue and challenges faced by SMEs) while those which related to the financial practices of SMEs in Malaysia are particularly focuses on financing issues, and sources and uses of funds employed throughout the business (see Saleh and Ndubisi, 2006; Aris, 2007; Hassan, 2008; Hall, 2003; Rozali et al, 2006). The topic of financing preferences and capital structure among SMEs in Malaysia are still understudied and thus open up for an opportunity to gauge into this area which will enhance better understanding on this topic, consequently.

Cook (2001) point out that the theoretical insights into the fields of finance and SMEs have largely been confined to studies undertaken in the US and the UK. Although considerable amount is known about the characteristics and behavior of SMEs, this knowledge continues to be imperfect and a large number of questions remain unanswered in relation to finance and SME development in developing countries. He added that in developing countries, research on both the supply and demand for finance among SMEs has been empirically based and pre-occupied with gathering information on the characteristics of SMEs and lending institutions rather than on testing theoretical proportions that

would improve understanding of the relationship between finance and SMEs.

Cook (2001) point out some weaknesses and gaps in knowledge concerning the relation between finance and SME development, and suggested the followings four elements of research into SME financing that will contribute to a better understanding of the financing needs of SMEs and the ways to deliver financial services to them:

1. The forms of finance used by SMEs and made available by lending institutions and investors.
2. The relation between different financial forms and firm-level performance.
3. The behavior of SMEs with different forms of finance.
4. Supply side of finance

This study incorporates two of his suggestions in contributing to a better understanding of SME financing behaviors. Focuses are on the behavior of SMEs with different forms of finance and the forms of finance used by SMEs. These two areas are studied by investigating the financing preferences among SMEs managers toward different sources of financing and also the capital structure of SMEs which reflects the forms of finance used by them. These investigations would also incorporated general theory on SME financing and selective financial theory relates to firm's capital structure.

Greater financial accessibility is believed to be achieved by enhancing the understanding of financial practices among SMEs. This will ensure the correct measures were taken in strengthening the existing infrastructure, and enabling a more effective channeling of funds to SMEs. In addition to that, it is also hoped to improved provision of financial advisory support and enhancing awareness of financial products and assistance programmes available to SMEs. Therefore, given the significant role of SMEs and the existence of financing gaps as well as gaps in the literature, this research aims to investigate the financial practices of SMEs in Malaysia particularly within the scope of financing preferences and capital structure. These are believed will further enhance understanding of financial behavior and practices among SMEs in Malaysia which in turn will provide better channeling of funds. The financing gaps would then be reduced, and subsequently will increase the accessibility and adequacy of financing to the SMEs.

Given the existence of financing-related challenges faced among SMEs in general and in particular Malaysian SMEs, there is an avenue for further studies on financial practices among SMEs in Malaysia to enhance better understanding of their financial behavior. This is hoped to add to the existing knowledge on financial practices among SMEs in general, and especially within the context of Malaysia.

### III FINANCING PREFERENCES AND CAPITAL STRUCTURE

#### A. Financing Preferences

Investigation into SMEs financing choices often seeks explanation of the issue in term of firm characteristics (firm size, age, asset structure, profitability; to name a few) without considering one important aspects of small business and entrepreneurship which is the role of SME owner (Mac an Bhaird, 2010). Norton (1991) often cited by those researching financing behavior of SMEs (Coleman, 2008; Mac an Bhaird, 2010; Romano et al, 2000; Paul et al, 2007) to include the important of understanding managerial beliefs and its relation to firm's capital structure. Norton (1991) cited by Mac an Bhaird (2010) stated that *'In small businesses and entrepreneurial firms, managerial beliefs and desires will play an especially important role in determining capital structure....models must include the role of management preferences, beliefs, and expectations if we are to better understand capital structure policy'*.

The important managerial role, primarily one that relates to the issue of financing decision is fundamental element in this study concerning managerial preferences toward various sources of financing. Although managerial preferences might not precisely resemble the observed capital structures, information provided will offer evidence of motivations behind the financing decision (Mac an Bhaird, 2010). He also point out that there are evidences that relative paucity of published papers employing the influence of firm owners' business goal, objectives and preferences on issues related to SME financing. Incorporating managerial elements in improving understanding of financial practices among SMEs is then very much needed.

Mac an Bhaird (2010) outlined two approaches used in relation to owner characteristics examined in previous studies into owner's personal characteristics (age, gender, race, education,

experience) and owners' preferences, business goals and motivations. Likewise, Low and Mazzarol (2006) found that personal characteristics of the owner-managers play a significant role in determining their financing preference. These characteristics may provide some additional predictive power in explaining the firm's capital structure (Cassar, 2004). In this study, selecting managerial characteristics were executed through reviews of past studies particularly on the personal characteristics of SMEs owner or manager. The following table summarizes previous studies concerning financial aspects and practices of firms which integrate managerial characteristics as one of the indicators:

**Table 1: Financial practices and managerial characteristic: previous studies**

Author	Managerial characteristics
Vos, Yeh et al. (2007)	Age, education
Wu, Song et al (2008)	Age, education, experience
Buferna (2005)	Age, knowledge, experience
Low and Mazzarol (2006)	Education, age, experience,
Cassar (2004)	Experience, education, gender
Sara and Peter (1998)	Gender, business ownership, age, number of children, business experience.
Boden and Nucci (2000)	Gender, experience, marital status, age, hours worked per week in business
Romano et al (2000)	Age, business ownership
Watson (2006)	Gender, education, experience
Coleman (2000)	Gender
Storey (1994)	Experience, gender, education, age, birthplace, employment status
Verheul and Thurik (2001)	Gender, Experience, Education
Zhang (2008)	Age, political connections, education, native status, experience, credit rating status
Osei-Assibey et al. (2011)	Age, education, gender, business ownership
Gebbru (2009)	Ownership status, education, age
Coleman and Cohn (2000)	Gender, education, age, experience
Bates (1982)	Education, management experience, age

Studies integrating managerial characteristics were found use similar indicators of managerial characteristics. Gender, age, education, experience and business ownership are example of indicators that often used in relation to understanding of firm's financial practices. These indicators are selected to

be used in this study to investigate the managers' level of financing preferences towards various sources of financing. Summary of these variables are presented as follows:

**Table 2: Summary of selected manager's characteristics**

Variable	Indicator
Gender	Gender i.e. Male or Female
Age	Age. Classified into groups of ages.
Education	Level of education. Classified into groups of education levels.
Experience	Experience. Classified into groups of experiences with regards to years of experience.
Business ownership	Concerning ownership of business i.e. Own/ did not own the business

In summary, manager's personal characteristics are believed to be a good indicator in regards to firm's overall capital structure decision. Incorporating these aspects in investigating the preference of financing among SMEs are important not only in providing clear and better understanding on SMEs capital structure but in improving knowledge about how these aspects influence SMEs in their capital structure decision.

## B. Capital Structure

The study of capital structure attempts to explain the mix of securities and financing sources used by corporations to finance real investment. Most of the research on capital structure has focused on the proportions of debt versus equity observed on the right-hand sides of corporations' balance sheets (Myers, 2001). There is no consensus theory that explains a firm's capital structure but, finance theory offers two broad competing models: trade-off theory and pecking order theory (Tong and Green, 2005) and these theories appear to have the most support (Seifert and Gonenc, 2008).

Theories of optimal capital structure differ in their relative emphases on certain factors. The trade-off theory emphasizes taxes, the pecking order theory emphasizes differences in information, and the free cash flow theory emphasizes agency costs (Myers, 2001). Empirically, distinguishing between these hypotheses has proven difficult (Booth, Aivazian et al., 2001; Tong and Green, 2005). In cross-sectional tests, variables that describe one theory can be classified as others and vice versa (Booth, Aivazian et al. 2001). Trade-off did better in one case (large equity issues of low-leverage firms) and pecking order in the other (the negative impact of profitability on leverage) (Tong and Green, 2005).

In Trade-off Theory (TOT, hereafter), firms seek debt levels that balance the tax advantages of additional debt against the costs of possible financial distress (Myers, 2001). Optimal capital structure is achieved by balancing the benefits of debt (tax and reduction of free cash flow problems) with the costs of debt (bankruptcy and agency costs between stockholders and bondholders) (Seifert and Gonenc (2008). Firm is viewed as setting a target debt-to-equity ratio and gradually moving towards it. This implies that some form of optimal capital structure exists that can maximize the firm value while simultaneously minimizing external claims to the cash flow stream. Such claims include taxes, bankruptcy costs, and agency costs (Kjellman and Hansen, 1995). A value-maximizing firm will pursue an optimal capital structure by considering the marginal costs and benefits of each additional unit of financing, and then choosing the form of financing that equates these marginal costs and benefits. Benefits of debt include its tax advantage and the reduced agency costs of free cash flow; costs include the increased risk of financial distress and increased monitoring and contracting costs associated with higher debt levels (Tong and Green, 2005). Applicability of the trade-off theory to the SME has been the focus of a number of studies as the debt tax shield is as relevant for SME as it is for publicly quoted firms (Mac an Bhaird, 2010).

The pecking order theory or hypothesis of capital structure (POH, hereafter), is among the most influential theories of corporate leverage (Frank and Goyal, 2003). It contrasts the static trade-off theory with a competing popular story based on a financing pecking order. Firms are said to prefer internal to external financing and debt to equity if it issues securities. In the pure pecking order theory, the firm has no well-defined target debt-to-value ratio (Myers, 1984). The pecking order hypothesis describes a hierarchy of financial choices firms make. According to the pecking order hypothesis, internally generated financing is preferred first, followed by debt (safe and then risky), and lastly outside equity (Seifert and Gonenc, 2008). The firm will borrow, rather than issuing equity, when internal cash flow is not sufficient to fund capital expenditures. Thus the amount of debt will reflect the firm's cumulative need for external funds (Myers, 2001).

A fundamental issue in corporate finance involves understanding how firms choose their capital structure (Seifert and Gonenc, 2008). What

determines the optimal capital structure is still an ongoing and complex matter (Esparanca, Gama et al. 2003). Researchers are still puzzled by how firms choose the debt, equity or hybrid securities they issue (Kjellman and Hansen, 1995). Theories of capital structure suggest how some of the factors might be correlated with leverage (Rajan and Zingales, 1995). There have been many empirical studies attempting to test the explanatory power of capital structure models on corporate behavior in developed countries, particular in a U.S. setting. Most of the work has been to identify the determinants of capital structure. The main determinants of capital structure tested include profitability, size, growth opportunity, asset structure, costs of financial distress, and tax shields effects (Chen, 2004).

In the case of capital structure, however, the set of features one must include in such a general model is so large and complicated that the resulting structure would not yield clear insights. Based on theoretical capital structure studies, firm's capital structure emerges from three sources: firm specific, country institutional and macroeconomic factors. There is empirical evidence for the importance of all three—firm, institutional, and macroeconomic—factors in determining firm capital structure. However, there is still a lack of studies spanning a large number of countries and different firm types simultaneously (Joeveer, 2005).

Previous studies among large firms' shows some factors that seem to have influences on capital structure decisions among them. This particular study incorporates those factors namely profitability, firm's size, asset tangibility, firm's growth, firm's age, non-debt tax shields and liquidity. Reviews on these studies are used to support the decision on selecting those factors to be tested in this study. Analysis of factors used in investigating into capital structure decisions among SMEs shows that factors selected in this study were among the factors that mostly included in the previous studies concerning the determinants of capital structure among SMEs. Interestingly, firm's size was included in all selected studies. This might be an important factor in differentiating financial practices among SMEs as most definitions of SME divided SME into different groups such as micro, small and medium enterprises. The next factor that usually included when studying the determinants of capital structure among SMEs is firm's growth. Profitability and asset tangibility or structure were included in thirteen studies while firm's age, non-

debt tax shields and liquidity was included in nine, five and two studies respectively. In summary, indicator used for each explanatory variable is as follows:

**Table 3: Summary of indicator used for each explanatory variables**

Variable	Indicator
Profitability	Return on Assets: EBIT/Total Assets
	Gross Profit Margin: Gross Profit/Net Sales
	Net Profit Margin: Net Income/Sales
Firm's Size	Based on number of Full-time employees or annual sales turnover which divided into 3 different groups which is Micro, Small and Medium.
Asset Tangibility	Fixed Assets/Total Assets
Firm's Growth	Growth of Total Assets (%)
	Growth of Total Sales (%)
Firm's Age	Divided into 5 groups (Less than 5 years, 5 to 9 years, 10 to 14 years, 15 to 19 years, more than 20 years)
Non-Debt Tax Shield	Depreciation/Total Assets
Liquidity	Quick Ratio: (Current Assets – Inventories)/Total Assets
	Current Ratio: Current Asset/Current Liabilities

Indicator for capital structure variables mainly revolved around ratios within the company's capital structure. To some extent, the value of those variables are differentiate either by taking the book value or the market value of leverage or equity. Four indicators used for capital structure variables in this study are:

1. Debt Ratio (DR)=Total Liabilities/Total Assets
2. Short-term Debt Ratio (STD R)=Current Liabilities/Total Assets
3. Long-term Debt Ratio (LTDR)=Long-term Debt/Total Assets Debt-to-Equity Ratio
4. Debt-to-Equity Ratio (DER)=Total Debt/Total Equity

In conclusion, managers' level of financing preferences towards different sources of financing are investigated within selected managers' characteristics, while firm's capital structure was studied through selected firm's characteristics. These would enable clear views on the associations and influences between these characteristics with managers' financing preferences and firm's capital structure, respectively.

### III RESEARCH METHODOLOGY

#### A. Research objectives

Desired outcome need to be reflected when stating research objectives. It is viewed as the starting point of rigorous research in that they demonstrate the potential legitimacy of the research project in far stronger terms than a statement of the research idea (Hair, 2007). The objectives of this study are:

1. To investigate the level of financing preferences towards different sources of financing among managers of SMEs in Malaysia,
2. To investigate the capital structure among SMEs in Malaysia, and
3. To determine if there are any significant associations between selected manager's characteristics with their level of financing preferences towards different sources of financing, and between selected firm characteristics with the firm's capital structure among SMEs in Malaysia.

These specific objectives are accomplished through gathering of specific data among chosen sample of Enterprise 50 award winners to gauge the issue of financing preferences and choice of capital structure, and factors influencing their decisions on these two.

#### B. Data collection, response rate and analysis

Accomplishing of the research objectives was dependent on the reliable analysis of responses received from a large number of respondents. Therefore, survey research was considered to be the suitable and appropriate data collection method for achieving the objectives of this study. Availability of the internet in recent years overcomes some drawbacks of traditional ways of postal surveys especially the one relating to cost of postal questionnaire. For that reason, electronic survey was chose to be the appropriate and reliable instrument in supporting the accomplishment of data collection process, not only for increasing the response rates but also increasing a reliable analysis and findings of research objectives. This method involves dissemination of self-administered electronic surveys through e-mail, the World Wide Web, Interactive Voice Response and touch-tone data entry (Dillman, 2000). Web survey is chose to be used in this study as this particular type of electronic survey have more refined appearance and have a flexibility to provide survey capabilities far

beyond the e-mail and paper surveys (Dillman, 2000; Hair et al. 2007).

As questionnaire is the sole survey instrument to be used in this study, it was very clear that detailed and careful planning should be undertaken to develop a reliable instrument. After considering the comments and suggestions received from the pre-testing and pilot testing the first draft of the questionnaire, the final version of the questionnaire was constructed involving four different parts and accessible via designated link. The link for the final version of the questionnaire was sent via e-mail to the selected sample upon satisfactory results of pilot testing. A list of Enterprise 50 winners from 1998 to 2010 were formed to guides the overall process of data collection. SMEs listed on the list were classified based on alphabetical orders and the distributions of e-mails were made on the basis of completing the list. Telephone contacts were also made in the case where direct e-mail contact is not available mainly to get direct e-mail address of designated person in charge which in turn hoped to increase the response rate.

In the pilot study, the overall contactable SMEs were 47 (out of 50 SMEs). Two SMEs refuse to participate and excluded in determining the overall response rate of 28 % [13/ (50-3-2)]. This rate was deemed to be appropriate as the average response rate for surveys among SMEs in Malaysia was 15.6%. As this study employ an e-mail surveys, it was thought that this instrument was yet to be tested within Malaysian context especially among SMEs and anticipated to open a new way of researching SMEs in Malaysia. The actual surveys which took almost six month to complete resulting in a total of 120 responses received. This figure is used to determining the response rate received for this survey. A total of 423 SMEs were contactable and out of this, 17 of them were not interested and refused to participate. After all these were taken into consideration, the overall response rate for this study was determined as follows:

$$\text{Response rate} = [120 / (444 - 21 - 17)] = 29.5\%$$

Upon satisfactory of responses received data analyses were performed on the basis of 120 responses. Descriptive, bivariate and multivariate analyses were involved to accommodate different functions mainly to achieve the research objectives. Parametric and non-parametric analyses were used based on the type of data collected. All parametric assumptions was fulfilled and justified before the

parametric analyses were used. The following section will discuss the results of these analyses.

#### IV RESULTS

##### A. Descriptive analysis

Descriptive analysis was conducted with an aim of accomplishing the first and the second research objectives of this study. In addition, profile of the SMEs and respondents are presented as follows:

##### Profile of SMEs

**Table 4: Profile of SMEs**

	%			
<b>Legal Status</b>				
Individual Proprietorship	5.0			
Private Limited Firm	89.2			
Partnership	5.8			
<b>Sector</b>				
Manufacturing	45.0			
Services	31.7			
Manufacturing Related Services	13.3			
Agro-based Industries	4.2			
ICT	5.8			
<b>Years of establishment</b>				
Less than 5 years	15.0			
5-9 years	25.8			
10-14 years	18.3			
15-19 years	14.2			
More than 20 years	26.7			
<b>Subsidiary or an independent firm?</b>				
A subsidiary firm	15.8			
An independent firm	84.2			
<b>Compositions of SMEs</b>				
<b>Size/Number of Employees</b>				
<b>Sector 1</b>	<b>Micro</b>	<b>Small</b>	<b>Medium</b>	
	<b>&lt; 5</b>	<b>5-50</b>	<b>51-150</b>	<b>Total</b>
Manufacturing	6	19	29	<b>54</b>
MRS	4	10	2	<b>16</b>
Agro-based I	1	2	2	<b>5</b>
<b>Total</b>	<b>11</b>	<b>31</b>	<b>33</b>	<b>75</b>
<b>Size /Number of Employees</b>				
<b>Sector 2</b>	<b>Micro</b>	<b>Small</b>	<b>Medium</b>	
	<b>&lt; 5</b>	<b>5-19</b>	<b>20-50</b>	<b>Total</b>
Services	8	2	28	<b>38</b>
ICT	4	1	2	<b>7</b>
<b>Total</b>	<b>12</b>	<b>3</b>	<b>30</b>	<b>45</b>

Descriptive results show that SMEs within this study mainly registered as private limited firm from manufacturing sector and have been in operations for more than 20 years. Majority of them are also independent firms. In term of size, more than half of SMEs responded to this study are medium-sized firms with 63 firms compared to 23 and 34, micro and small-sized firms, respectively.

##### Profile of respondents

**Table 5: Profile of respondents**

	%
<b>Gender</b>	
Male	64.2
Female	35.8
<b>Age</b>	
Less than 25 years old	0
26-35 years old	19.2
36-45 years old	28.3
46-55 years old	39.2
56-65 years old	10.0
Over 65 years old	3.3
<b>Highest level of education</b>	
School Certificate (SRP/PMR/SPM/STPM)	8.3
Diploma	20.8
Bachelor Degree	52.5
Master Degree	14.2
PhD	0.8
Other (please specify)	3.3
<b>Do you have any working/business experience prior working with/running this present business?</b>	
Yes	86.7
No	13.3
<b>Length of service with present business?</b>	
Less than 5 years	25.0
5-9 years	25.0
10-14 years	21.7
15-19 years	14.2
More than 20 years	14.2
<b>Are you the owner/shareholders of this business?</b>	
Yes	56.7
No	43.3

Respondents in this study are mainly male manager and in an age category of between 46-55 years old. Most of them possess a Bachelor degree, have a prior working or business experience and work for current business for less than 10 years. In term of business ownership, more than half of the respondents are the owner or shareholders of the business they are currently working with.

##### Level of financing preferences

In term of level of financing preferences towards different sources of financing among SMEs managers, results revealed that retained earnings were the most preferred sources of internal financing among SMEs managers followed by shareholders own contribution and funds from related companies (parent, subsidiaries or associate companies). When it comes to external funding, banking institutions, trade/supplier credit and government funds were found to be the most preferred sources of financing. Other sources of financing (DFIs, cooperative financing, leasing and factoring) were found to be least preferred by the SMEs managers with equity investments being the

least preferred sources of financing. In term of financing term, long-term financing are found to be the most preferred term of financing among respondents.

By comparing both descriptive results for manager's level of financing preference toward different internal and external sources of financing, conclusion can be made on five most preferred sources of financing are presented as follows:

**Table 6: Five most preferred source of financing**

Rank	Source of financing	Sources
1	Banking Institutions	External
2	Retained Earnings (Net Income Retained for Reinvestment)	Internal
3	Shareholder's Own Fund/Contribution	Internal
4	Trade/Supplier Credit	External
5	Government Funds/Schemes	External

Table above indicates that the most preferred sources of financing among SMEs managers are a mixed of external and internal sources of financing. This list provides a clearer insight into the level of financing preferences towards various sources and types of financing available for small business particularly in the case of Malaysian SMEs. Managers of SMEs appears to find external funding most probably from banking institutions, supplier and also from the Government. Otherwise, they would use internally sought sources of financing from retained earnings or providing their own funds to accomplish the much needed funding.

#### ***SMEs capital structure***

Focus on the studies of firm's capital structure was motivated by an objective to increase an understanding on firm's capital structure used by SMEs in Malaysia within the chosen sample and issues related to it. Descriptive results indicate that generally SMEs depends more on debt over equity-sources of financing. This is proven by the descriptive results which shows that overall Debt-to-Equity ratio (DER) was found to be approximately 57 to 43. This figure proves that firms mainly seek for external debt-sources of financing over internal funds. Proportion of debt financing also found to be equally divided into short and long-term debt financing which shows that firms generally use both types of debts in financing their business activity.

The following eight items were found to have the highest proportion in the firm's liability and equity. These items are presented as follows:

**Table 7: Type of financing with the highest proportion in the firm's liability and equity**

Rank	Type of financing	Types
1	Account Payable	Debt
2	Retained Earnings (Net Income Retained for Reinvestment)	Equity
3	Shareholder's Own Fund/Contribution	Equity
4	Trade/Supplier Credit	Debt
5	Share Capital	Equity
6	Capital Reserved	Equity
7	Bank Overdraft	Debt
8	Long-term Debt	Debt

In summary, SMEs get their funding from debt-sources of financing in the form of account payable, trade/supplier credit, bank overdraft and long-term debt. Other form of debt financings were found to be least used by the SMEs which support the previous results on manager's level of financing preferences towards various sources of financing. Other possible ways of funding comes from internally-sought funds mainly from retained earnings.

#### **B. Bivariate analysis**

This analysis seeks to investigate statistically significant associations between manager's characteristics and managers' level of financing preferences towards different sources of financing, and statistically significant associations between firm's characteristics and firm's capital structure. These objectives were translated into two main general alternative hypotheses as follows:

- H<sub>1</sub>: There are statistically significant relationships between manager's characteristics and their level of financing preferences towards different sources of financing.
- H<sub>2</sub>: There are statistically significant relationship between firm's characteristics and firm's capital structure

Data transformations were performed on several variables in this study. These variables were assessed through few indicators to gauge the much needed data for the analysis. These indicators were then grouped and reduced into a smaller group of variables to simplify the analysis and increase an understanding of the data more easily in achieving research objectives. The responses given were



combined using the composite score where all individual items scores were summated together and aggregated for hypotheses testing. The data transformations were used on creating summated scores for the level of financing preferences among managers towards Internal Equity Financing (IEF), Debt Financing (DF) and External Equity Financing (EEF). The same transformation also performed in assessing the proportions of firm's capital structure which includes Short-term Financing (STF), Long-term Financing (LTF) and Equity Financing (EF), and average changes on firm's characteristics-variables involving three different variables: Liquidity (LIQ), Profitability (PROF) and firm's growth (GROWTH).

### Determining appropriate tests

Determination of the analysis for hypothesis testing generally involves two broad classes of inferential statistical significance tests: parametric and nonparametric test (Cooper and Emory, 1995; Saunders et al., 2009; Collis & Hussey, 2009). The former tests were used with continuous data which make certain assumptions about the distributional characteristics of the population under investigation whilst the latter are designed to be used when data are not normally distributed and often used with categorical data. Hence, in order to determine whether the bivariate association test for this study fall under parametric or non-parametric, the type of data used are analyzed, and type of tests to be applied are then determined.

**Table 8: Type of bivariate tests**

Area of study	DV	IV	Bivariate test of association
Determinants of financing preferences	IEF, DF, EEF	Age, Education, Experience	Spearman's correlation
		Gender, Ownership	Point-Biserial correlations
Determinants of firm's capital structure	DR, STDR, LTDR, DER	LIQ, PROF, TANG, NDTs, GROWTH	Pearson's correlation
		Firm's Age	Spearman's correlation
		Firm's Size	Biserial correlation

### Associations between managers' level of financing preference with manager's characteristics

Discussions on the results are divided into 15 sub-hypotheses to represent the testable association between five independent variables of manager's characteristics with three dependent variables in

regards to managers' level financing preferences towards IEF, DF and EEF. Summary of the results are presented as follows:

**Table 9: Summary of bivariate correlation coefficient test results**

Dependent Variable	Independent Variable	Reject/ Accept $H_0$
Manager's preference on Internal Equity Financing (IEF)	AGE ( $H_{1-1}$ ), EDU( $H_{1-4}$ ), EXP ( $H_{1-7}$ ), GENDER ( $H_{1-10}$ )	Accept $H_0$
	OWN ( $H_{1-13}$ )	Reject $H_0$
Manager's preference on Debt Financing (DF)	AGE( $H_{1-2}$ ), EDU( $H_{1-5}$ ), EXP( $H_{1-8}$ ), GENDER( $H_{1-11}$ )	Accept $H_0$
	OWN( $H_{1-14}$ )	Reject $H_0$
Manager's preference on External Equity Financing (EEF)	AGE( $H_{1-3}$ ), EXP( $H_{1-9}$ ), GENDER( $H_{1-12}$ )	Accept $H_0$
	EDU( $H_{1-6}$ ), OWN( $H_{1-15}$ )	Reject $H_0$

In summary, manager's preferences towards three different sources of financing did not have a statistically significant relationship with their age, experience and gender. This indicates that their preferences on different sources of financing were not related to these three variables. Manager's highest level of education<sup>1</sup> is found to have a statistically significant negative relationship with their preferences toward EEF and not with the other two sources of financing. Finally, manager's ownership status<sup>2</sup> is found to have a statistically significant positive relationship with their preferences towards all three sources of financing.

### Associations between firm's capital structure with firm's characteristics

The analyses are executed to study the association between selected firm's characteristics with firm's capital structure represented by firm's Debt Ratio (DR), Short-term Debt Ratio (STDR), Long-term Debt Ratio (LTDR) and Debt-to-Equity Ratio (DER). The analyses are separated into 28 sub-hypotheses representing seven independent variables and four different capital structure-variables to guide the hypothesis testing, and involving three different types of bivariate association tests. Summary of Pearson's correlation tests for five interval variables are presented below:

<sup>1</sup>  $r = -0.320^{**}$  (EEF)

<sup>2</sup>  $r = 0.230^{*}$  (IEF),  $r = 0.290^{**}$  (DF),  $r = 0.353^{**}$  (EEF)

**Table 10: Summary of Pearson's correlation coefficients test results**

	<i>LIQ</i>	<i>PROF</i>	<i>GRO</i>	<i>TANG</i>	<i>NDTS</i>
<i>DR</i>	-0.059	0.053	0.136	<b>0.321**</b>	<b>-0.203*</b>
<i>STDR</i>	<b>0.202*</b>	-0.081	-0.029	0.147	<b>-0.395**</b>
<i>LTDR</i>	0.159	0.040	0.096	0.172	<b>-0.468**</b>
<i>DER</i>	-0.122	-0.066	0.040	<b>0.221*</b>	<b>-0.316**</b>

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

\*Correlation is statistically significant at the 95% level of confidence (2-tailed)

Results show that firm's LIQ, TANG and NDTS are found to have statistically significant relationships with firm's capital structure. Another two independent variables, firm's age and size were tested using two different types of non-parametric bivariate association tests. Results show that these two variables are found to have no statistical relationship with firm's capital structure. Summary of bivariate correlation coefficient test results are presented as follows:

**Table 11: Summary of bivariate correlation coefficient test results**

Dependent Variable	Independent Variable	Reject/Accept $H_0$
Debt Ratio (DR)	LIQ( $H_{3-1}$ ), PROF( $H_{3-5}$ ), GROWTH( $H_{3-13}$ ), SIZE( $H_{3-25}$ ), AGE( $H_{3-21}$ )	Accept $H_0$
	TANG ( $H_{3-9}$ ), NDTS ( $H_{3-17}$ )	Reject $H_0$
Short-term Debt Ratio (STDR)	PROF( $H_{3-6}$ ), GROWTH( $H_{3-14}$ ), SIZE ( $H_{3-26}$ ), AGE ( $H_{3-22}$ ), TANG ( $H_{3-10}$ )	Accept $H_0$
	LIQ ( $H_{3-2}$ ), NDTS( $H_{3-18}$ )	Reject $H_0$
Long-term Debt Ratio (LTDR)	LIQ ( $H_{3-3}$ ), PROF( $H_{3-7}$ ), GROWTH( $H_{3-15}$ ), SIZE( $H_{3-27}$ ), AGE( $H_{3-23}$ ), TANG ( $H_{3-11}$ )	Accept $H_0$
	NDTS ( $H_{3-19}$ )	Reject $H_0$
Debt-to-Equity Ratio (DER)	LIQ ( $H_{3-4}$ ), PROF ( $H_{3-8}$ ), GROWTH ( $H_{3-16}$ ), SIZE ( $H_{3-1}$ ), AGE( $H_{3-28}$ )	Accept $H_0$
	TANG ( $H_{3-12}$ ), NDTS ( $H_{3-20}$ )	Reject $H_0$

In summary, NDTS was the only variable that has a statistically significant relationship with firm's capital structure. Firm's profitability, growth, age and size are found to not have any relationships with firm's capital structure. Tangibility on the other hand, has statistically significant relationships only with firm's DR and DER, while liquidity is found to have a statistically significant relationship with firm's STDR.

## V CONCLUSION

SMEs play a very important role in a nation's economy and become one aspect of the national agenda where the government has embarked on the concerted effort to improve SME stages of business development. Increased understanding on financial practices among Malaysian SMEs would create better awareness on factors influencing their financing decisions. Better understanding of financial practices of SMEs in Malaysia may assist policymakers in providing enhanced financing environment to the SMEs which may focuses on accessible and adequacy of financing which will meet the demand side of SMEs, with regards to the evidence on SMEs financing preferences and capital structure.

## REFERENCE

- Ab. Wahab, I. and Buyong, S. Z. (2008) "Financing Technology-Bases SMEs in Malaysia: Practices and Problems". Paper presented at 5<sup>th</sup> SMEs in a Global Economy Conference, August 2<sup>nd</sup>- 3<sup>rd</sup>, Senshu University, Kandajimbocho, Tokyo, Japan.
- Abdullah, M. A. and Ab. Manan, S. K. (2010) "Adequacy of Financial Facilities for Small-Medium Businesses: Empirical Findings from Malaysia", International Review of Business Research Papers Volume 6. No.4, pp. 535 – 548.
- Aris, N.M. (2007) "SMEs: Building Blocks for Economic Growth", Journal of Department of Statistics, Department of Statistic, Malaysia, Vol. 1.
- Bates, J. and Hally, D. L. (1982) "The Financing of Small Business", 3<sup>rd</sup> edition, London, Sweet & Maxwell.
- Boden, R. J. and Nucci A. R. (2000) "On the Survival Prospect of Men's and Women's New Business Ventures", Journal of Business Venturing **15**, 347–362
- Boocock, G., & Shariff, M. N. M. (2005) "Measuring the Effectiveness of Credit Guarantee Schemes: Evidence from Malaysia." International Small Business Journal, Vol. 23 (4), pp 427-454
- Booth, L. and Aivazian, V. (2001) "Capital Structures in Developing Countries", The Journal of Finance, Vol. 56, No. 1, pp. 87-130.
- Buferna, F. M (2005) "Determinants of Capital Structure: Evidence from Libya", unpublished PhD thesis, University of Liverpool.
- Cassar, G. (2004). "The financing of business start-ups." Journal of Business Venturing, Vol. 19, No.2, pp. 261-283.
- Chen, J. J. (2004). "Determinants of capital structure of Chinese-listed companies." Journal of Business Research (Issue 57): pp. 1341-1351.
- Coleman, S (2000) "Access to Capital and Terms of Credit: A Comparison of Men- and Women-Owned Small Businesses", Journal of Small Business Management, pp. 37-52.
- Coleman, S. and Richard C. (2000) "Small Firms' Use of Financial Leverage: Evidence from the 1993 National Survey of Small Business Finances". Journal of Business and Entrepreneurship 12 (3), 81-98.
- Cook, P. (2001) "Finance and Small and Medium-Sized Enterprise in Developing Countries", Journal of Developmental Entrepreneurship, Vol. 6, No. 1, pp. 17-40.

- Esparanca, J. P. and Gama, A. P. M. (2003) "Corporate debt policy of small firms: an empirical (re)examination", *Journal of Small Business and Enterprise Development*, Vol. 10, No. 1, pp. 62-80.
- Frank, M. Z. and Goyal, V. K. (2003) "Testing the pecking order theory of capital structure", *Journal of Financial Economics*, Vol. 67, pp. 217-248.
- Gebru, G. H. (2009), "Financing preferences of micro and small enterprise owners in Tigray: does POH hold?", *Journal of Small Business and Enterprise Development*, Vol. 16 Iss: 2 pp. 322 - 334
- Hair, J. F., Money, H. A., Samouel, P. and Page, M. (2007) "Research Methods for Business", England: John Wiley and Sons Ltd.
- Hall, C. (2003). The SME policy framework in ASEAN and APEC: Benchmark comparisons and analysis. A 16th Annual Conference of Small Enterprise Association of Australia and New Zealand
- Hassan, Z. (2008). Entrepreneurship Development for competitive SMEs: A Malaysian comparative analysis. UITM, Malaysia
- Joeveer, K. (2005) "What Do We Know about the Capital Structure of Small Firms?" Working Paper Series, Prague, Center for Economic Research and Graduate Education, Charles University, pp. 1-38.
- Kjellman, A. and Hansen, S. (1995) "Determinants of Capital Structure: Theory vs. Practice", *Scandinavian Journal of Management*, Vol.11, No. 2, pp. 91-102.
- Low, C. and Mazzarol, T. W. (2006) "Owner-Managers' Preferences for Financing: A Study of Singaporean SME", *International Council of Small Business 51st Annual Conference*, Melbourne, 19-21 June,
- Mac an Bhaird, C. (2010) "The Modigliani-Miller proposition after fifty years and its relation to entrepreneurial finance", *Strategic Change*, 19: 9-28.
- Myers, S.C. (1984) "The Capital Structure Puzzle", *Journal of Finance*, Vol. 39, pp. 575-592.
- Mitchell, F. and Reid, G. (2000), "Problems, Challenges and Opportunities: Small Business as a Setting for Management Accounting Research", *Management Accounting Research*, 11 (4): pp. 385 - 390.
- Myers, S. C. (2001) "Capital Structure", *Journal of Economic Perspectives*, Vol. 15, No.2, pp. 81-102.
- Norton, Edgar (1991). "Capital structure and small growth firms." *The Journal of Small Business Finance* 1 (2), 161-177.
- Osei-Assibey, E., Bokpin, G. A. and Twerefou, D. K. (2010) "The Microenterprise and Financing Preference in Ghana: Is There a Hierarchical Preference Ordering?" Available at SSRN: <http://ssrn.com/abstract=1612071>
- Paul, S., Whittam, G. and Wyper, J. (2007), "The pecking order hypothesis: Does it apply to start-up firms? *Journal of Small Business and Enterprise Development*, 14 (1): 8-21.
- Rajan, R. G. and Zingales, L. (1995) "What Do We Know about the Capital Structure? Some Evidence from International Data", *The Journal of Finance*, Vol. 50, No. 5, pp. 1421-1460.
- Romano, C. A. et al. (2000) "Capital Structure Decision Making: A Model for Family Business", *Journal of Business Venturing* 16, 285-310
- Rozali, M. B., Taib, H., Latiff, R. A. and Salim, M. (2006) "Small Firms' Demand for Finance in Malaysia", *Proceeding of International Conference on Business and Information (BAI) July 12-14, 2006, Pan Pacific Hotel, Singapore Volume 3, ISSN 1729-9322, 2006*
- Saleh, A. S. and Ndubisi, N. O. (2006) "SME Development in Malaysia: Domestic and Global Challenges", *Economics Working Paper Series*, University of Wollongong.
- Saleh, A. S. and Ndubisi, N. O. (2006) "An Evaluation of SME Development in Malaysia", *International Review of Business Research Papers*, Vol. 2, No. 1, pp. 1-14.
- Sara, C. and Peter, R. (1998) "The financing of male- and female-owned businesses, *Entrepreneurship & Regional Development*" *An International Journal*, 10:3, 225-242
- Seifert, B. and Gonenc, H. (2008) "The international evidence on the pecking order hypothesis". *Journal of Multinational Financial Management*, Vol. 18, pp. 244-260.
- Storey, D. J. (1994) "The role of legal status in influencing bank financing and new firm growth", *Applied Economics*, 26, 129-136.
- Tong, G. and Green, J. (2005) "Pecking order or trade-off hypothesis? Evidence on the capital structure of Chinese companies", *Applied Economics*, Vol. 37, No. 19, pp. 2179-2189.
- United Nations Development Programme (UNDP) (2007) "Malaysia Small and Medium Enterprises: Building an Enabling Environment".
- Verheul, I. and Thurik, R. (2001) "Start-up Capital: Does Gender Matter?" *Small Business Economics*, 16, 329-345.
- Vos, E., and Yeh, A. J. Y. (2007) "The happy story of small business financing", *Journal of Banking and Finance*, Vol. 31, No. 9, pp. 2648-2672.
- Watson, J. 2006, 'External Funding and Firm Growth: Comparing Female- and Male-Controlled SMEs', *Venture Capital*, 8, 1, pp. 33-49.
- Wu, J. and J. Song, (2008) "An empirical evidence of small business financing in China", *Management Research News*, Vol. 31, No. 12, pp. 959-975.
- Zhang, G. B. (2008). "The choice of formal or informal finance: Evidence from Chengdu, China." *China Economic Review* 19(4): 659-678.