THE DETERMINANTS OF CAPITAL STRUCTURE AMONG SMES IN MALAYSIA

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ABSTRACT

At present there is limited number of studies into capital structure among small and medium sized enterprises (SMEs). Most theoretical and empirical studies of this topic are focused on large corporations. However, increasing importance of economic contributions of SMEs around the world, particularly in developing countries necessitates better understanding of capital structure decisions among SMEs. This research investigates the determinants of capital structure among SMEs in Malaysia, among SMEs within the list of Enterprise 50 award winners from 1998 to 2010. Electronic surveys were conducted with a response rate of 29.5%. Result shows that the average debt-to-equity ratio among these SMEs is 57 to 43. Factors determining firm's capital structure are investigated through selected firm's characteristic which focuses on the possible association between these characteristics with firm's capital structure. Overall, three out of seven selected firm's characteristics were found to have statistically significant relationship with firm's capital structure, and all these three variables were also found to have an ability in explaining variations in the firm's capital structure. Bivariate and multiple regression analysis revealed that non-debt tax shields, tangibility of assets and firm's level of liquidity to have a statistically significant relationship with (and an ability to explains) 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 determinants of firm's capital structure.

Keywords: Capital Structure; SMEs, Malaysia

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).

SMEs 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 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.

FIRM'S 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 relatives 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 that 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) and 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 applied in this study is as follows:

Table 1: 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 (STDR)=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, 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 firm's capital structure.

RESEARCH METHODOLOGY

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 capital structure among SMEs in Malaysia,
2.   To determine if there are any significant associations between selected firm characteristics with the firm's capital structure among SMEs in Malaysia, and
3.   To determine factors affecting 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 choice of capital structure, and factors influencing their decisions on their firm's capital structure.

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:

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 discusses the results of these analyses.

RESULTS

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 table 2 and table 3 summarize the proportion of firm's liability and equity among sample of Enterprise 50 award winner from 1998 to 2010.

Table 2: Proportion of liabilities and equity

Type of Funds/Percentage	Less than 25%	26% to 50%	51% to 75%	More than 75%
Short-term Liabilities	37.5	37.5	11.7	1.7
Long-term Liabilities	29.2	41.7	10.0	1.7
Owner's Equity	35.0	31.7	19.2	11.7

Table 3: Proportion of liabilities and equity: Mean and median

	Short-term Liabilities	Long-term Liabilities	Owner's Equity
Mean	28.18	28.63	43.20
Median	30.00	30.00	40.00
Minimum	0	0	0
Maximum	80	90	100

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 4: 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.

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

Bivariate analysis was performed to investigate statistically significant associations between firm's characteristics and firm's capital structure. This objective was translated into the following general alternative hypothesis:

H_1: 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 where summated together and

aggregated for hypotheses testing. The data transformations were used on creating summated scores for 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).

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 and 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 5: Type of bivariate tests

Area of study	DV	IV	Bivariate test of association
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

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:

Table 6: Summary of Pearson's correlation coefficients test results

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

**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 7: 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.

Determinants of SME's Capital Structure

Multiple regression analysis was performed to establish models predicting the capital structure among SMEs within the samples of Enterprise 50 winners. Four different capital structure ratios were used to represent the capital structure of SMEs namely DR, STDR, LTDR and DER. Seven firm's characteristics were chose and tested whether they have the ability in predicting the firm's capital structure. Predictor variables were arranged primarily based on the results of bivariate correlation analysis presented in the previous chapter. NDTS was found to be significantly correlated with all outcome variables, while TANG and LIQ was found to be significantly correlated with DR and DER, and STDR, respectively. Out of seven predictor variables, one predictor (AGE) involves the use of dummy variables as this predictor was measured on categorical scale with more than two categories. Four dummy variables were created to represent five different categories of firm's age. Regression analysis involves two stages of analysis where hierarchical and forced entry regression method are used in the first stage, and forward stepwise is used in the second stage.

Regression model is developed as follows:

$$CS = \alpha + \beta_1 NDTS_i + \beta_2 TANG_i + \beta_3 LIQ_i + \beta_4 PROF_i + \beta_5 GRO_i + \beta_6 SIZE_i + \beta_6 AGE_i + \varepsilon$$

Where;

CS= Firm's capital structure (DR, STDR, LTDR, DER)
α= Model's intercept

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B_{1-7}= Regression coefficients associated with variable 1 to 7
NDTS= Non-Debt Tax Shields
TANG= Firm's assets structure (tangibility)
LIQ= Firm's liquidity
PROF= Firm's profitability
GRO= Firm's growth
SIZE= Firm's Size
AGE= Firm's age
ε=Residual term

The following tables summarize the results of regression test performed in determining factors affecting SMEs' capital structure.

Table 8: Summary of linear regression analysis test results with firm's capital structure

A.   Summary of linear regression analysis test results for determinants of firm's DR
Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.321[a]	.103	.095	.839	.103	13.517	1	118	.000	1.373

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.246	.283		7.925	.000
	TANG	.317	.086	.321	3.677	.000

a. Predictors: (Constant), TANG
b. Dependent Variable: Debt Ratio: Total Liabilities/Total Assets

B.   Summary of linear regression analysis test results for determinants of firm's STDR
Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.395[a]	.156	.149	.797	.156	21.875	1	118	.000	1.813

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.326	.298		14.525	.000
	NDTS	-.449	.096	-.395	-4.677	.000

a. Predictors: (Constant), NDTS

A. Summary of linear regression analysis test results for determinants of firm's DR

Model Summary[b]

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | | Durbin-Watson |
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.321[a]	.103	.095	.839	.103	13.517	1	118	.000	1.373

Coefficients[a]

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
		B	Std. Error	Beta		
1	(Constant)	2.246	.283		7.925	.000
	TANG	.317	.086	.321	3.677	.000

b. Dependent Variable: Short-term Debt Ratio: Current Liabilities/Total Assets

C. Summary of linear regression analysis test results for determinants of firm's LTDR

Model Summary[b]

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | | Durbin-Watson |
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.468[a]	.219	.213	.772	.219	33.167	1	118	.000	1.506

Coefficients[a]

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
		B	Std. Error	Beta		
1	(Constant)	4.518	.288		15.676	.000
	NDTS	-.535	.093	-.468	-5.759	.000

a. Predictors: (Constant), NDTS
b. Dependent Variable: Long-term Debt Ratio: Long-term Debt/Total Assets

D. Summary of linear regression analysis test results for determinants of firm's DER

Model Summary[c]

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | | Durbin-Watson |
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.316[a]	.100	.092	.833	.100	13.087	1	118	.000	
2	.381[b]	.145	.130	.815	.045	6.164	1	117	.014	1.791

Coefficients[a]

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
		B	Std. Error	Beta		
1	(Constant)	4.116	.311		13.232	.000
	NDTS	-.363	.100	-.316	-3.618	.000
2	(Constant)	5.017	.474		10.593	.000
	NDTS	-.429	.102	-.374	-4.218	.000

LIQ	-.222	.089	-.220	-2.483	.014

a. Predictors: (Constant), NDTS
b. Predictors: (Constant), NDTS, LIQ
c. Dependent Variable: Debt-to-Equity Ratio: Total Debt/Total Equity

Within the context of firm's capital structure, three predictor variables were found to be statistically significant. These predictors are TANG, NDTS and LIQ. Other predictors are found to be not significant and do not have any effects on firm's capital structure.

Firm's DR is the first outcome variable under studies. Out of seven selected predictors, only one predictor is found to be statistically significant in predicting firm's DR. TANG is found to have a statistically significant positive relationship with the outcome variable. Where there is an increase in firm's level of asset tangibility, firm's DR also increase. This tells that the availability of tangible assets, which commonly associated with the ability of firm in providing collateral for debt funding, will eventually increase the use of debt financing (preferably long-term financing). The availability of tangible assets would support debt financing needed by the firm. In the case of SMEs, fund providers are believed to require back-up in the form of collateral to support the loan application. Availability of tangible asset would ease the loan application made by SMEs.

NDTS is found to be statistically significant in predicting the remaining firm's capital structure ratios. It is also found that this particular predictor is negatively correlated with firm's STDR, LTDR and DER. These thus indicate that there will be a decrease in the firm's use of debt when there is an increase in NDTS. This results show that as firm is having an increase in the tax shield from other sources that debt, they will eventually reduce the use of debt in financing their business. In this study, NDTS were represented by the depreciation expenses over total assets. One of the motivations for the use of debt was the tax shields effect which is the benefit of using debt. Interest paid or the costs of debt are tax-deductible, which in turn would reduce the overall firm's tax expenses. Firm is believed to try to maximize the benefit of using debt for this particular motivation. However, within the sample used in this study, results show that as firm is having an increase in the tax benefits from other sources than debt, they would eventually reduce the use of debt in funding the business. Depreciation expenses are an example of deductible expenses in determining firm operating income or EBIT. These expenses reduce the taxable income for the firm and would eventually decrease the overall firm's tax expenses.

Firm's DER is also found to be significantly predicted by LIQ, in addition to the NDTS. Both predictors were found to be negatively correlated in the model predicting firm's DER. This shows that increases in firm's liquidity would reduce firm use of debt particularly on the short-term financing. Increases in firm's liquidity as measured by Quick and Current ratios indicate that firms would be able to use the liquid asset in financing it funding requirement which will reduces their need for debt financing. These conditions will eventually reduce the overall use of debt financing reflected by lower DER.

In summary, it can be concluded that firm's capital structure is affected by firm level of asset tangibility, non-debt tax shields and liquidity. Other factors (profitability, growth, firm's age, firm's size) are found to be not statistically significant in predicting the firm's capital structure.

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.

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