

The Characteristics of a Manager in Determining the Capital Structure of SMEs in Malaysia: A Case in the Manufacturing Sector

Kuah Yoke Chin

Faculty of Business and Finance, Universiti Tunku Abdul Rahman, Malaysia
*Corresponding Author: kuahyc@utar.edu.my

Copyright©2021 by authors, all rights reserved. Authors agree that this article remains permanently open access under the terms of the Creative Commons Attribution License 4.0 International License

Received: 01 September 2022; Revised: 10 September 2022; Accepted: 25 October 2022; Published: 30 December 2022

Abstract: . Firms need funding through capital structure which refers to the specific mix of debt and equity in order to support business activities. In this sense, business managers or owners need to make important choices particularly in terms of leveraging to attain capital and maximize firms' wealth. However, the privilege of leveraging is not simply accessible to all businesses. This study employed binary logistic model involving the sample of 189 small and medium-sized businesses (SMEs) from manufacturing sector. The results of this study revealed that manager's gender, working experience and education level have significant and positive effects on firms' decision making in terms of leveraging. Academics and industry players can use the findings to understand the kind of influence the characteristics of a manager have on capital structure. Meanwhile, decision makers can utilize the findings to make strategic choices and formulate ideal capital structure.

Keywords: *Manager, Capital Structure, Manufacturing, SMEs*

1. Introduction

Firms need funding through capital structure which refers to the specific mix of debt and equity in order to support business activities. Inappropriate mix of debt and equity in financing a business might seriously affect its performance and ability to survive especially for small firms [1]. [2] argued that more than half of Canadian firms become insolvent due to internal problems e.g., lack of managerial knowledge and experience. It was also found that although some managers have managerial experience, they do not have industry-related knowledge and display very authoritarian behaviour. Other than management skills, individual characteristics, and personal qualities i.e., gender, age, education level and working experience are also important in determining the performance of a company. Failure to adopt an ideal capital structure may lead to bankruptcy [3], e.g., most businesses were found to have failed in less than three years after their establishment because of the managers' characteristics [4].

An increasing number of scholars have begun to question owners' or managers' characteristics as a critical factor in financing. Companies in the same industry have management with different characteristics and substantial influences over any financing decisions [5]. Employing different capital structure models i.e., debt or equity preferences may result in diverse outcomes [6]. Many studies have discussed the relationship between managers' characteristics and debt financing in listed companies, but little has been done in the Malaysian context, especially Malaysian SMEs in the manufacturing sector. This study attempts to bridge the gap, given that an analysis of the managers' characteristics is crucial to understand the capital structure of a firm. Other than that, this study examines if manager's characteristics i.e., age, gender, education level and work experience influence firm's decisions on capital structure as a form of leveraging. In addition, academics and industry players can use the findings of this study to understand the kind of influence

Corresponding Author: Kuah Yoke Chin, Faculty of Business and Finance, Universiti Tunku Abdul Rahman, Malaysia. Email: kuahyc@utar.edu.my

the characteristics of a manager have on capital structure, while decision makers can utilise the findings to make strategic choices and formulate ideal capital structure.

2. Literature Review

The topic of capital structure has been widely discussed over decades around the world. However, despite the great amount of literature that have analysed the capital structure in listed companies, the significance of manager's characteristics on company's financial decisions, especially in Malaysian context, deserves further development. In China, [7] used logistic regression model to analyse the implementation of leverage policy from different perspectives of the manager's characteristics. They found that CEO's risk preference affects the leverage decision. The CEO will prefer low leverage if he or she is a risk-averse CEO. Relatively older CEOs will prefer low leverage due to their conservative thinking, and firms with female CEOs tend to adopt low leverage compared to male CEOs. [6] studied the effects of manager's characteristics on the capital structure of 61 listed companies in Nairobi Securities Exchange from 2008-2013. He concluded elder or mature CEOs have significantly affected the performance of companies. At the same time, he found that gender and education level are not significant in contributing towards firms' financial options.

Similarly, [8] posited the effects of manager's characteristics on capital structure among firms listed in Nairobi Securities Exchange. It was found that age and gender have negative significant effects on capital structure. He recommended more female managers to be appointed to promote gender equality and that managers should serve longer tenure to better understand company's capital structure. [9] also examined the relationship between CEOs' characteristics and capital structure in Jordanian listed companies from 2008-2013 and released two outcomes from the research. First, CEOs supporting gender diversity have a positive and significant association with the capital structure. Second, older CEOs are less likely to acquire more debt than younger CEOs.

Next, [9] used data from European banks in 19 countries and found that younger managers are less averse and less conservative in their leverage choices, hence causing their banks to become more leveraged. Other than that, managers with longer tenure prefer to adopt leverage strategies, in which this is the same scenario as managers with shorter decision horizon—especially in highly leveraged banks. Besides, [11] analysed the mediating effect of capital structure on the association between managerial ability and firm performance. The database consists of 6,384 Taiwanese electronic companies from 2005-2018. The results indicated CEOs with high ability prefer low debt.

[1] examined the impact of CEO's characteristics on capital structure in Sri Lankan listed companies. A total of 123 financial and non-financial companies on the Colombo Stock Exchange were chosen throughout the period of 2012-2019. The results showed that male CEOs tend to employ more debt than female CEOs, and the relationship between CEO's age and capital structure is significant and positive. Older CEOs also have more experience in debt financing. In Malaysia, [12] used Bursa Malaysia's annual data from 2008-2012 to conduct research on capital structure. They found that managerial experience is a potential determinant of firms' capital structure. When the manager's or CEO's experience level increases, the company's total debt and long-term debt ratios also increase.

H1: There is a relationship between owner/manager's age and leverage in the Malaysian Manufacturing SMEs

H2: There is a relationship between owner/manager's gender and leverage in the Malaysian Manufacturing SMEs

H3: There is a relationship between owner/manager's experience and leverage in the Malaysian Manufacturing SMEs

H4: There is a relationship between owner/manager's education level and leverage in the Malaysian Manufacturing SMEs

3. Theoretical Model

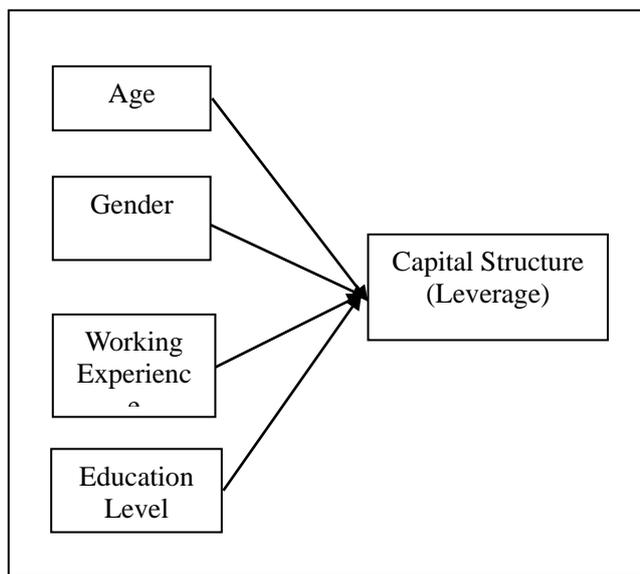
There are several theories suggesting that firm's decision on capital structure is based on various costs and benefits associated with debt and equity financing [13]. After the work of Modigliani and Miller (1958), a few theories of capital structure were developed to explain the optimal capital structure i.e., pecking order theory, trade-off theory and agency theory. Modigliani and Miller theory (M&M) is the founder of capital structure theories [14]. M&M (1958) assumes that firms have a particular set of expected cash flows. After selecting certain proportions of debt and equity to finance the assets, the cashflow is then allotted among the investors.

Investors and firms must be having equal access to financial market which allows homemade leverage. Therefore, a firm's leverage has no effect on its market value [15]. M&M also assumes the following: (i) Market is perfect and has no influence over the value of a firm; (ii) Investors have homogeneous expectation; and (iii) Economy is tax-free without any transaction costs. However, this theory is inapplicable as it is based on restrictive assumptions and is inconsistent with the real world. M&M theory has also been extended to pecking order theory and trade-off theory. Pecking order theory (POT) was propounded by Myers and Majluf (1984) who argued a firm prefers internal financing from different sources and debt financing is chosen if

external financing is needed.

In order to avoid underinvestment problem, managers seek to finance new projects using a security that is not undervalued by the market e.g., internal funds and riskless debt. Trade-off theory (TOT) describes the leverage financing option as contrary to the pecking order theory. It assumes the presence of an optimal capital structure that maximises shareholders' wealth and simultaneously minimises the costs incurred by firms [14]. It means that firms will balance the costs and benefits of debt to achieve an optimal capital structure. Firms should attempt to balance the benefits of debt as tax benefits against the costs associated with the increasing level of debt. Finally, agency cost theory was coined by Jensen and Meckling in 1976 to discuss the conflict of interest between principal (shareholders) and decision maker (agents) of a firm (managers and board members). This conflict exists because of the differences in behaviour or decisions by different agents and shareholders who often have different goals and risk tolerance.

Figure 1: Theoretical Model



Source: Developed for Research

4. Research Methodology

The data of this study was collected using structured questionnaire survey which consists of two sections. Section one captures the demographics of the respondents, managers and owners, which include age, gender, education level and work experience. Section two focuses on respondents' preferences on capital structure, sources of finance and purposes of finance. A total of 1,500 questionnaires were distributed to SMEs in the manufacturing sector in Malaysia using convenience sampling technique. From this number, only 189 managers

or owners completed the questionnaire. Data entry and cleaning were carried out using statistical software for social science (SPSS) version 24.0 for data analysis. Descriptive analysis was used to show frequency distribution using Microsoft Excel and binary logistic model was used to access and identify the influence of manager's characteristics on capital structure preference.

5. Data Analysis

5.1 Descriptive Analysis

The sample size of 189 respondents has the following descriptive characteristics: (i) Male respondents 90% and female respondents 10%; (ii) They are mostly sole proprietors in electrical and electronic products; (iii) SMEs of more than 50 employees makes up 75.66% while the rest are lesser than 50 employees; (iv) Survival rate of more than ten years since establishment consists of 53.97% companies; (v) Annual sales turnover and gross profit fall between RM15 million and RM20 million; (vi) Approximately 80% of the managers will use external financing from banking institutions (67.72%), bank overdraft (23.28%), government funds and scheme (5.29%), factoring (2.65%) and leasing companies (1.06%); and (vii) The managers use leverage to expand into new market with existing products (51.32%), introduce new products to the existing market (21.16%), to increase sales or shares of existing market (13.23%), to explore entirely new market (11.11%), to expand overseas (2.12%) and to acquire or take over other firms (1.06%).

This study used binary logistic model to test the relationship between independent variables i.e., age, gender, education level and work experience towards dependent variables as leverage. For hypotheses testing, the results of the proposed hypotheses are supported by the findings as shown in Table 2. The proposed empirical model is written under general form as follows:

$$\text{Leverage} = f(\text{Gen, Age, Work, Edu})$$

Where:

Leverage (Capital Structure) = 1 if the respondent is applying leverage; 0 otherwise

Gender = 1 is Male; 0 is Female

Age = 1 is 20 or younger, 2 is 21-30, 3 is 31-40, 4 is 41-50, 5 is more than 51

Work = 1 is yes; 0 is no

Edu = 1 is no formal education, 2 is primary school, 3 is PMR/LCE, 4 is SPM/MCE, 5 is Degree/Diploma, 6 is Professional Certification, 7 is Postgraduate/Doctorate

Results from Table 2 conclude that capital structure (leverage) is influenced by manager’s gender, age and education level. Gender is undoubtedly influential in determining if a firm is willing to take more debts [6][9]. Surprisingly, manager’s age does not affect the financing decision. This result is similar to that of [16] who concluded that taking debts as an initiative in raising capital is not influenced by the age of entrepreneurs; whether they are younger or older. Meanwhile, work experience and education level are important elements in financing decision. [17] argued that managers with greater business experience are fond of financing through banking institutions or other formal methods. In terms of education background, [18] mentioned that CEOs who possess MBA or other professional degrees tend to have greater leverage financing adoption in their companies. This could be attributed to the fact that they have sufficient financial knowledge and are aware of various sources of financing. This is in line with who found that manager’s education level is significantly related to debt financing.

Capital structure is one of the most important and fundamental decisions to be made by business managers or owners. As the literature suggest, managers possess the greatest influence and decision-making power in organizations particularly in terms of internal and external financing. Much empirical evidence has suggested manager’s characteristics significantly influence a firm’s financing decisions e.g., gender, age, work experience and education level. This study employed binary logistic model to study the manager’s gender, work experience and education level as the fundamental factors affecting the company’s leverage. However, the limitations of this study include limited number of SMEs involved within only one sector i.e., manufacturing, hence the findings cannot be generalized to the whole context of SMEs in Malaysia. The study also examined only four manager’s characteristics. Other factor that can considered by future studies is manager’s risk appetite in order to generate better results and analysis for the literature in the same filed.

6. Conclusion and Discussion

Table 1: Demographic Profile of Respondents

PROFILE	FREQUENCY	PERCENTAGE (%)
GENDER		
Male	170	89.95
Female	19	10.05
LEGAL STATUS		
Sole Proprietors	151	79.89
Partnership	10	5.29
Limited Liability Partnership	20	10.58
Limited Liability Company	8	4.23
SUB SECTOR		
Production of Electrical and Electronic Products	89	47.09
Production of Chemicals, Chemical products, Petroleum Products	34	17.99
Production of Wood and Wood products	13	6.88
Production of Textiles, Apparels and Footwear	26	13.76
Production of Construction and Related Materials	19	10.05
Production of Transport Equipment	3	1.59
Production of Food Products, Beverage and Tobacco Products	5	2.65
NUMBER OF FULL TIME EMPLOYEES		
Less than 5	1	0.53
5 to 20	15	7.94
21 to 50	23	12.17

51 to 150	143	75.66
More than 150	7	3.70
YEAR OF ESTABLISHMENT		
Below and up to 1 year	3	1.59
More than 1 year to 3 years	56	29.63
More than 3 years to 10 years	28	14.81
More than 10 years	102	53.97
ANNUAL SALES TURNOVER		
Less than RM300,000	7	3.70
RM300,000 to less than RM3 million	10	5.29
RM3million to less than RM15 million	34	17.99
RM15 million to less than RM20 million	100	52.91
RM20 million and more	38	20.11
GROSS PROFIT		
Less than RM300,000	5	2.65
RM300,000 to less than RM3 million	9	4.76
RM3 million to less than RM15 million	31	16.40
RM15 million to less than RM20 million	112	59.26
RM20 million and more	32	16.93
SOURCES OF EXTERNAL FINANCING		
Banking Institutions	128	67.72
Leasing Companies	2	1.06
Bank Overdraft	44	23.28
Government Funds and Schemes	10	5.29
Factoring	5	2.65
MAIN PURPOSE OF APPLYING DEBT		
To increase sales or shares of existing market	25	13.23
To expand into new market with existing products	97	51.32
To introduce new products to the existing market	40	21.16
To go entirely new market	21	11.11
To expand overseas	4	2.12
To acquire or take over other existing firms	2	1.06

Table 2: Summary of Results and Hypothesis Testing

Hypothesis	Relationship	p-value	Result
H1	Gender-Leverage	0.012***	Supported
H2	Age-Leverage	0.375	Not Supported
H3	Working-Leverage	0.058**	Supported
H4	Education-Leverage	0.000***	Supported

*** significant at 1%, ** significant at 5%, * significant at 10%

7. References

- [1] De Silva, R., & Banda, Y. K. W. (2022). Impact of CEO characteristics on capital structure: evidence from a frontier market. *Asian Journal of Business and Accounting*, 15(1).
- [2] Baldwin, J. R., Bian, L., Dupuy, R., & Gellatly, G. (2000). Failure rates for new Canadian firms: New perspectives on entry and exit. *Failure Rates for New Canadian Firms: New*
- [3] Ooghe, H., & De Prijcker, S. (2008). Failure processes and causes of company bankruptcy: A typology. *Management Decision*, 46(2), 223-242.
- [4] Arasti, Z., Zandi, F., & Talebi, K. (2012). Exploring the effect of individual factors on business failure in Iranian newly established small businesses. *International Business Research*, 5(4),2.
- [5] Borgia, D., & Newman, A. (2012). The influence of managerial factors on the capital structure of small and medium-sized enterprises in emerging economies: Evidence from China. *Journal of Chinese Entrepreneurship*, 4(3), 180-205.
- [6] Kyenze, A. M. (2014). The effect of managers' characteristics on the capital structure of firms listed at the Nairobi securities exchange. *Doctoral dissertation, University of Nairobi*.
- [7] Chen, Y., Zhang, X., & Liu, Z. (2014). Manager characteristics and the choice of firm "low leverage": Evidence from China. *American Journal of Industrial and Business Management*, 4(10), 573.
- [8] Barno, L. J. (2017). Impact of managers' characteristics on capital structure among firms listed in Nairobi Securities Exchange, Kenya. *International Journal of Economics, Commerce and Management*, 5(7), 487-503.
- [9] Alqatamin, R. M. (2018). Capital structure and ceo's personal characteristics: Evidence from Jordan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 8(2), 113-125.
- [10] Carvalho, M. A. S. D., & Cerejeira, J. (2019). Level leverage decisions and manager characteristics.
- [11] Ting, I. W. K., Tebourbi, I., Lu, W. M., & Kweh, Q. L. (2021). The effects of managerial ability on firm performance and the mediating role of capital structure: evidence from Taiwan. *Financial Innovation*, 7(1), 1-23.
- [12] Matemilola, B. T., Bany-Ariffin, A. N., Azman-Saini, W. N. W., & Nassir, A. M. (2018). Does top managers' experience affect firms' capital structure? *Research in International Business and Finance*, 45, 488-498.
- [13] Abor, J. & Biekpe, N. (2009). How do we explain the capital structure of SMEs in sub-Saharan Africa? Evidence from Ghana. *Journal of Economic Studies*, 36(1), 83-97.
- [14] Kumar, S., & Rao, P. (2015). A conceptual framework for identifying financing preferences of SMEs, *Small Enterprise Research*, 22(a), 99-112.
- [15] Luigi, P., & Sorin, V. (2009). A review of the capital structure theories. *Annals of Faculty of Economics*, 3(1), 315-320.
- [16] Uddin, M. A. (2014). Problems faced by micro, small and medium enterprises in raising debt capital, *Proceedings of the Social Sciences ICSSR*.
- [17] Zabri, S. M., & Lean, J. (2014). SME managers' financing preferences: The case of successful SMEs in Malaysia. In *Proceedings of 5th Asia Pacific Business Research Conference*.
- [18] Frank, M. Z., & Goyal, V. K. (2007). Corporate leverage: How much do managers really matter? *Available at SSRN 971082*.