

# Determinants of Capital Structure in Small and Medium Enterprises in Malaysia: An Exploratory Factor Analysis

Hafizah Mat Nawi<sup>1</sup>, Wan Nur Shawatul Aswal Zulkefle<sup>2</sup>, Ong Hock Siong<sup>3</sup>

<sup>1</sup>National Defence University of Malaysia, Malaysia, <sup>2</sup>Quest International University, Malaysia, <sup>3</sup>Universiti Tunku Abdul Rahman, Malaysia  
Email: hafizah.matnawi@upnm.edu.my (Corresponding author)

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v12-i10/15117> DOI:10.6007/IJARBSS/v12-i10/15117

*Published Date:* 08 October 2022

## Abstract

It is theoretically acknowledged that decisions on capital structure remain an important goal to maximise returns. This study seeks to identify factors influencing the capital structure of Malaysia's small and medium enterprises (SMEs) through re-assessment of the operationalisation of constructs and an evaluation of certain assumptions on capital structure choices. An analysis of 500 questionnaires from SMEs located in the central region of Peninsular Malaysia was considered in the context of reliability and validity concerning capital structure determinants. The finalised model of capital structure consists of 11 constructs and 40 items. The results of an exploratory factor analysis (EFA) confirmed that external factors such as culture and environment also influenced the capital structure choices of SMEs. Prospective research could validate the framework proposed in this study and establish the framework as a standard measurement exercise to assess SMEs' capital structure determinants. This study also presented policy implications for strategies to manage, preserve, and enhance economic systems, legal and tax frameworks, and inflation rates that may aid SMEs in accessing different financial sources.

**Keywords:** Capital Structure, Small and Medium Enterprises (SMEs), Exploratory Factor Analysis (EFA), Malaysia, Pecking Order Theory, trade-off theory

## Introduction

Capital structure decisions are usually equated with complexity in making choices that could maximise economic returns (Nawi, 2015). Firms generally finance their activities, either individually or collectively, using personal savings, internal funds, debt, and equity (Kumar et al., 2020). The prevalence of capital structure was firstly investigated by Modigliani and Miller (1958) prompting subsequent theories to be established, for instance, pecking order theory (Donaldson, 1961; Myers, 1984; Myers & Majluf, 1984), static trade-off theory (Jensen & Meckling, 1976; Myers, 1977), and agency theory (Jensen & Meckling, 1976; Myers, 1977). A

substantial share of theories as a result of these research suggested several factors that might influence firms' capital structure decisions.

The review of the literature suggested that factors influencing SMEs' capital structure were related to owners (Bell & Vos, 2009; Hussain & Matlay, 2007; Robb & Fairlie, 2007; Smallbone et al., 2001; Vos et al., 2007) and firm-related variables (Berger & Udell, 1998; Bhaired & Lucey, 2010; Nguyen et al., 2006; Onaolapo et al., 2015; Romano et al., 2001; Rozali et al., 2006; Smyrniotis & Dana, 2006). By contrast, the lack of prior studies investigating cultural differences (see, for example, Abdullah et al., 2011; Ibrahim & Masron, 2011) was surprising given the prevalence of business environment on SMEs' financing decisions.

Previous research comparing variables that influenced capital structure were also limited. Specifically, although empirical studies on capital structure determinants acknowledged Association of the Southeast Asian Nations (ASEAN) countries' economic significance (Nawi, 2015), the few existing findings on capital structure merely focused on developed economies (Charles et al., 2021; Bhaired & Lucey, 2010; Frank & Goyal, 2009; Fattouh et al., 2008; Delcours, 2007; Sogorb-Mira, 2005; Michaelas et al., 1998; Rajan & Zingales, 1995) and far fewer studies emphasising developing countries (Nawi, 2018; Kila & Mahmood, 2008; Bhole & Mahakud, 2004; Changjiang & Huibo, 2001). Addressing these shortcomings of research on determinants of capital structure in relatively developing countries, the investigation on capital structure was carried out to determine capital structure decisions across micro, small, and medium-sized firms in Malaysia, one of Southeast Asia's developing countries. Specifically, a combination of cultural and macroeconomic factors, which were previously overlooked, were considered (Chui et al., 2002; Covin et al., 1999; Michaelas et al., 1998; Naman & Slevin, 1993).

Based on the suggestions raised in previous studies, this study investigated the determinants of capital structure based on firm-specific, external, and owner-related factors such as factors associated with business culture and environment as demonstrated in Malaysian-based studies. The variables found in the Malaysian-based studies included, but were not limited to potential interdependencies between significant effects of industry on Malaysian corporate financing decisions (Mohamad, 1995; Annuar & Shamsher, 1993) and financing patterns among Malaysian SMEs (Nawi, 2015; Moha & Khadijah, 2011).

In addition to developing a model on capital structure determinants of SMEs, an empirical study testing the applicability of the model in a non-Western setting was also conducted. To generate a more nuanced picture of the model, a re-assessment of the operationalisation of constructs and an evaluation of certain assumptions on capital structure choices were carried out. Therefore, the following research question demonstrated the centrality of the study:

What are the factors that influenced the capital structure of Malaysia's SMEs?

In particular, the central question demonstrated above was further sequenced into three sub-inquiries:

1. Do owner-related factors such as 'perceptions and beliefs', 'relationship,' and 'networking' influence the capital structure of SMEs?
2. Do firm-related factors such as 'objectives and goals' and 'business planning' influence the capital structure of SMEs?

### 3. Do external factors such as 'environment' and 'culture' influence the capital structure of SMEs?

The article focusing on capital structure decisions proceeded as follows. The next section reviewed literature related to the capital structure determinants and the development of associated hypotheses. Subsequently, the methods employed in this paper were elaborated in detail, followed by a description of results and discussions of the empirical approach. Conclusions and recommendations were provided as the outcome of the article. Therefore, generating and testing the model of capital structure decisions helped develop a clearer understanding of the particular determinants of SMEs and offer practical insights to public policymakers, particularly, financial and non-financial institutions that have since provided financial facilities to SMEs.

#### **Literature Review and Development of Hypotheses**

The theories and empirical studies emphasising capital structure generally focused on large listed firms. These theories resulting from prior research on capital structure, irrespective of the companies' nature, contexts, and distinct approaches, could be applied to SMEs. Among others, the centrality of SME capital structures was evidenced in (Abor and Biekpe, 2007; Borgia and Newman, 2012; Chittenden et al., 1996; Hamilton and Fox, 1998; Michaelas et al., 1999; Reid, 1996; Sogorb and Lopez, 2003; Watson and Wilson, 2002; Lopez-Gracia and Sanchez-Andujar, 2007; Bajaj et al., 2020).

However, three consistent threads binding these research were finance access constraints, complexities, and challenges facing SMEs, particularly start-ups, despite varying financing options that were made available (Carter et al., 2003; Hood, 2000; Robb & Fairlie, 2007). One of these complexities was related to the models of capital structure that distinguished SMEs from larger companies. Smaller firms' disclosure on asset structure, business planning, and profitability was found to be restricted because smaller firms generally had lower tangible assets, higher intangible assets, and greater financial risks (Cressy & Olofsson, 1997). However, larger firms generally were allowed to release detailed information to lenders because larger firms were found to be associated with lower financial risks and existing liabilities relative to total assets, and relatively higher fixed assets to total asset ratio (Fama & Jensen, 1983; Peel & Wilson, 1996; Rajan & Zingales, 1995). Thus, the threshold of optimum capital structure that SMEs were recommended to accomplish remained uncertain.

Studies and hypotheses concerning capital structure were drawn based on the following constructs:

#### **Business Planning**

Business plans describe an organisation's plans, activities, previous statuses, existing states of conditions, and prospective goals that the organisation plans to meet. Business planning records are usually represented through four items, namely, business plans, formal and strategic long-term plans, information on formal management structure, and performance appraisals (Zunckel & Nyide, 2019; Nawi, 2015).

A great importance is emphasised to business planning because a lack of business planning will invariably lead to information opacity, resulting in difficulties in accessing and securing external financial facilities (Nawi, 2018; Nguyen & Ramachandran, 2006). However,

to minimise information opacity, regular and accurate financial reports, forecasts, and statements that portrayed overall business performance reflecting firms and SMEs' ability to repay loans all needed to be released (Coleman & Carsky, 1999). However, studies showed that disclosures of information largely depended on the quality of data and the degree of privacy and confidentiality between firms and outsiders (Romano et al., 2001). Smaller firms were generally found to be reluctant to disclose firms' information to outsiders (Berger & Udell, 1998). Nonetheless, it was found that well-established firms with relatively lower default rates and lower costs of debt provided transparent financial standing records (Harris & Raviv, 1991). Therefore, because decisions made by fund-granting institutions were frequently correlated with business planning, the following hypotheses were posited:

H1.1: There was a negative association between business planning and funds from family and friends.

H1.2: There was a positive association between business planning and debt.

### **Business Objectives**

SME owner-managers played two important roles, namely, in realising commercial or lifestyle goals, as part of making firms' capital structure decisions (Mat Nawi, 2015; Romano et al., 2001). Firstly, owners were concerned about maintaining a sufficient level of income so that they and their families could enjoy their chosen lifestyles (Morrison, 2006). For instance, owner-managers realised goals that accumulated wealth (Ou & Haynes, 2006), supported families by earning sufficient income from businesses (Getz & Carlsen, 2000), and, for home accommodation managers, met personal satisfaction and enjoyment in addition to receiving extra money from home-stay guests (Lynch, 1999). However, past reviews of literature indicated that there was no evidence linking commercial and lifestyle goals to capital structure in developing countries, particularly Malaysia.

Secondly, SME owner-managers helped to realise the goals of growth (i.e. expansion) and external equity. On the one hand, some owners-managers remained bullish about their businesses by choosing equity instead of debt financing (Chaganti et al., 1995). On the other hand, small productive firms relied on internal funds to materialise the long-term value of their businesses.

Thirdly, reviews of literature also pointed to stark differences among firms who employed varying sets of control in dealing with debts. Some firms were found to have relied on their own sets of beliefs, independence, and control as opposed to firms that relied on investments to grow. As a result, firms' reluctance on debt-financing was found to be negatively associated with management shareholding (Friend and Lang, 1988). Nonetheless, studies showed that businesses that relied on debt financing were found to grow steadily (Romano et al., 2001). While far fewer studies examined how firms realised their objectives, the following hypotheses were formulated:

H2.1a: SMEs which focused on lifestyle goals were unlikely reliant on debt or external equity.

H2.1b: SMEs which focused on lifestyle goals were likely reliant on internal capital and retained profits.

H2.2a: SMEs which focused on social welfare goals were unlikely reliant on debt or external equity.

H2.2b: SMEs which focused on social welfare goals were likely reliant on internal capital and retained profits.

H2.3a: SMEs which focused on commercial goals were likely reliant on debt or external equity.

H2.3b: SMEs which focused on commercial goals were unlikely reliant on internal capital and retained profits.

### **Owner's Motivation, Perceptions, and Beliefs**

Three reasons surrounding owners' motivation, perception, and beliefs existed. Firstly, different managers defined firms' operationalisation differently. Despite perceptions playing an important role in how individuals and firms allocate resources, managers or firms' owners may describe their concerns differently (Norton, 1990), financing attitudes, cultural norms, managerial motivation, and self-interests (Friend & Lang, 1988). Secondly, perceptions and beliefs by owner-managers about external finance determined capital structure decisions of small firms (Michaeles et al., 1998). Thirdly, analysis using pecking order hypothesis showed that capital structures' formulation, particularly among small firms, depended upon firm management's belief systems (Norton, 1990). As such, small firms generally utilised the debt-averse or 'no-debt-at-all' concept. Through previous studies and qualitative findings, this study was designed to determine the relationship between the three concepts, namely, owners' motivation', 'perceptions and beliefs', and 'capital structure'. Therefore, a hypothesis was posited:

H3: Owners' 'motivation' and perceptions and beliefs' were negatively associated with debt or external equity.

### **Relationships and Networking**

In businesses, relationships and networking are generally understood as business and social relations (Nguyen & Ramachandran, 2006). Business and social relations that form extensive relationships and networking could involve financial stakeholders (Nguyen & Ramachandran, 2006) and non-financial stakeholders (Parsons & Titman, 2007). Among the goals of business relationships and networking were generally related to increasing agency and reducing information asymmetry crises (Cole, 1998; Petersen & Rajan, 1994).

Firstly, social and business networking bolster finance access through qualitative and quantitative information (Scott, 2006). Firstly, studies showed that fund-granting institutions generally approved of loans through local banks' evaluation of records of personal relationships with clients as opposed to relying upon borrowers' financial standing evaluation (Krishnan & Moyer, 1997). Building social relationships among creditors could guarantee availability and fast decisions on funding approvals, loans at the best possible rate, and personalised loan needs (Donnelly et al., 1985). Secondly, studies also demonstrated that small firms whose accounting records were generally poor relied on their rapport with banks as they attempted to secure bank financing (Abor & Biekpe, 2007). Therefore, social relations and networking were frequently correlated with minimising asymmetric information and borrowers' liquidity constraints (Petersen & Rajan, 1994).

Secondly, it has been suggested that building 'relationships' and 'networking' could also be equated with forms of transaction lending or relationship lending (Kusi et al., 2021). Firstly, transaction lending commonly describes transparent borrowers, while relationship lending

signifies opaque borrowers (Brighi & Torluccio, 2007). Secondly, the provision of relationships in this context functions as 'soft information' to support credit approval through, for instance, well-established records of relationships with financial-granting institutions to alleviate opacity risks. Thus, it could very well be anticipated that links to and relationships with banks may offer explicit or implicit guarantees of access to funds, particularly, during unforeseen financial circumstances (Nguyen & Ramachandran, 2006). Therefore, in comparison to SMEs, large firms are typically seen to have 'upper hands' in transaction lending based on 'hard information'.

Thirdly, studies suggested that 'close relationships' were key predictors to eventual lending transactions and how fund-granting institutions respond to both large firms and SMEs. Firstly, 'lending discrimination' (Petersen & Rajan, 1994) that was enforced may result in an undue limitation of access to loans or a reduction in firms' capacity to increase the marketability of products and goods (Robb & Fairlie, 2007). Secondly, well-established relationships between lenders and borrowers may help to minimise information asymmetry crises through provisions of transparent and accurate information (Nguyen & Ramachandran, 2006). Therefore, close relationships with financial-granting institutions not only promote large firms and SMEs' track records but also help to attract external finance (Scott, 2006).

Fourthly, studies suggested that networking can generate companies' information on reliability (Nguyen & Ramachandran, 2006). Because financing could be granted from informal networks or through trade credit from suppliers (Newman et al., 2011), direct and indirect transactions with firms' counterparts or counterparts' networks such as family members can satisfy creditors and lenders concerning counterparts' reliability (McMillan & Woodruff, 1999). Thus, large firms and SMEs' associations with network added value to business communities, customers, and suppliers (Holmlund, 1997). In this way, shortfalls in receiving trade credits and short-term liabilities could be traced back to managers' conduct towards networking, including trust and confidence by banks on banks' relationships with lenders (Kusi et al., 2021; Berger & Udell, 1998; Han et al., 2009; Nguyen & Ramachandran, 2006; Mat Nawi, 2015).

Finally, generating numerous channels of fund sources also depended upon large firms and SMEs' social relations (Petersen & Rajan, 2002). In China, Japan, Korea, Southeast Asian countries, and many developing countries with poor and often inadequate laws of contracts, networking, and other similar informal relationships helped facilitate business transactions without restrictions (Greif, 1993; Yeung & Tung, 1996). Following theoretical and empirical studies presented, the following hypotheses were posited:

H4: A good firm-lender/supplier relationship would enhance debt levels and firms' external equity.

H5: A wide networking would increase the level of debt financing of the firm.

## **Environment**

The combination of previous research also led to a dramatic increase in research that examined the interdependencies between capital structure and inflation rate. Firstly, research determining effects of 'environment' on capital structure across developed countries generally concluded that countries' macro-economic data such as gross domestic products (GDP) growth and inflation rates had implications for debts accrued (Michaelas et

al., 1999). Secondly, while studies carried out by Covin et al (1999); Michaelas et al (1999); Naman and Slevin (1993); Sener (1989); Taggart (1995) continued to generate interests in capital structure choices, some other studies found no relationship between inflation rates and capital structure decisions (see, for instance, Booth et al., 2001; Hatzinikolaou et al., 2002; Mutenheri & Green, 2002). Furthermore, studies demonstrated that irrespective of countries' economic statuses, developed or not, debt ratios remained affected by macroeconomic conditions such as inflation rates and GDP growth rates in determining firms' capital structure (Booth et al., 2001). Therefore, the extent to which environment-related factors affected capital structure decisions remained unknown (Gaud et al., 2005).

Debt tenure and debt finance laws emerged as dominant factors influencing decisions on capital structure. Firstly, firms were found to remain dependent on short-term debts in response to liquidity crises despite the stringent laws banks put in place as part of banks' financial crisis mitigating measures (Deesomsak et al., 2004; Michaelas et al., 1999). Secondly, debt finance laws continued to govern firms' decisions on capital structure. Specifically, country-specific laws and context-dependent enforcement were found dominant in firms' capital structure choices. For instance, studies found that common law systems regulating equity and debt providers, that differed from one country to another, provided better protection than the provision on civil laws (La Porta et al., 1998). Thirdly, when corruption reports increased due to poor legal systems' offences on integrity, firms tended to struggle with increasing debts, particularly in dealing with short-term tenure debts (La Porta et al., 1998). Thus, firms' capital structure decisions not only depended upon inflation rates; regulations of debt tenure and debt finance laws were equally dominant in determining capital structure choices.

A dramatic increase in research in capital structure choices also suggested multinational and multidisciplinary approaches. For instance, Rajan and Zingales (1995) suggested that prospective research might better consider developments of theoretical models based on empirical findings that cut across nations. Because different countries regulated different forms of capital structure, macroeconomic circumstances (economic, legal, tax, and technological environments) determined firms' financing choices (Gleason et al., 2000; Korajczyk & Levy, 2003). By focusing on various global environment-related factors, economic crises could be mitigated particularly by taking into consideration the 1997 ASEAN economic crises. Thus, examining factors related to capital structure decisions across Malaysia's large firms and SMEs formed the central aim of the study. The following hypothesis concerning environment-related factors was posited:

H6: There was a relationship between business environment and debts.

### **Culture**

Since different forms of culture operate in different cultural environments, finance is generally understood differently in a particular society (Clugston et al., 2000). Culture, as described by Nwankwo and Lindridge (1998, p. 201), encompassed "race, religion, language group, shared history, and origin", while Hofstede et al (1991) defined culture as a "collective programming of the mind which distinguishes the members of one group or category of people from another". Schwartz's (1994) specific concepts on culture were used in this study as measurements of cultural dimensions as opposed to Hofstede's (1980), firstly because Schwartz's (1994) concepts had widely been used to test the theoretical influence of culture

on capital structure decisions (Chui et al., 2002). Secondly, because Schwartz's (1994) concepts bore resemblance to individualised constructs, Schwartz's (1994) concepts were employed to understand country-specific variations on cultural dimensions, and how country-specific variations were sufficient for hypothesis-testing. As Clugston et al (2000) argued, when independent variables were considered to measure cultural concepts, individualised measures must be used. Thus, Schwartz's (1994) cultural concepts played important roles to determine whether firms and SMEs' values, attitudes, thinking, beliefs, and behaviours influenced decisions on capital structure.

Two dimensions of culture, namely, 'conservatism' and 'mastery', were considered. On the one hand, items on 'conservatism' examined whether capital structure decisions had relationships with owners and employees who worked collectively to create harmonious relationships, preserve the public image, and tolerate uncertainty avoidance (Li et al., 2011; Shao et al., 2009; Breuer & Salzmann, 2008; Castro et al., 2007; Siegel et al., 2007; Chui et al., 2002; Licht, 2001). On the other hand, items on 'mastery', which were related to individual success, actions, and decisions, investigated whether individual satisfaction affected individuals' interests in materialising firms' success, adopting strict policies to protect firms, and choosing low-risk projects that accrued fewer debts (Hirshleifer & Thakor, 1989).

Chui et al (2002) exemplified how culture determined capital structure decisions. It was reported that firms' with high scores on the construct of 'conservatism' utilised fewer debts in capital structures because owners and employees worked collaboratively to create harmonious relationships, preserve the public image, security, conformity, and tradition. As expected, firms' with high scores on the construct of 'mastery' used less debt financing, emphasised control, and celebrated individuals' success. Therefore, because a direct relationship between the impact of culture on finance was not investigated directly, the following model (Figure 1) and hypotheses were formulated

H7.1a: There was a positive association between conservatism and internal sources of finance.

H7.1b: There was a negative association between conservatism and debt financing.

H7.2a: There was a positive association between mastery and internal sources of finance.

H7.2b: There was a negative association between mastery and debt financing.

## **Methodology- Procedures of Data Collection**

### *Instrument*

As the study was designed to examine factors that influenced capital structure decisions across Malaysia's SMEs, Malay and English questionnaires were used. Two steps governed the process of designing the instrument. Firstly, a back-translation technique (Mullen, 1995) was used to translate Malay-to-English and English-to-Malay questionnaires. While Malay-to-English translations were carried out by the investigator, a certified bi-lingual translator wrote, scrutinised, and edited English-to-Malay questionnaires. The translator is a bi-lingual lecturer at a private university in Malaysia. Secondly, the content in the questionnaires was evaluated by five academics (i.e. three accounting and two finance lecturers from public universities in Malaysia) and three SME owners (i.e. they are the participants from qualitative study on this topic). Brislin's (1970) guide on questionnaires was used to evaluate how the questionnaires satisfied the face, content, and semantic equivalence of the translated instrument.



### **Units of Analysis**

Units of analysis were defined in terms of firms' contexts. Firstly, only SMEs that consisted of a total manufacturing workforce of less than 200 or an annual sale turnover of RM 50 million were selected (SME Corporation Malaysia, 2020). For SMEs involved in the service industry, only SMEs with less than 75 employees or a sale turnover of RM 20 million were considered and chosen (SME Corporation Malaysia, 2020). Secondly, a total of 560 questionnaires were distributed to SMEs' owners from a variety of business backgrounds. 500 questionnaires were returned, indicating a high response rate of 89%.

### **Scales of Measurement**

The scales of measurement adopted in this study were constructed in two ways. Firstly, the reviews of literature guided the selection of eight constructs. Secondly, the constructs identified were integrated for conciseness. Table 1 illustrates the examples of constructs and constructs' corresponding items:

Table 1

*Constructs and items derived from the reviews of literature*

<b><u>Determinants of capital structure</u></b>	<b><u>Description of items</u></b>	<b><u>Sources for items' measurements</u></b>	
Business planning	1. Wrote a formal business plan	Romano et al (2001)	
	2. Wrote formal strategic plans (long-term or short-term plans)		
	3. Wrote a formal management structure		
	4. Wrote a business performance appraisal	Nawi (2015)	
Lifestyle goals	1. Considered accumulated wealth as important	Romano et al (2001); Read (1997)	
	2. Considered improved lifestyles as important		
	3. Considered hobbies as important		
	4. Considered skills as important		
	5. Considered challenges as important		
Commercial goals	1. Considered control as important		
	2. Considered expansion of firm as important		
	3. Considered increased firm value as important		
	4. Considered repayments as important		
Social welfare Goals	1. Considered family commitments as important		
	2. Considered provisions of jobs to family and friends as important		
	3. Considered passing on values to the next generation as important		
Perceptions and beliefs	1. Considered the importance of cultural norms		Nawi (2015)
	2. Considered the importance of religions		
	3. Considered the importance of ways of life		
	4. Considered the importance of financing attitudes		
Relationship	1. Considered hobbies of bank managers	Nguyen and Ramachandran (2006)	
	2. Invited lenders to visit firms		
	3. Invited suppliers to visit firms		
	4. Close relationship with the financial providers		
	5. Established close relationships with suppliers		
	6. Sent reports to lenders regularly		
	7. Sent reports to suppliers regularly		
	8. Provided data to lenders when requested		
	9. Provided data to suppliers when requested		
	10. Reviewed relationships with lenders regularly		
	11. Reviewed relationships with suppliers regularly		
	12. Reviewed services of lenders regularly		
	13. Reviewed services of suppliers regularly		
	14. Specified duration of relationships with lenders		

	<ol style="list-style-type: none"> <li>15. Specified duration of relationships with suppliers</li> <li>16. Organised regular review of procedures in getting credits</li> </ol>	
Networking	<ol style="list-style-type: none"> <li>1. Listed regular clients</li> <li>2. Paid in time</li> <li>3. Visited lenders regularly</li> <li>4. Visited suppliers regularly</li> <li>5. Offered personal greetings to lenders</li> <li>6. Offered personal greetings to suppliers</li> <li>7. Lenders were managed by family members</li> <li>8. Lenders were managed by friends</li> <li>9. Suppliers were managed by family members</li> <li>10. Suppliers were managed by friends</li> </ol>	Nguyen and Ramachandran (2006)
Stable / dynamic environment	<ol style="list-style-type: none"> <li>1. Felt very stressful to keep afloat in this industry</li> <li>2. Felt very hard to keep afloat in this industry</li> <li>3. Felt a little threat to the survival of my business</li> <li>4. Felt a little threat to the well-being of my business</li> <li>5. Observed rich investment opportunities</li> <li>6. Observed rich marketing opportunities</li> <li>7. Felt that my business must frequently change its marketing practices</li> </ol>	Naman and Slevin (1993); Covin et al (1999)
Benign/hostile Environment	<ol style="list-style-type: none"> <li>1. Believed that one wrong decision could easily threaten the viability of my business</li> <li>2. Believed that the failure rate of businesses in this industry was high</li> </ol>	
External environment	<ol style="list-style-type: none"> <li>1. Believed that high social pressure from society could affect my business</li> <li>2. Believed that strict government's rules and regulation could hinder the viability of my business</li> <li>3. Believed that the survival of my business was highly dependent on the economic situation of the country</li> </ol>	Nawi (2015)
Mastery	<ol style="list-style-type: none"> <li>1. Details of job requirements and instructions were important</li> <li>2. Owners' success was more important than group success</li> <li>3. Aggressive financing policies were important for the firm</li> <li>4. Owners' interests were more important than group interests</li> </ol>	Nawi (2015)

	5. Achievements of owner's goals were more important for the company	
Conservatism	1. Rules and regulations were important to inform employees of the expectations of the organisation	Nawi (2015)
	2. Standard operating procedures were helpful to employees	
	3. Harmonious working relationships and social harmony were important for the company	
	4. Instructions for operations were important for employees	
	5. Preserving public images was one of the main policies for the company	

### Content Validation

The process of content validation was carried out in two ways. Firstly, the full list of potential items was reviewed. Secondly, items that best captured the dimensions of capital structure determinants were carefully selected. As a result of a three-panel expert review, a final list of items was generated. In total, 68 items were generated across the following constructs: four items on 'business planning', five items on 'lifestyle goals', four items on 'commercial goals', three items on 'social welfare goals', four items on 'perceptions and beliefs', 16 items on 'relationship', 10 items on 'networking', seven items on 'stable environment', two items on 'benign environment', three items on 'external environment', five items on 'mastery', and five items on 'conservatism'.

### Items Purification

68 items measuring 12 constructs of capital structure determinants were finalised. Specifically, 12 variables made up factors related to 'objectives' and 'goals', 30 variables built factors related to 'perceptions and beliefs', 'relationships', and 'networking', four variables made up factors related to 'business planning', ten variables built factors related to 'cultural dimensions', and 12 variables made up factors related to 'environment'. The items were grouped to ensure that the number of observations per item for all analyses was at least 5:1 (five participants per variable) (Cavusgil & Zou, 1994; Hair et al., 2010). As argued by Menon et al (1996), assessing fewer measurement models from various constructs would yield more reliable results.

Subsequently, a five-step purification process of measurement scales was carried out using scale reliability and EFA. SPSS 28.0 was used to measure coefficient alpha and item-to-total correlation values before EFA was applied. Firstly, EFA was applied by dividing the constructs into five groups based on theoretical constructs. Secondly, an eigenvalue greater than 1.0 was considered to determine factors to extract (Pallant, 2001; Hair et al., 2010). Thirdly, an oblique rotation was applied to initially extract factors due to inherent correlations among constructs. Fourthly, results from Kaiser-Meyer-Olin (KMO) Measure of Sampling Adequacy (above 0.5) and Bartlett's Test of Sphericity ( $p$ -values below 0.05) were analysed to assess the factorability of items. Only communalities with more than 0.50 were considered (Hair et al., 2010).

Finally, reliability analysis was carried out to test the reliability and internal consistency of all factors. Specifically, the coefficient alpha and item-to-total correlation for provisional dimensions were considered to evaluate the internal consistency of all variables. The reliability analysis revealed that the statistical criteria for item retention were higher than 0.35 for item-to-total correlation (Bearden et al., 2001; Hair et al., 2010). Pearson correlation's value was reported lower than 0.30, while coefficient alpha value was recorded higher than 0.5 (Nunnally, 1967).

## Results and Discussions

The following sections highlight discussions pertinent to the results generated from the EFA. The sections describing the results of the current study are drawn based on the order of the questionnaires' content.

### *a. Business Planning*

The EFA result across the four-item group on 'business planning' revealed that items loaded clearly on one factor. With a value of 0.861, the KMO measures for the items indicated meritorious sample adequacy (Kaiser, 1974). Bartlett's Test of Sphericity also showed significantly higher levels of associations with the factorability of the correlation matrix. In addition, the assessment of internal consistency reliability was positively associated with factors' coefficient alphas ( $\alpha=0.96$ ). The reliability of this factor was confirmed by Pearson inter-correlation for subsequent investigation on internal consistency. While the results revealed a significant value of 0.001, item-to-total correlations were found to be slightly higher than the threshold value (0.35).

### *b. Objectives and Goals*

All variables concerning 'lifestyle', 'commercial', and 'social welfare' goals demonstrated relatively positive relations. With a value of 0.678, the combined KMO measurement on 'objectives' showed a mediocre sample adequacy (Kaiser, 1974). Moreover, Bartlett's Test of Sphericity revealed a higher level of factorability of correlation matrix because the test reached statistical significance (0.000). A three-factor solution was produced after the rotation. Two items were eliminated because they were cross-loaded. All remaining loadings were above 0.7 and the Cronbach's alpha value recorded for 'lifestyle goals' was at 0.898. Higher item-to-total-correlation values for all variables demonstrated values higher than 0.5. However, Cronbach alpha values of variables on 'commercial goals' and 'social welfare goals' were 0.634 and 0.514, respectively. It should be noted here that although the coefficient value was slightly higher (below 0.70), the coefficient value was still considered acceptable because the value was higher than 0.50 (Nunnally, 1967).

### *c. Relationships, Networking, Perceptions, and Beliefs*

Based on KMO measurement, 30 items that measured 'perceptions and beliefs', 'relationships', and 'networking' demonstrated sampling adequacy of 0.745. The Bartlett's Test of Sphericity was significant at  $p < 0.001$ , revealing that the R-matrix was negatively related to the identity matrix. The result suggested slightly higher levels of relationships between the variables. As a result of a three-factor solution, 16 items were eliminated because they were cross-loaded and that they produced communality values of less than 0.50. However, the second run of factor analysis demonstrated that all factor loadings indicated slightly above 0.7. While the Cronbach alpha values generated for items on

'networking' and 'perceptions and beliefs' were 0.85 and 0.817, respectively, the item-to-total-correlation values were slightly higher than 0.5 (Hair et al., 2010).

Analysis on the construct of 'relationship' revealed interesting results. Firstly, because a value of 0.30 was recorded for these items, namely, 'provided data to lenders', 'provided data to suppliers', 'reviewed services of lenders regularly', and 'reviewed services of suppliers regularly', they were eliminated to increase the reliability. Secondly, the subsequent reliability alpha tests which were re-analysed demonstrated a significantly higher value of Cronbach alpha (0.894) and an item-to-total-correlation value that was acceptably higher than 0.3 (Field, 2005). It should be noted here that none of the items would increase the reliability if they were deleted.

#### *d. Business Culture Orientations*

The factor analysis was conducted on ten items that measured 'business and culture'. One variable ('details of job requirements and instructions were important') was eliminated from the analysis because the communality value showed slightly lower than 0.5 (communality= 0.417). As demonstrated earlier, reviews on literature concerning finance and management were sourced to identify the variables on 'business and culture'.

In the second run of factor analysis, all factor loadings showed a significantly higher value than 0.7. The KMO measures for the items showed a value of 0.833, a 'meritorious' value (Kaiser, 1974). Bartlett's test of sphericity  $\chi^2(36) = 2003.108$ ,  $p < 0.001$  indicated that the correlation between items was significantly high for PCA. For the dimensionality of the remaining items, the EFA result demonstrated that they loaded clearly (significantly higher than 0.5) on two factors; the first factor ('conservatism') consisted of five variables, while the second factor ('mastery') was found to load with four variables. The communalities values for all items were relatively higher than 0.5. In addition, the Cronbach's alpha for 'conservatism' and 'mastery' illustrated values of 0.893 and 0.897 respectively. Item-to-total-correlations reported for both constructs were significantly higher than 0.5 (Hair et al., 2010).

#### *e. Environment*

A combined KMO measurement score of items on 'environment' indicated a value of 0.675, a value equated with 'mediocre' sample adequacy (Kaiser, 1974). Bartlett's Test of Sphericity also reached statistical significance (0.000), supporting the positive and significant factorability of the correlation matrix. Five items were eliminated from the first run of EFA due to cross-loading and low communality (a value lower than 0.5). The outcome of the second run of EFA was considered appropriate because most variables loaded significantly high on two factors and all communalities' showed values higher than 0.5. Four items were found to load onto the first factor ('stable environment') and three items were found to load onto the second factor ('external environment'). While the reliability alpha of the first factor was 0.604, Nunnally (1967) argued that this value was acceptable because it recorded a value relatively higher than 0.50. However, the first factor's alpha value was significantly higher than the standard estimation of 0.70 (Nunnally and Bernstein, 1994). Subsequent internal consistency investigation depicted confirmed reliability; Pearson inter-correlation test indicated a significance at 0.001 levels for both factors. Item-to-total-correlations for all items were slightly higher than 0.3, a relatively good value (Field, 2005). It should be noted here that none of the items would increase the reliability if they were deleted.

Table 2

*Results of Exploratory Factor Analysis (EFA)*

Items		Factor 1	Factor 2	Factor 3	Communalities
<b>1<sup>st</sup> group: Business plan (BP)</b> ( $\alpha=0.96$ )					
Formal business plan	BP1	<b>.944</b>			.891
Formal strategic plan	BP2	<b>.957</b>			.916
Formal management structure	BP3	<b>.950</b>			.902
Business performance appraisal	BP4	<b>.936</b>			.877
<b>2<sup>nd</sup> group: Objectives and goals</b>					
<u>Lifestyle goals (LSG)</u> ( $\alpha=0.898$ )					
Develop hobbies or skills	LSG3	<b>.917</b>			.845
Improve lifestyle	LSG2	<b>.825</b>			.707
Accumulate wealth	LSG1	<b>.629</b>			.503
<u>Commercial goals (CG)</u> ( $\alpha=0.634$ )					
Increase firm's value	CG3		<b>.707</b>		.598
Expand the firm	CG2		<b>.756</b>		.603
Repay borrowing	CG4		<b>.776</b>		.605
Maintain control	CG1		<b>.765</b>		.586
<u>Social welfare goals (SWG)</u> ( $\alpha=0.514$ )					
Family tradition	SG3			<b>.659</b>	.522
Fit around family commitment	SG1			<b>.888</b>	.801
Provide job to family and friends	SG2			<b>.669</b>	.585
<b>3<sup>rd</sup> group: Perceptions &amp; Beliefs and Relationship &amp; Networking</b>					
<u>Relationship(RS)</u> ( $\alpha=0.894$ )					
Established close relationships with lenders	RS4	<b>.825</b>			.686
Specified duration of relationships with lenders	RS14	<b>.904</b>			.819
Reviewed relationships with suppliers regularly	RS11	<b>.909</b>			.831
Organised regular review of procedures in getting credits	RS16	<b>.852</b>			.733
<u>Networking (NW)</u> ( $\alpha=0.85$ )					
Listed regular clients	NW1		<b>.963</b>		.927
Offered personal greetings to lenders	NW5		<b>.965</b>		.932

<u>Perceptions &amp; beliefs (PB)</u> ( $\alpha=0.817$ )					
Culture norms	PB1			<b>.805</b>	.763
Belief in religion	PB2			<b>.721</b>	.592
Way of life	PB3			<b>.872</b>	.831
Financing attitude	PB4			<b>.715</b>	.562
<b>4<sup>th</sup> group: Cultural (BC)</b>					
<u>Conservatism (CSV)</u> ( $\alpha=0.893$ )					
Rules and regulations were important to inform employees of the expectations of the organisation	CSV1	<b>.737</b>			.543
Standard operating procedures were helpful to employees.	CSV2	<b>.889</b>			.791
Harmonious working relationship and social harmony were important for the company.	CSV3	<b>.905</b>			.821
Instructions for operations were important for employees	CSV4	<b>.935</b>			.879
Preserving public images was one of the main policies for the company	CSV5	<b>.717</b>			.517
<u>Mastery (MS)</u> ( $\alpha=0.897$ )					
Owners' success was more important than group success	MS2		<b>.892</b>		.795
Aggressive financing policies were important for the firm	MS3		<b>.910</b>		.829
Owners' interests were more important than group interests	MS4		<b>.942</b>		.890
Achievements of owner's goals were more important for the company	MS5		<b>.764</b>		.595
<b>5<sup>th</sup> group: Business Environment (EV)</b>					
<u>Stable environment (SEV)</u> ( $\alpha=0.854$ )					
It is very stressful to keep afloat in this industry.	SEV1	<b>.795</b>			.868
Felt a little threat to the survival of my business.	SEV3	<b>.918</b>			.894
Observed rich investment opportunities	SEV5	<b>.812</b>			.806
Felt that my business must frequently change its marketing practices.	SEV7	<b>.725</b>			.812



<u>External environment</u> (EEV) ( $\alpha=0.604$ )				
Believed that high social pressure from society could affect my business	EEV1		<b>.619</b>	.512
Believed that strict government's rules and regulation could hinder the viability of my business	EEV2		<b>.852</b>	.828
Believed that the survival of my business was highly dependent on the economic situation of the country	EEV3		<b>.937</b>	.927

### Conclusions and Implications

Factors that influenced capital structure were identified and confirmed in this research, offering new insights on SMEs' capital structure decisions. Firstly, this study shed light on business planning, strategic plans, and management structure. In particular, owners-managers had a higher likelihood to materialise objectives and goals that they see fit in choosing their financing capitals. Secondly, SMEs agreed that establishing relationships and networking more intensively with lenders and suppliers were important. Thirdly, SME decision-makers exhibited a higher emphasis on perceptions and beliefs while dealing with financial decisions. Finally, the study emphasising factors that influenced SMEs' capital structure decisions equally recognised the interdependencies of internal and external factors, particularly culture and environment. Given the levels of factors influencing SMEs' decisions on capital structure, policymakers might better control, maintain, or improve economic systems, legal issues, tax environment, and inflation rates that complement SMEs to access various financial sources.

All theoretical, operationalisation of constructs, and methodological underpinnings as demonstrated in this study contributed to prospective research. Firstly, a more nuanced understanding concerning capital structure decision factored in business planning, goals, relationship, networking, cultural orientations, environment, and owners' perceptions and beliefs. Relevant attitudinal factors that were commonly associated in Western-imposed settings were all accounted for concerning Malaysia's SMEs.

Secondly, potential interdependencies among perceptions, culture, and environment shed light on the feasibility of how concepts were operationalised. Specifically, while nearly all constructs employed in this research had been investigated previously, their operationalisations, in academic practice, were rare as a likely result of inadequate findings on measurement scales' validity and reliability. Hence, an analysis of questionnaires to Malaysian SMEs presented in this study not only revealed significant constructs but also illustrated evidence concerning construct validity and reliability of previous scales.

Thirdly, the findings presented in this study on factors that determined capital structure complemented recent empirical research. For instance, while studies carried out by Michaelas et al (1998); Romano et al (2001) suggested that owners' perceptions, business environment, and culture determined capital structure decisions, unfortunately, these factors were not tested in their studies. Moreover, while far fewer studies focused on owners' perceptions, business environments, and culture, this research emphasising capital structure decisions replicated and extended previous studies by (Chui et al., 2002; Gaud et al., 2003; Gleason et al., 2000; Norton, 1990). Finally, given the prevalence of factors influencing capital structure decisions, the framework as presented above can be introduced as a standard measurement among SMEs. By focusing on financing preferences and factors influencing financing choices, prospective development of a model could be facilitated.

## References

- Abdullah, M. A., Manan, S. K. A., and Khadijah, S. (2011). Small and medium enterprises and their financing patterns: Evidence from Malaysia. *Journal of Economic Cooperation and Development*, 32(2), 1-18.
- Abor, J., and Biekpe, N. (2007). Corporate governance, ownership structure and performance of SMEs in Ghana: implications for financing opportunities. *Corporate Governance*, 7(3), 288-300.
- Annuar, M. N., and Shamsheer, M. (1993). Earnings and dividend behaviour. *Journal of Social Science and Humanities*, 1(2), 171-177.
- Baas, T., and Mechthild, S. (2006). Relationship banking and SMEs: a theoretical analysis. *Small Business Economic*, 27(2), 127-137.
- Bajaj, Y., Kashiramka, S., & Singh, S. (2020). Capital structure dynamics: China and India (Chindia) perspective. *European Business Review*, 32(5), 845-868.
- Balios, D., Daskalakis, N., Eriotis, N., and Vasiliou, D. (2016). SMEs capital structure determinants during severe economic crisis: The case of Greece. *Cogent Economics & Finance*, 4(1), 1145535.
- Barton, S. L., and Paul J. G. (1988). Corporate strategy and capital structure. *Strategic Management Journal*, 9(6), 623-632.
- Bell, K., and Vos, E. (2009). SME capital structure: the dominance of demand factors. In 22nd Australasian Finance and Banking Conference.
- Berger, A. N., and Udell, G. F. (1998). The economics of small business finance: the roles of private equity and debt markets in the financial growth cycle. *Journal of Banking and Finance*, 22, 613-673.
- Bhaird, C. M., and Lucey, B. (2010). Determinants of capital structure in Irish SMEs. *Small Business Economics*, 35, 357-375.
- Bhole, L. M., and Mahakud, J. (2004). Trends and determinants of corporate capital structure in India: A panel data analysis. *Finance India*, 18, 37-56.
- Booth, L., Aivazian, V., Kunt-Demirguc, A., and Maksimovic, V. (2001). Capital structure in developing countries. *Journal of Finance*, 56, 87-130.
- 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.
- Boyacigiller, N. A., and Adler, N. J. (1991). The parochial dinosaur: Organizational science in a global context. *Academy of Management Review*, 262-290.

- Boyer, P., and Roth, H. (1978). The cost of equity finance for small business. *American Journal of Small Business*, 2(1), 1-11.
- Breuer, W., and Salzman, A. (2008). Cultural dimensions of corporate governance systems. Working Paper (available from SSRN).
- Brighi, P., and Torluccio, G. (2007). Evidence on Funding Decisions by Italian SMEs: A Self-Selection Model. Available at SSRN 1629988.
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of cross-cultural psychology*, 1(3), 185-216.
- Carter, D. A., Simkins, B. J., and Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. *Financial Review*, 38(1), 33-53.
- Castro, C., Desender, K. A., and Escamilla, S. (2007). Earnings management and shared cultural values, Working Paper: UAB Economia Empresa No. 8/01, Barcelona.
- Cavusgil, S. T., and Zou, S. (1994). Marketing strategy-performance relationship: an investigation of the empirical link in export market ventures. *The Journal of Marketing*, 1-21.
- Chaganti, R., DeCarolis, D., and Deeds, D. (1995). Predictors of capital structure in small ventures. *Entrepreneurship Theory and Practice*, 20, 7-18.
- Changjiang, L., and Huibo, H. (2001). Empirical Study on the Capital Structure Characteristic of Listed Companies [J]. *Nankai Business Review*, 5, 26-29.
- Charles, C., Sloan, M. F., & Butler, J. S. (2021). Capital structure determinants for arts nonprofits. *Nonprofit Management and Leadership*, 31(4), 761-782.
- Chittenden, F., Hall, G., and Hutchinson, P. (1996). Small firm growth, access to capital markets and financial structure: Review of issues and an empirical investigation. *Small Business Economics*, 8, 56-67.
- Chui, A. C. W., Lloyd, A. E., and Kwok, C. C. Y. (2002). The determination of capital structure: is national culture a missing piece to the puzzle? *Journal of International Business Studies*, 33(1), 99-127.
- Clugston, M., Howell, J. P., and Dorfman, P. W. (2000). Does cultural socialization predict multiple bases and foci of commitment?. *Journal of Management*, 26(1), 5-30.
- Cole, R. A. (1998). The importance of relationships to the availability of credit. *Journal of Banking and Finance*, 22(6), 959-977.
- Coleman, S., and Carsky, M. (1999). Sources of capital for small family-owned businesses evidence from the national survey of small business finances. *Family Business Review*, 12(1), 73-84.
- Covin, J., Slevin, D., and Heeley, M. (1999). Pioneers and followers: Competitive tactics, environment, and firm growth. *Journal of Business Venturing*, 15(2), 175-210.
- Cressy, R., and Olofsson, C. (1997). The financial conditions for Swedish SMEs: Survey and research agenda. *Small Business Economics*, 9(2), 179-194.
- Deesomsak, R., Paudyal, K., and Pescetto, G. (2004). The determinants of capital structure: evidence from the Asia Pacific region. *Journal of Multinational Financial Management*, 14(4/5), 387-405.
- Delcours, N. (2007). The determinants of capital structure in transitional economies. *International Review of Economics and Finance*, 16(3), 400-415.
- Dewhurst, P., and Horobin, H. (1998). Small business owners. The management of small tourism and hospitality firms, Cassell, London, 19-38.
- Di Patti, E. B., and Dell'Ariccia, G. (2004). Bank competition and firm creation. *Journal of Money, Credit and Banking*, 225-251.

- Donaldson, G. (1961). *Corporate Debt Capacity*. Graduate School of Business Administration, Harvard University, Boston.
- Donnelly, J. H., Berry, L. L., and Thompson, T. W. (1985). *Marketing Financial Services: A Strategic Vision*. Homewood, Illinois: Dow Jones-Irwin.
- Fabowale, L., Orser, B., Riding, A., and Swift, C. (1994). Gender and banking with the small business client. *Canadian Woman Studies*, 15(1).
- Fama, E. F., and Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301-325.
- Fattouh, B., Harris, L., and Scaramozzino, P. (2008). Non-linearity in the determinants of capital structure: evidence from UK firms. *Empirical Economics*, 34(3), 417-438.
- Field A. (2005). *Discovering Statistics Using SPSS*, Zed edn, SAGE Publications Ltd, London.
- Frank, M. Z., and Goyal, V. K. (2009). Capital structure decisions: which factors are reliably important? *Financial Management*, 38(1), 1-37.
- Friend, I., and Lang, L. (1988). An empirical test of the impact of managerial self-interest on corporate capital structure. *Journal of Finance*, 43, 271–281.
- Gaud, P., Jani, E., Hoesli, M., and Bender, A. (2005). The capital structure of Swiss companies: an empirical analysis using dynamic panel data. *European Financial Management*, 11(1), 51-69.
- Getz, D., and Carlsen, J. (2000). Characteristics and goals of family and owner-operated businesses in the rural tourism and hospitality sectors. *Tourism management*, 21(6), 547-560.
- Gleason, K. C., Mathur, L. K., and Mathur, I. (2000). The interrelationship between culture, capital structure, and performance: evidence from European retailers. *Journal of Business Research*, 50(2), 185-191.
- Greif, A. (1993). Contract enforceability and economic institutions in early trade: The Maghribi traders' coalition. *American Economic Review*, 43, 491–519.
- Hair, J. F., Black, W. C., Babin, B. J., and Anderson, R. E. (2010). *Multivariate Data Analysis*, seventh edition. Upper Saddle River, New Jersey: Prentice Hall.
- Hamilton, R. T., & Fox, M. A. (1998). The financing preferences of small firm owners. *International Journal of Entrepreneurial Behavior & Research*.
- Han, L., Fraser, S., and Storey, D. J. (2009). Are good or bad borrowers discouraged from applying for loans? Evidence from US small business credit markets. *Journal of Banking and Finance*, 33(2), 415-424.
- Harris, M., and Raviv, A. (1991). The theory of capital structure. *Journal of Finance*, 46(1), 297-355.
- Hatzinikolaou, D., Katsimbris, G. M., and Noulas, A. G. (2002). Inflation uncertainty and capital structure: Evidence from a pooled sample of the Dow-Jones industrial firms. *International Review of Economics and Finance*, 11(1), 45-55.
- Hirshleifer, D., and Thakor, A. V. (1989). Managerial reputation, project choice and debt. Working paper No.14-89, Anderson Graduate School of Management at UCLA.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, Cal., and London: Sage.
- Hofstede, G., Hofstede, G. J., and Michael, M. (1991). *Cultures and organizations*. London: McGraw-Hill.
- Holmlund, M. (1997). What are relationships in business networks? *Management decision*, 35(4), 304-309.

- Hood, C. (2000). *The art of the state: Culture, rhetoric, and public management*. Oxford University Press, USA.
- Huang, W., Boateng, A., and Newman, A. (2016). Capital structure of Chinese listed SMEs: an agency theory perspective. *Small Business Economics*, 47(2), 535-550.
- Hussain, J., and Matlay, H. (2007). Financing preferences of ethnic minority owner/managers in the UK. *Journal of Small Business and Enterprise Development*, 14(3), 487-500.
- Ibrahim, H., and Masron, T. A. (2011). Capital Structure and the Firm Determinants: Evidence from Small and Medium Enterprises (SMEs) in Malaysia. In *International Conference on Economics, Trade and Development*.
- Jensen M., and Meckling W. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305-360.
- Jõeveer, K. (2013). Firm, country and macroeconomic determinants of capital structure: Evidence from transition economies. *Journal of Comparative Economics*, 41(1), 294-308.
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31-36.
- Kila, S. M., and Mahmood, W. M. W. (2008). *Capital Structure and Firm Characteristics: Some Evidence from Malaysian Companies*. University Teknologi MARA, Malaysia.
- Korajczyk, R. A., and Levy, A. (2003). Capital structure choice: macroeconomic conditions and financial constraints. *Journal of Financial Economics*, 68(1), 75-109.
- Krishnan, V. S., and Moyer, R. C. (1997). Performance, capital structure and home country: An analysis of Asian corporations. *Global Finance Journal*, 8(1), 129.
- Kumar, S., Sureka, R., & Colombage, S. (2020). Capital structure of SMEs: a systematic literature review and bibliometric analysis. *Management Review Quarterly*, 70(4), 535-565.
- Kusi, B. A., Dzaha, G., Gyan, K. K., & Turkson, F. E. (2021). Debt capital structure and credit information sharing: Evidence on listed firms from an emerging market. *Journal of African Business*, 22(2), 153-170.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R. W. (1998). Law and finance. *Journal of Political Economy*, 106(6), 1113-55.
- Li, K., Griffin, D., Yue, H., and Zhao, L. (2011). National culture and capital structure decisions: Evidence from foreign joint ventures in China. *Journal of International Business Studies*, 42(4), 477-503.
- Licht, A. N. (2001). The mother of all path dependencies: Toward a cross-culture theory of corporate governance systems. *Delaware Journal of Corporate Law*, 26, 147-205.
- Lopez-Gracia, J., and Sanchez-Andujar S. (2007). Financial structure of the family business: Evidence from a group of small Spanish firms. *Family Business Review*, 20, 269.
- Lynch, P. (1999). Host attitudes towards guests in the homestay sector. *Tourism and Hospitality Research*, 1(2), 119-144.
- Mat Nawi, H. (2015). *Determinants of capital structure in small and medium sized enterprises in Malaysia* (Doctoral dissertation, Brunel University London).
- McMahon, R. G., and Stanger, A. M. (1995). Understanding the small enterprise financial objective function. *Entrepreneurship Theory and Practice*, 19, 21-40.
- McMillan, J., and Woodruff, C. (1999). Interfirm relationships and informal credit in Vietnam. *Journal of Economics*, November, 1285-320.
- Menon, A., Bharadwaj, S. G., and Howell, R. (1996). The quality and effectiveness of marketing strategy: Effects of functional and dysfunctional conflict in intraorganizational relationships. *Journal of the Academy of Marketing Science*, 24(4), 299-313.

- Michaelas, N., Chittenden, F., and Poutziouris, P. (1998). A model of capital structure decision making in small firms. *Journal of Small Business and Enterprise Development*, 5(3), 246-260.
- Michaelas, N., Chittenden, F., & Poutziouris, P. (1999). Financial policy and capital structure choice in UK SMEs: Empirical evidence from company panel data. *Small Business Economics*, 12(2), 113-130.
- Modigliani, F., and Miller, M. H. (1958). The cost of capital, corporate finance, and the theory of investment. *American Economic Review*, 48, 261–75.
- Modigliani, F., and Miller, M. H. (1963). Corporate income taxes and the cost of capital: a correction. *American Economic Review*, 53(3): 433-443.
- Mohamad, M. H. (1995). Capital structure in large Malaysian companies. *MIR: Management International Review*, 119-130.
- Morrison, A. (2006). A contextualisation of entrepreneurship. *International Journal of Entrepreneurial Behavior & Research*, 12(4), 192-209.
- Moro, A. L., Michael, G. U., and Grassi, E. (2010). Financing SMEs: a model for optimising the capital structure. In: 17th Annual Global Finance Conference, 27-30 June 2010, Poznan.
- Mullen, M. R. (1995). Diagnosing measurement equivalence in cross-national research. *Journal of International Business Studies*, 3rd quarter, 573-96.
- Mutenheri, E., and Green, C. (2002). Financial reform and financing decisions of listed firms in Zimbabwe. University of Manchester, Institute for Development Policy and Management.
- Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of Financial Economics*, 5(2), 147-175.
- Myers, S. C. (1984). The capital structure puzzle. *The Journal of Finance*, 39(3), 575-592.
- Myers, S. C., and Majluf, N. (1984). Corporate financing and investment decision when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187–221.
- Naman, J. L., and Slevin, D. P. (1993). Entrepreneurship and the concept of fit: A model and empirical tests. *Strategic Management Journal*, 14(2), 137-153.
- Nawi, H. M. (2017). A Qualitative Study to Discover the Determinants of Capital Structure of Micro and Small-sized Enterprises in Malaysia. *International Journal of Arts and Commerce*, 6(8), 70-87.
- Nawi, H. M. (2018). Measuring Capital Structure Determinants of Small and Medium Enterprises (SMEs): An Assessment of Construct Reliability and Validity of a Proposed Questionnaire. *Canadian Social Science*, 14(2), 44-58.
- Newman, A., Gunessee, S., and Hilton, B. (2012). Applicability of financial theories of capital structure to the Chinese cultural context: A study of privately owned SMEs. *International Small Business Journal*, 30(1), 65-83.
- Nguyen, T. D. K., and Ramachandran, N. (2006). Capital structure in small and medium-sized enterprises: The case of Vietnam. *ASEAN Economic Bulletin*, 23(2), 192-211.
- Norton, E. (1990). Similarities and differences in small and large corporation beliefs about capital structure policy. *Small Business Economics*, 2, 229-245.
- Nunnally, J. C. (1978). *Psychometric Theory*. (2nd ed.). New York: McGraw-Hill.
- Nunnally, J. C., and Bernstein, I. H. (1994). *Psychometric Theory* (3rd ed.). New York, McGraw Hill.
- Nwankwo, S., and Lindridge, A. (1998). Marketing to ethnic minorities in Britain. *Journal of Marketing Practice: Applied Marketing Science*, 4(7), 200-216.

- Onaolapo, A. A., Kajola, S. O., and Nwidobie, M. B. (2015). Determinants of capital structure: A study of Nigerian quoted companies. *methodology*, 7(23).
- Ou, C., and Haynes, G. W. (2006). Acquisition of additional equity capital by small firms— Findings from the national survey of small business finances. *Small Business Economics*, 27, 157–168.
- Pallant, J. (2001). *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS*. Buckingham: Open University.
- Parsons, C., and Titman, S. (2007). Capital structure and corporate strategy. Available at SSRN 983553.
- Peel, M. J., and Wilson, N. (1996). Working capital and financial management practices in the small firm sector. *International Small Business Journal*, 14(2), 52-68.
- Peng, T. K., Peterson, M. F., and Shyi, Y. P. (1991). Quantitative methods in cross-cultural management research: Trends and equivalence issues. *Journal of Organizational Behaviour*, 12, 87-108.
- Petersen, M. A., and Rajan, R. G. (2002). Does distance still matter? The information revolution in small business lending. *The Journal of Finance*, 57(6), 2533-2570.
- Petersen, M. A., and Rajan, R. G. (1994). The benefits of lending relationships: Evidence from small business data. *Journal of Finance*, 49, 3–37.
- Philip, K. (1999). *Kotler on marketing: How to create, win, and dominate markets*. Simon and Schuster UK.
- Rajan, G. R., and Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *Journal of Finance*, 50, 1421–60.
- Robb, A. M., and Fairlie, R. W. (2007). Access to financial capital among U.S business: The case of African American firms. *The ANNALS of the American Academy of Political and Social Science*, 613, 47-72.
- Romano, C. A., Tanewski, G. A., and Smyrniotou, K. X. (2001). 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. In *Proceeding of International Conference on Business and Information (BAI)* July, 12-14.
- Saito, K., and Villanueva, D. (1981). Transactions costs of credit to the small-scale sector in the Philippines. *Economic Development and Cultural Change*, 29, 3.
- Schwartz, S. H. (1994). Beyond individualism/collectivism: new cultural dimensions of values, in "Individualism and collectivism: theory, method and application", Kim and al. editors, Newbury Park: Sage.
- Scott, A. J. (2006). Entrepreneurship, innovation and industrial development: geography and the creative field revisited. *Small Business Economics*, 26, 1-24.
- Sener, R. (1989). An empirical test of the de angelo-masulis tax shield and tax rate hypotheses with industry and inflation effects. *Journal of Business*, Mid-Atlantic, 26.
- Shah, A., and Khan, S. (2007). Determinants of capital structure: Evidence from Pakistani panel data. *International Review of Business Research Papers*, 3(4), 265-282.
- Shao, L., Kwok, C. C., and Guedhami, O. (2009). National culture and dividend policy. *Journal of International Business Studies*, 41(8), 1391-1414.
- Siegel, J., Licht, A., Schwartz, S. (2007). *Egalitarianism and international investment*, Working Paper: SSRN, Cambridge/Jerusalem.
- Smallbone, D., Ram, M., Eakins, D., and Baldock, R. (2003). Access to Finance by Ethnic Minority Businesses in the UK. *International Small Business Journal*, 21(3), 291-314.

- SME Corporation Malaysia. (2020). SME Annual Report 2018/2019. Retrieved from [https://www.smecorp.gov.my/images/SMEAR/SMEAR2018\\_2019/final/english/SME%20AR%20-%20English%20-%20All%20Chapter%20Final%204Jan2020.pdf](https://www.smecorp.gov.my/images/SMEAR/SMEAR2018_2019/final/english/SME%20AR%20-%20English%20-%20All%20Chapter%20Final%204Jan2020.pdf)
- SME Annual Report 2007. [Online] Available from [http://www.bnm.gov.my/files/publication/sme/en/2007/chap\\_7.pdf](http://www.bnm.gov.my/files/publication/sme/en/2007/chap_7.pdf) [Accessed 19 October 2009].
- Smyrnios, K. X., and Dana, L. (2006). The MGI Family and Private Business Survey. Melbourne: RMIT University.
- Sogorb-Mira, F. (2005). How SME uniqueness affects capital structure: Evidence from a 1994–1998 Spanish data panel. *Small Business Economics*, 25(5), 447–457.
- Storey, D. J. (1994). *Understanding the Small Business Sector*. Routledge.
- Taggart, J. R. A. (1995). Secular patterns in the financing of U.S corporations. In Friedman, B.M. *Corporate capital structures in the United States*, University of Chicago Press, 13-80.
- Titman, S., and Wessels, R. (1988). The determinants of capital structure choice. *Journal of Finance*, 43, 1–19.
- Vos, E., Yeh, A. J., Carter, S., and Tagg, S. (2007). The happy story of small business financing. *Journal of Banking and Finance*, 31, 2648-2672.
- Ward, J. M. (1987). Integrating information systems into business strategies. *Long range planning*, 20(3), 19-29.
- Wiwattanakantang, Y. (1999). An empirical study on the determinants of the capital structure of Thai firms. *Pacific-Basin Finance Journal*, 7, 371-403.
- Yeung, I. Y., and Tung, R. L. (1996). Achieving business success in Confucian societies: The importance of Guanxi (Connections). *Organizational Dynamics*.
- Zunckel, S., & Nyide, C. J. (2019). Capital structure of small, medium and micro enterprises: major factors for a developing economy. *Problems and Perspectives in Management*, 17(2), 124-133.