# MALAYSIAN SMEs' LIABILITY STRUCTURE AND ITS IMPACT ON PROFITABILITY AND GROWTH

### Woei-Chyuan Wong\*, Sharmilawati Sabki, Angappan Regupathi and Syed Mohd. Na'im Syed Salim

School of Economics, Finance and Banking, Universiti Utara Malaysia, 06010 UUM, Sintok, Kedah, Malaysia

\*Corresponding author: wwchyuan@uum.edu.my

## ABSTRACT

This paper offers new evidence as to how the heterogeneity in small and medium enterprises' (SMEs') liability structure affects their growth and profitability. On average, SMEs in our sample incurred a shortage in spontaneous (supplier) financing of 24.9% of total assets. This shortage is financed by bank debt of 21.1% which consists of trade-line facilities (9.6%) and term loans (11.6%). SMEs also finance this shortage in spontaneous financing with non-bank financing sources such as leasing (3.3%) and related party loans (2.9%). Regression results show that SMEs that are efficient in working capital management (shorter cash conversion cycle) tend to perform better. This value creation in efficient working capital management mainly arises from longer payable period enjoyed from the suppliers. SMEs that obtained more loans from related parties tend to exhibit higher performance. Conversely, SMEs that extend more loans to their related parties are associated with lower performance. In terms of growth, SMEs with access to banking facilities tend to enjoy higher growth rate. However, excessive debt in balance sheet is detrimental to SMEs' growth prospect.

Keywords: working capital management, capital structure, related party loans, SMEs, Malaysia

To link to this article: https://doi.org/10.21315/aamjaf2019.15.2.4

© Asian Academy of Management and Penerbit Universiti Sains Malaysia, 2019. This work is licensed under the terms of the Creative Commons Attribution (CC BY) (http://creativecommons. org/licenses/by/4.0/).

Publication date: 31 December 2019

To cite this article: Wong, W-C., Sabki, S., Regupathi, A., & Syed Salim, S. M. N. (2019). Malaysian SMEs' liability structure and its impact on profitability and growth. *Asian Academy of Management Journal of Accounting and Finance*, *15*(2), 77–94. https://doi.org/10.21315/aamjaf2019.15.2.4

### **INTRODUCTION**

Working capital, capital budgeting and capital structure are three major functions for a financial manager (Ross, Westerfield & Jordan, 2011). Working capital management involves managing inventories, accounts receivable and payable with the purpose to ensure that a firm is able to continue its operations without incurring any costly interruptions. Due to its short-term focus in nature, working capital management receives less attention in the finance literature as compared to capital budgeting and capital structure decisions. There are however burgeoning working capital management literatures that examine the determinants of efficient working capital management strategies and how these strategies in turn affect firms' profitability and growth.

In this paper, we focus on the small and medium enterprise (SME) sector which is the backbone of the Malaysian economy. SMEs constitute 98.5% of total business establishments in Malaysia and contribute 36.3% to the national gross domestic product (GDP). SME sector also provides job opportunities to more than 4 million workers which accounts for about 57% of workforce in Malaysia (Sources: SME Corp. Malaysia and Bank Negara Malaysia [Central Bank of Malaysia] websites). Due to the importance of the SME sector to the economy and employment, policy makers worldwide have engaged considerable measures to promote the growth, productivity and competitiveness of their SMEs.

In Malaysia, access to financing has been identified as one of the important components in creating globally competitive SMEs across all sectors in Malaysia.<sup>1</sup> A recent survey by Salikin, Wahab and Muhammad (2014) identifies capital insufficiency as the main financial drawback faced by their SME respondents. This finding is in line with the findings from the Census of Establishment and Enterprise conducted by the Department of Statistics Malaysia in 2005 where only 16% of the SME respondents indicate that they have access to financing from financial institutions. The census results also indicate that financing was used by Malaysian SMEs for the following purposes, in descending order - working capital (29.9%), equipment/machinery purchase/lease (28.5%) and land/building purchase (17.8%). The census results also indicate that the working capital is the most common type of financing (29.9%) among Malaysia's SMEs followed by purchase/lease of equipment/machinery (28.5%) and land/building purchase (17.8%). Moreover, this census results show that working capital financing (as a percentage of total financing) tend to be higher for smaller SMEs than their larger counterparts. This decade old census result is still valid now as working capital financing accounts for the highest outstanding balance (43.2%) compared to other types of SME loans as of December 2017 (Central Bank of Malaysia, 2018).

Due to the importance of access to financing for SMEs, particularly for working capital management, we set the uncovering of working capital efficiency and capital structure of Malaysian SMEs as our first research objective. We provide, for the first time, detailed breakdown of Malaysian SMEs' capital structure. We decompose individual firms' liability structure into different types of bank debts and non-bank debts. For non-bank debt commitment, we report total value of related loans obtained by SMEs from their related companies. Related party transactions are prevalent among private firms in Malaysia. To the best of our knowledge, we are also the first to report the extent of related party loans for SMEs.

The second objective of this paper is to consider joint impact of working capital and capital structure decisions on SMEs' profitability. Existing literature tends to examine these decisions in isolation. On the one hand, published papers in working capital management either ignore the impact of capital structure (Eljelly, 2004; Gill, Biger, & Mathur, 2010) or merely contemplate the impact of firms' capital structure by including a debt ratio variable without considering the heterogeneity of SMEs' debt structure (Garcia-Teruel & Martinez-Solano, 2007; Jakpar, Tinggi, Siang, Johari, Myint, & Sadique, 2017). On the other hand, published papers in corporate finance literature that focus on long-term financing decisions such as capital structure, investment and dividends typically ignore the impact of working capital management variables in their regression models (see Rauh & Sufi, 2010; Kumar & Li, 2016; Jacob & Michaely, 2017) for studies on capital structure, investment and dividend policies respectively). Therefore, it is reasonable to consider both working capital and capital structure decisions in our regression model since they are both important in determining firm's value.

To preview our results, we find that spontaneous financing obtained from suppliers' credit is insufficient to cover our sample of SMEs' daily operating requirement. Specifically, trade payables (15% of total assets) are less than trade receivables and inventory combined (40% of total assets). The shortage in spontaneous financing is supported by debt ratio of 21.1% (9.6% trade line facilities and 11.6% term loans), 3.3% of leasing and 2.9% of related party loans. These descriptive statistics underscore the importance to consider the heterogeneity of SMEs liability structure instead of treating debts as uniform. On average, 84.6% of the SMEs had access to bank financing during the study period. Regression analyses show that SMEs that are efficient in working capital management mainly comes from longer payable period extended from the suppliers. We also find that SMEs that obtained more loans from related parties tend to perform better. In terms of growth, we find SMEs with access to banking

facilities tend to enjoy higher growth rate. However, too much of debt in the balance sheet is detrimental to SMEs' growth prospect.

### LITERATURE REVIEW

A number of papers have examined the impact of working capital management on firms' profitability. Empirical evidence tends to support the value enhancing property of efficient (aggressive) working capital management. Specifically, firms that maintain shorter cash conversion cycle (CCC) or invest lesser in working capital are associated with higher profitability. This is because efficient working capital management allows firms to convert funds tied-up in current assets into other more profitable and risky long-term investments, and hence, increases firms' profitability. Empirical evidence that supports this hypothesis include Jose, Lancaster and Stevens (1996), Shin and Soenen (1998), Eljelly (2004), Raheman and Nasr (2007), Garcia-Teruel and Martinez-Solano (2007), Falope and Ajilore (2009) and Pais and Gama (2015). These papers use return on assets (ROA) and return on equity (ROE) as proxy for profitability.

Proponents of the value enhancing longer CCC, on the other hand, argue that greater investment inventory and trade-credit (receivables) granted to customers tend to increase firm's sales and, consequently their profitability. This is because larger investment in inventory reduces the risk of a stock-out while generous (longer) trade credit (receivable) policy could stimulate sales by attracting new customers. Moreover, lesser reliance on supplier financing (trade payables) also means firms could enjoy discount from suppliers for early payment.<sup>2</sup> Empirical papers that support this hypothesis include Gill et al. (2010) and Mathuva (2009). Jakpar et al. (2017) conversely do not find any significant relationship between CCC and firm profitability.<sup>3</sup>

With respect to the impact of leverage on firm profitability, Modigliani and Miller's (1958) seminal paper posits that there exists positive relationship between leverage and firm performance due to the increased risk of cash flows to equity holders as firms increase their leverage. Trade-off theory predicts that profitable firms tend to use more debt, when bankruptcy risks are not imminent from using more debt. On the contrary, pecking order theory on the other hand predicts profitable firms to use less debt to avoid issue of costly equity.<sup>4</sup> Empirical evidences on the impact of leverage on performance have been mixed. Hull (1999) finds that firm value decreases as it deviates further from its optimal leverage ratio. Giacomini, Ling and Naranjo (2017) however show that highly leveraged (relative to target debt ratio) firms tend to perform better on a risk-adjusted basis. In the SME sector, Jakpar et al. (2017) and Garcia-Teruel and Martinez-Solano (2007) find debt ratio exert a negative impact Malaysian and Spanish SMEs' profitability respectively which is consistent with pecking order theory's prediction.

Corporate governance literature commonly view related party transactions as means for controlling shareholders to expropriate wealth from the minority shareholders. This is true for transactions that are likely to result in the appropriation of a firm's minority shareholders' interests such as asset acquisitions, asset sales, equity sales, cash payments and loan/advances granted to related parties. Jiang, Lee and Yue (2010) for instance document how controlling shareholders abuse intercorporate loans to siphon billions of RMB from hundreds of Chinese listed companies. Cheung, Rau and Stouraitis (2006) document that market reacts negatively to related party transactions that are likely to result in appropriation of minority shareholders mentioned above. Conversely, there are transactions that are likely to benefit firm's minority shareholders such as cash receipts or loans received from related parties. Cheung et al. (2006) do not find the announcement of these transactions to result in negative abnormal returns. Focusing on a sample of Asia listed Real Estate Investment Trusts (REITs), Downs, Ooi, Wong and Ong (2016) find the announcement of related party property acquisitions to be associated with positive abnormal returns.

Another branch of literature has been studying the determinants of SME growth. Kachlami and Yazdanfar (2016) document a positive impact of short-term debt on the growth of SMEs in Sweden. The impact of long-term debt on growth is however mixed. The authors argue for the positive short-term debt-growth relationship as supportive of mitigation of agency problem problem from using short-term debt that in turn leads to higher growth rate (Childs, Mauer, & Ott, 2005; Titman & Wessels, 1988).<sup>5</sup> Similarly, Mateev and Anastasov (2010) document a positive impact of leverage on firm growth for SMEs in Eastern Europe which suggest the importance of external capital to support asset growth of SMEs in transition economies. Foreman-Peck, Makepeace and Morgan (2006) find SMEs in Wales, U.K. with the following characteristics tend to exhibit a higher growth rate: use technology (use of computerised account), innovative, with a marketing plan and in a financial sector. This paper however does not control for SMEs' capital structure.

In summary, literature in working capital, capital structure and related party transactions do provide guidance to the impact of these corporate decisions or transactions on growth and firm performance. Surprisingly, these different strands of literature tend to exist in isolation despite them being joint decisions made by the firm. In other words, the inter-dependence of these decisions have not been adequately investigated. Arguably, the inter-dependence of these decisions is more pronounced among SMEs, as these decisions tend to be made by a smaller, and more closely knitted group of financial managers, compared to larger firms. The literature on SMEs, however, emphasises the impact of working capital management on profitability, but largely ignores the impact of other longterm financing decisions. We attempt to bridge this research gap by connecting these different, but related, financial decisions in one regression model as shown in the next section of this paper.

# **RESEARCH METHODOLOGY**

Our empirical methodology consists of two main parts. First, we estimate the determinant of SMEs' performance measured by ROA and ROE with working capital and capital structure variables as our key variables of interest. Second, we investigate whether these key variables exert the same impact on SMEs growth prospect measured by annual sales and asset growth rates. We estimate a panel model of profitability and growth rate as a function of working capital management and liability structure strategies as follows:

$$\begin{aligned} Profitability_{it} &= \theta CCC_{it-1} + \beta Size_{i,t-1} + \phi Cash \ Holdings/Total \ assets_{i,t-1} + \\ &\gamma Leasing/Total \ assets_{i,t-1} + \lambda Loans \ to \ Related/ \\ &Total \ assets_{i,t-1} + \delta Loans \ from \ Related/Total \ assets_{i,t-1} + \\ &\sigma Bank \ loans \ (0,1)_{i,t-1}, \theta Debt \ ratio/Total \ assets_{i,t-1} + d_t + u_{it} \end{aligned}$$
(1)

$$Growth_{it} = \theta CCC_{it-1} + \beta Size_{i,t-1} + \phi Cash \ Holdings/Total \ assets_{i,t-1} + \gamma Leasing/Total \ assets_{i,t-1} + \lambda Loans \ to \ Related/$$

$$Total \ assets_{i,t-1} + \delta Loans \ from \ Related/Total \ assets_{i,t-1} + \sigma Bank \ loans \ (0,1)_{i,t-1}, \theta Debt \ ratio/Total \ assets_{i,t-1} + d_t + u_{it}$$

$$(2)$$

We control for time-invariant unobservable firm characteristics using fixed effect estimation. In addition, we also control for the time-varying unobservable using time (year) dummies ( $d_t$ ). We use lagged explanatory variable to address endogeneity issues that may arise from the reverse causality from working capital management or liability structure strategies to SMEs' profitability or growth. The definition and summary statistics of the dependent and explanatory variables are summarised in Table 1.

### DATA

We employ data purchased from Business and Search Information Services (BASIS), an independent and private credit information agency that manages and provides online credit information for Malaysian SMEs. Our sample covers between the years 2005–2012. In line with the formal definition of Malaysian SMEs, we exclude firm-year observation with sales values that are more than RM50 million.<sup>6</sup> After omitting observations with missing values and outliers<sup>7</sup>, the final sample consists of 285 firm-year observations which consist of 167 unique SMEs.

### RESULTS

### **Descriptive Statistics**

The summary statistics in Table 1 indicates that SMEs in our sample perform well during the study period with average ROA and ROE of 6.4% and 8.9%, respectively. Not shown here, ROA remained positive even during the global financial crisis period in 2008 and 2009 at 7.2% and 8.5% respectively. The average annual asset (sales) growth during the study period was 9.5% (6.6%). Total sales ranged from RM0.745 million to RM49.5 million with a mean value of RM18.7 million. This implies that our sample of SMEs does not include Micro SMEs with sales value lesser than RM300,000 as defined by Malaysian policy makers. Cash holdings of 9.2% of total assets are higher than the average cash holdings of 6.8% documented by Rahman and Muhamad (2013) for a sample of Malaysian public listed companies in 2009. High cash holdings by SMEs could be explained by their motives to preserve cash for future reinvestment and financial shocks due to their low access to external financing as discuss earlier.

Turning to SMEs' working capital management variables, CCC which is a measure of efficiency in working capital management has a mean value of 87.6 days. The CCC variable is constructed by the summation of inventory days (53.6 days) and trade receivable days (81.3 days) minus trade payable days (47.3 days). The positive value of CCC suggests that, on average, spontaneous financing obtained from suppliers in the form of trade credit is insufficient to cover SMEs' working capital requirement (trade receivables and inventory). The shortage in spontaneous financing constitutes 24.9% (14.8% + 25.1% - 15.0%) of total assets. This deficit in financing working capital is funded 21.1% by bank debt, which consists of 9.6% trade-line facilities (bank overdraft and bankers' acceptance), and the rest, term loans. On average, 84.6% of SMEs had outstanding bank loans during the study period, and this suggests that most SMEs have access to bank financing. This is in line with the 82% high financing approval rate by financial institutions over SME loans in Malaysia (Central Bank of Malaysia, 2014). SMEs also finance their deficits in spontaneous financing using non-bank financing sources such as leasing (3.3%) and related party loans (2.9%). Leasing (renting) helps reduce SMEs' upfront capital expenditure. Related party loans are loans obtained from SMEs' own managers, directors, principal owners or affiliates. Over 26.0% of SMEs in our sample have access to related party financing.

Variables	Definitions	Mean	Median	SD	Min.	Max.
ROA	Net income scaled by total assets	0.064	0.058	0.167	-0.893	0.813
ROE	Net income scaled by total equity	0.089	0.079	0.189	-0.767	0.835
Asset growth	Annual growth in total assets	0.095	0.066	0.396	-0.902	2.878
Sales growth	Annual growth in total sales	0.066	0.042	0.226	-0.432	1.930
Asset (in RM million)	Total assets	18.23	13.72	15.05	0.576	79.70
Sales (in RM million)	Total sales	18.70	12.40	16.65	0.745	49.49
Cash holdings	Cash/Total assets	0.092	0.052	0.116	0	0.832
CCC	Trade receivable days plus inventory days minus trade payable days	87.63	82.89	78.76	-650.32	373.74
Inventories (days)	Inventory scaled by total sales multiplied with 365 days	53.64	40.92	46.57	0.142	296.09
Receivables (days)	Trade receivables scaled by total sales multiplied with 365 days	81.31	76.73	45.05	1.18	270.70
Payables (days)	Trade payables scaled by total sales multiplied with 365 days	47.32	38.52	58.89	-0.635	852.58

# Table 1Descriptive statistics of variables

*(continue on next page)* 

Variables	Definitions	Mean	Median	SD	Min.	Max.
Bank loan dummy	Dummy variable equals to one for firm-year observation with bank loans outstanding and zero otherwise	0.846	1	0.362	0	1
Total debt/Total assets	Total bank debt/Total assets	0.211	0.203	0.165	0	0.624
Trade facilities/ Total assets	Bank overdraft plus bankers' acceptance scaled by total assets	0.096	0.043	0.119	0	0.453
Term loans/Total assets	Term loans & other bank borrowings scaled by total assets	0.116	0.085	0.122	0	0.499
Trade receivables/ Total assets	Self-explanatory	0.251	0.236	0.146	0.004	0.934
Trade creditors/ Total assets	Self-explanatory	0.150	0.113	0.136	0.001	0.747
Inventory/Total assets	Self-explanatory	0.148	0.122	0.110	0.001	0.601
Leases/Total assets	Self-explanatory	0.033	0.011	0.048	0	0.271
Loans from related/ Total assets	Self-explanatory	0.029	0	0.082	0	0.601
Loans to related/ Total assets	Self-explanatory	0.018	0	0.068	0	0.547

Table 1 (continued)

Next, we examine the differences in working capital and capital structure variables of large and small SMEs in our sample. We defined small (large) SMEs as those that rank in the bottom (top) 25 percentile in term of total assets in our sample. A few interesting observations arise from Table 2. Smaller SMEs are more financially constrained than larger SMEs, evidenced by their lower access to bank financing (bank loan dummy) and related party loans. This explains why they tend to hold more cash than their larger counterparts, possibly to cushion against unexpected shocks in business operations.

Petersen and Rajan (1997) postulate that larger firms have larger capacity to extend more trade credits which enables them to invest more in working capital as compared to smaller firms, however, this is proven only in our findings of CCC and inventory days variables. We also have conflicting conclusion when we scale working capital variables by total assets instead of sales (as in CCC). In

### Woei-Chyuan Wong et al.

this situation, we find smaller SMEs make significantly larger investment in trade receivables and trade payables than larger SMEs.

0 1 0	2	2.0	
Variables	Large SMEs	Small SMEs	Mean equality-test
CCC	103.45	78.31	*
Inventories (days)	76.25	40.33	***
Receivables (days)	86.39	81.40	Insignificant
Payables (days)	83.89	74.06	Insignificant
Bank loan dummy (0,1)	0.930	0.789	**
Total debt/Total assets	0.229	0.204	Insignificant
Trade facilities/Total assets	0.100	0.096	Insignificant
Term loans/Total assets	0.128	0.108	Insignificant
Trade receivables/ Total assets	0.187	0.328	***
Trade creditors/ Total assets	0.117	0.185	***
Inventory/Total assets	0.159	0.137	Insignificant
Leases/Total assets	0.018	0.052	***
Loans from related/Total assets	0.060	0.008	***
Loan to related/Total assets	0.017	0.011	Insignificant
Cash holdings	0.035	0.069	***

Table 2Working capital management and liability structure by firm size

Note: \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% level respectively.

### **Regression Analysis**

Table 3 shows multivariate analysis that highlights the combined impact of working capital and capital structure strategies on SME performance measured by ROA and ROE. Consistent with existing literature, we find a negative relationship between CCC and SME performance. As noted earlier, this suggests that SMEs that practice efficient or aggressive working capital management is associated with higher profitability. Decomposition of CCC into its components reveals that efficiency in working capital management is driven by longer trade credit enjoyed from suppliers. This suggests SMEs which possess strong bargaining power over their suppliers tend to perform better.

In line with the literature in related party transactions, we find transactions that are likely to expose SMEs to exploitation by their related parties are negatively related to SME performance. Specifically, *Loans to related* is

negative and significantly related to ROA and ROE. Conversely, *Loans from related* which is likely to be beneficial to SMEs are associated positively with SME performance. *Bank loan dummy* and *Total debt/Total assets* are insignificant across all regression models. Not reported here, we also replace *Total debt/Total assets* with its composition, i.e. *Trade facilities/Total assets and Term loans/Total assets*. These variables are not significantly related to SME performance.

We find some weak evidence of the negative relationship between cash holdings and SME performance (Model 1). This finding is inconsistent with empirical evidences documenting the value enhancing property of cash holding due to the liquidity value of cash (Pinkowitz & Williamson, 2007; Hill, Kelly, & Hardin, 2012). The negative cash holding-SME performance reflects the opportunity costs faced by SMEs from holding more cash. We also document weak evidence of the negative impact of leasing on SME performance (Model 4). The results contradict with the findings of Salam (2013) which shows positive correlation between lease finance, and ROA and ROE in Bangladesh. However, Salam's findings is based on observations of only 53 SMEs in one year (2012). Another possible contribution to his findings is due to lower access of financial institutions loan in Bangladesh, compared to Malaysia. Overall, the regression results imply that working capital and related party financing are the first order priority in determining SME performance over bank financing variables.

Next, as indicated in Table 4, we supplement our SME performance results with SME growth by replacing the profitability ratios (dependent variables) with annual asset and sales growth variables. We rerun the regressions using the same set of control variables. Unlike Kieschnick, La Plante and Moussawi that document a positive relationship between future sales growth and CCC, none of the working capital management variables are significantly related with SME growth. Access to bank loans (*Bank loan dummy*) is associated positively with sales growth (Models 3 and 4). This underscores the importance of tackling constraints faced by SMEs in obtaining external financing. Debt ratio is however associated negatively with asset growth (driven by term loans in Model 2), suggesting that while access to bank loans are instrumental to SMEs growth, too much of long-term debt could hamper the growth prospect of SMEs.

Table 3

	Model 1 (ROA)	Model 2 (ROA)	Model 3 (ROE)	Model 4 (ROE)
Intercept	0.423 (0.29)	0.820 (0.59)	0.578 (0.34)	1.066 (0.67)
$\text{CCC}_{t-1}$	-0.000**** (-2.48)		-0.001*** (-2.80)	
Inventory $Days_{t-1}$		0.000		0.000
Receivable Days <sub>t-1</sub>		-0.000 (0.40)		-0.000 (-0.23)
Payable Days <sub>t-1</sub>		0.001*** (4.10)		-0.001*** (4.48)
Size <sub>t-1</sub>	-0.038	-0.103	-0.052	-0.131
Cash Holdings <sub>t-1</sub>	-0.159* (-1.66)	-0.096 (-0.90)	-0.183 (-1.47)	-0.108 (-0.82)
$Leasing_{t-1}$	-0.575 (-1.31)	-0.626 (-1.51)	-0.881 (-1.53)	-0.923* (-1.68)
Loans from Related <sub>t-1</sub>	0.662 (1.63)	0.695* (1.72)	0.773* (1.65)	0.826* (1.75)
Loans to Related <sub>t-1</sub>	-1.030** (-2.02)	-1.028* (-1.84)	-1.137* (-1.88)	-1.126* (-1.70)
Bank Loan Dummy <sub>t–1</sub>	0.001 (0.01)	0.09 (0.16)	-0.039 (-0.68)	-0.033 (-0.55)
Debt Ratio <sub>t-1</sub>	-0.072 (-0.38)	-0.069 (-0.37)	0.017 (0.08)	0.018 (0.08)
Firm & year fixed effects	Yes	Yes	Yes	Yes
No Obs	285	285	285	285
$R^2$ (within)	0.19	0.20	0.17	0.18

The impact of working capital management and capital structure on SME performance

Notes: \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% level respectively.

### Table 4

The impact of working capital management and liability structure on SME growth

	Model 1 (Asset Growth)	Model 2 (Asset Growth)	Model 3 (Sales Growth)	Model 4 (Sales Growth)
Intercept	-4.484	-4.514	-1.645	-1.625
	(-0.70)	(-0.70)	(-0.26)	(-0.26)
$\text{CCC}_{t-l}$	0.000	-0.000	-0.001	-0.001
	(-0.01)	(-0.09)	(-1.50)	(-1.49)
Size <sub>t-1</sub>	0.656	0.659	0.252	0.250
	(0.73)	(0.73)	(0.29)	(0.28)

(continue on next page)

	Model 1	Model 2	Model 3	Model 4
	(Asset Growth)	(Asset Growth)	(Sales Growth)	(Sales Growth)
Cash Holdings $_{t-1}$	0.236	0.259	-0.994	-1.010
	(0.19)	(0.20)	(-0.97)	(-0.98)
Leasing <sub>t-1</sub>	0.932	0.962	0.181	0.160
	(0.65)	(0.66)	(0.23)	(0.21)
Loans from $Related_{t-1}$	0.286	0.387	0.223	0.154
	(0.62)	(0.92)	(0.89)	(0.64)
Loans to Related <sub>t-1</sub>	0.202	0.118	-0.290	-0.232
	(0.28)	(0.17)	(-0.47)	(-0.38)
Bank Loan Dummy <sub>t-1</sub>	0.108	0.095	0.093*	0.102*
	(0.54)	(0.49)	(1.85)	(1.88)
Debt Ratio <sub>t-1</sub>	-0.802*		-0.293	
	(-1.74)		(-0.57)	
Trade Facilities <sub>t-1</sub>		-0.421		-0.555
		(-0.63)		(-0.94)
Term Loans <sub>t-1</sub>		-0.923*		-0.210
		(-1.91)		(-0.37)
Firm & Year Fixed Effects	Yes	Yes	Yes	Yes
No Obs	243	243	244	244
$R^2(\text{within})$	0.08	0.08	0.06	0.06

Table 4 (continued)

Notes: \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% level respectively.

### **CONCLUSIONS**

This paper contributes to finance literature by examining the combined impact of working capital and capital structure decisions on SME performance and growth. Existing literature tend to examine these decisions in isolation. We first provide descriptive evidence of Malaysian SMEs' liability structure. The average bank loans is 21.1% of total assets (trade facilities of 9.6% and term loans of 11.6%). Non-bank financing in the form of trade credit, leasing and related party loans constitute 15.0%, 3.3% and 2.9% of total assets respectively. We reconfirm Bank Negara Malaysia's concern of financial constraints faced by smaller SMEs, where they have lesser access to bank financing and hold more cash for daily business operation needs compared to their larger counterparts.

#### Woei-Chyuan Wong et al.

Regression results show that efficient (aggressive) working capital management strategy is associated positively with SME performance. This is driven by longer trade credit received from suppliers. These findings underscore the importance of maintaining a good relationship with the suppliers. We establish for the first time, the positive (negative) impact of loans from (to) related parties on SME performance. This is the missing link in SME literature despite the prevalence of related party loans among SMEs. Finally, we find access to bank financing to exert a positive impact on SME growth. However, too much usage of long-term debt could lead to slower growth.

Our results have the following two implications for policy-makers/ practitioners. First, initiatives taken by the Malaysian government to improve the financial accessibility for SMEs should be intensified and targeted towards SMEs that encounter constraints in access to external financing. We could have underestimated the financial constraints faced by smaller SMEs since this study does not cover micro SMEs with annual sales volume below RM300,000. Second, agency issues between controlling and minority shareholders arising from related party loans should be less of a concern for SMEs that largely (if not wholly) owned by the founders. Our results however indicate that higher level of loans to or from related parties does influence SMEs' future performance. This insight is useful for financial institutions or venture capitalists to consider lending to or investing in the Malaysian SME sector.

# ACKNOWLEDGEMENTS

We thank the Malaysia Ministry of Higher Education for financial support through its FRGS research grant (Code S/O: 12909). We dedicate this research paper to the late Associate Professor Nasruddin Zainudin, who had been instrumental in securing this research grant.

# NOTES

- 1. Other components to the holistic development of SME sector are innovation and technology, human capital development, market access, legal and regulatory environment and infrastructure (Central Bank of Malaysia, 2014)
- 2. Discount earned from early payment is not trivial, given the fact that trade credit interest rates commonly exceed 18% (Wilner, 2000).
- 3. There is another strand of papers that examine the impact of firm profitability (independent variable) on CCC or its components. There are Banos-Caballero,

Garcia-Teruel and Martinez-Salano (2014), Zainudin and Regupathi (2011), Naser, Nuseibeh and Al-Hadeya (2015), and Sabki, Wong and Regupati (2019).

- 4. Briefly, the trade-off theory is based on the premise that firms trade-off between the marginal benefits of issuing debts in the form of tax-shield and the marginal costs due to bankruptcy risks (Modigliani & Miller, 1958; 1963). Firms are hypothesised to issue debt up to their target or optimal debt ratio. The pecking order theory on the other hand is based on the premise that there exists information asymmetry between managers and the market. This leads to a pecking order of securities, such that firms issue security in the order of their information sensitivity, beginning with internal funds, safe debts and reluctantly, equity when firms have used up the other two financing options (Myers & Majluf, 1984).
- 5. The agency problem in the form of equity holder risk-shifting incentives decrease as debt maturity is shortened.
- 6. This follows the definition given by SME Corp Malaysia, a government agency under the purview of the Ministry of International Trade and Industry Malaysia, that defined "Medium" manufacturing firms as those with sales volume between RM15 million–RM50 million; "Small" with sales volume between RM300,000 and RM15 million; and "Micro" with sales below RM300,000.
- 7. We adopt the following filters to omit observations with extreme values: inventory day/receivable day/payable days more than 1000 days, annual asset (sales) growth below–100% or above 300%, ROA below–100% or above 100%, ROE below–200% or above 100%.

### REFERENCES

- Banos-Caballero, S., Garcia-Teruel, P. J., & Martinez-Salano, P. (2014). Working capital management, corporate performance and financial constraints. *Journal of Business Research*, 67(3), 332–338. https://doi.org/10.1016/j.jbusres.2013.01.016
- Central Bank of Malaysia. (2014). *Developing the SME financing ecosystem*. Retrieved from https://www.bnm.gov.my/documents/fi/publication/reports/Developing%20 the%20SME%20Financing%20Ecosystem.pdf
- Central Bank of Malaysia. (2018). Key statistics on SME financing and micro financing by Financial Institutions. Retrieved from http://www.bnm.gov.my/index. php?ch=fi&pg=fi\_download&ac=445&lang=en
- Cheung, Y. L., Rau, P. R., & Stouraitis, A. (2006). Tunnelling, propping, and expropriation: Evidence from connected party transactions in Hong Kong. *Journal of Financial Economics*, 82(2), 343–386. https://doi.org/10.1016/j.jfineco.2004.08.012
- Childs, P. D., Mauer, D. C., & Ott, S. H. (2005). Interactions of corporate financing and investment decisions: The effects of agency conflicts. *Journal of Financial Economics*, 76, 667–690. https://doi.org/10.1016/j.jfineco.2004.06.012

- Downs, D. H., Ooi, J. T. L., Wong, W. C., & Ong, S. E. (2016). Related party transactions and firm value: Evidence from property markets in Hong Kong, Malaysia and Singapore. *Journal of Real Estate Finance and Economics*, 52(4), 408–427. https://doi.org/10.1007/s11146-015-9509-0
- Eljelly, A. (2004). Liquidity-profitability trade-off: An empirical investigation in an emerging market. *International Journal of Commerce and Management*, 14, 48– 61. https://doi.org/10.1108/10569210480000179
- Falope, O., & Ajilore O. T. (2009). Working capital management and corporate profitability: Evidence from panel data analysis of selected quoted companies in Nigeria. *Research Journal of Business Management*, 3, 74–84. https://doi.org/10.3923/ rjbm.2009.73.84
- Foreman-Peck, J., Makepeace, G., & Morgan, B. (2006). Growth and profitability of small and medium-sized enterprises: Some Welsh evidence. *Regional Studies*, 40(4), 307–319. https://doi.org/10.1080/00343400600725160
- Garcia-Teruel, P. J., & Martinez-Solano, P. (2007). Effects of working capital management on SME profitability. *International Journal of Managerial Finance*, 3(2), 164– 177. https://doi.org/10.1108/17439130710738718
- Giacomini, E., Ling, D.C., & Naranjo, A. (2017). REIT leverage and return performance: Keep your eye on the target. *Real Estate Economics*, 45(4), 930–978. https://doi. org/10.1111/1540-6229.12179
- Gill, A., Biger, N., & Mathur, N. (2010). The relationship between working capital management and profitability: Evidence from the United States. *Business and Economics Journal*, 10, 1–9.
- Hill, M. D., Kelly, G. W., & Hardin III, G. (2012). Market value of liquidity. Journal of Real Estate Finance and Economics, 45(2), 383–401. https://doi.org/10.1007/ s11146-010-9280-1
- Hull, R. M. (1999). Leverage ratios, industry norms, and stock price reaction: An empirical investigation of stock-for-debt transactions. *Financial Management*, 28, 32–45. https://doi.org/10.2307/3666193
- Jacob, M., & Michaely, R. (2017). Taxation and dividend policy: The muting effect of agency issues and shareholder conflicts. *The Review of Financial Studies*, 30(9), 3176–3222. https://doi.org/10.1093/rfs/hhx041
- Jakpar S, Tinggi, M., Siang T. K., Johari, A., Myint, K. T., & Sadique, M. S. (2017). Working capital management and profitability: Evidence from manufacturing sector in Malaysia. *Journal of Business & Financial Affairs*, 6(2), 1–9.
- Jiang, G. H., Lee, C. M. C., & Yue, H. (2010). Tunneling through intercorporate loans: The China experience. *Journal of Financial Economics*, 98(1), 1–20. https://doi. org/10.1016/j.jfineco.2010.05.002
- Jose, M. K., Lancaster, C., & Stevens, J. L. (1996). Corporate return and cash conversion cycle. *Journal of Economics and Finance*, 20, 33–46. https://doi.org/10.1007/ BF02920497
- Kachlami, H., & Yazdanfar, D. (2016). Determinants of SME growth: The influence of financing pattern. An empirical study based on Swedish data. *Management Research Review*, 39(9), 966–986. https://doi.org/10.1108/MRR-04-2015-0093

- Kieschnick, R., LaPlante, M., & Moussawi, R. (2006). Corporate working capital management: Determinants and Consequences. University of Texas, Dallas.
- Kumar, P., & Li, D. M. (2016). Capital investment, innovative capacity, and stock returns. *The Journal of Finance*, 71(5), 2059–2094. https://doi.org/10.1111/jofi.12419
- Mateev. M., & Anastasov, Y. (2010). Determinants of small and medium sized fast growing enterprises in central and eastern Europe: A panel data analysis. *Financial Theory* and Practice, 34(3), 269–295.
- Mathuva, D. (2009). The influence of working capital management components on corporate profitability: A survey on Kenyan listed firms. *Research Journal of Business Management*, 3, 1–11. https://doi.org/10.3923/rjbm.2010.1.11
- Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporate finance, and the Theory of Investment. *American Economic Review*, 48, 261–297.
- Modigliani, F., & Miller, M. H. (1963). Corporate income taxes and the cost of capital: A correction. American Economic Review, 53(3), 433–443.
- Myers, S. C. & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187–221. https://doi.org/10.1016/0304-405X(84)90023-0
- Naser, K., Nuseibeh, R., & Al-Hadeya, A. (2015). Factors influencing corporate working capital management: Evidence from an emerging economy. *Journal of Contemporary Issues in Business Research*, 2(1), 11–30.
- Pais, M. A., & Gama, P. M. (2015). Working capital management and SMEs profitability: Portuguese evidence. *International Journal of Managerial Finance*, 11(3), 341– 358. https://doi.org/10.1108/IJMF-11-2014-0170
- Petersen, M. A., & Rajan, R. G. (1997). Trade credit: Theories and evidence. *The Review of Financial Studies*, 10(3), 661–691. https://doi.org/10.1093/rfs/10.3.661
- Pinkowitz, L., & Williamson, R. (2007). What is the market value of a dollar of corporate cash? *Journal of Applied Corporate Finance*, 19(3), 74–81. https://doi. org/10.1111/j.1745-6622.2007.00148.x
- Raheman, A., & Nasr, M. (2007). Working capital management and profitability: Case of Pakistani firms. *International Review of Business Research Papers*, 3, 279–300.
- Rahman, A. H. A. B., & Muhamad, S. F. (2013), Corporate governance and firms cash holding in Malaysia. Proceeding of the International Conference on Social Science Research, ICSSR 2013, 4–5 June 2013, Pulau Pinang, Malaysia.
- Rauh, J. D., & Sufi, A. (2010). Capital structure and debt structure. *The Review of Financial Studies*, 23(12), 4242–4280. https://doi.org/10.1093/rfs/hhq095
- Ross, S. A., Westerfield, R. W., & Jordan, B. D. (2011). Fundamentals of corporate finance. New York: McGraw Hill Book Co.
- Sabki, S., Wong, W. C., & Regupati, A. (2019). SME liquidity and its determinants. International Journal of Business and Society, 20(1), 111–124.
- Salam, M. A. (2013). Effects of lease finance on performance of SMEs in Bangladesh. International Journal of Science and Research, 2(12), 367–370.
- Salikin, N., Wahab, N.AB., & Muhammad, I. (2014). Strengths and weaknesses among Malaysian SMEs: Financial management perspectives. *Procedia Social and Behavioral Sciences*, 129, 334–340. https://doi.org/10.1016/j.sbspro.2014.03.685

- Shin, H. H., & Soenen, L. (1998). Efficiency of working capital and corporate profitability. *Financial Practice and Education*, 8, 37–45.
- Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. *Journal of Finance*, 43(1), 1–19. https://doi.org/10.1111/j.1540-6261.1988.tb02585.x
- Wilner, B. S. (2000). The exploitation of relationships in financial distress: The case of trade credit. *The Journal of Finance*, 55, 153–178. https://doi.org/10.1111/0022-1082.00203
- Zainudin, N., & Regupathi, A. (2011). Manufacturing SMEs' credit collection period and its determinants: Some evidence from Malaysia. *Folia Oeconomica Stetinensia*, 9(1), 83–104. https://doi.org/10.2478/v10031-010-0011-9