INVESTMENT AND FINANCING WORKING CAPITAL POLICY TOWARDS THE FINANCIAL CAPABILITY OF SMALL AND MEDIUM ENTERPRISE (SME) IN MALAYSIA

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ABSTRACT: *One of the most significant contributors to financial incompetency of Small and medium-sized enterprises (SME) in Malaysia is the ineffective working capital management. Motivated by a lack of research on working capital practices of SME in Malaysia, an analysis for a sample of 116 SMEs registered with the SME Corporation of Malaysia; covering the period of 2009-2014 was analysed. This study performs a preliminary analysis in identifying the influence of investment and financing working capital policy for SME in the Malaysian context towards firm's financial capabilities. Applying correlations and Pooled Ordinary Least Square Regression analysis, the results provided evidence indicating significant associations between level of aggressiveness of Investment and Financing Policy towards SME financial capabilities. This study provides significant contribution towards the literature on working capital policy for SME by studying the effects of the level of conservativeness and aggressiveness of the investment and financing policies in the management of working capital from Malaysia perspectives.*

Keywords: Investment Policy, financing policy, working capital management, financial capability

1. INTRODUCTION

The contribution of Small and Medium Enterprise (SME) as one of the key drivers towards the transformation of Malaysia to a high-income economy is inevitable. With 97% from total business establishments accounted for 662,939 SMEs, collectively, they are becoming a major source of GDP (32.7%) as compared to larger firm (67.3%), which evidenced the prodigious forte of the Malaysian economy [1]. While a number of SME has strived in becoming strong and respected corporations by being listed in Bursa Malaysia main board and ACE markets, many more still struggle towards long-term growth, profitability and survival [2] over the challenges that have emerged in recent times. Subsequently, one of the significant features that have led to SME's incompetency is the ineffective management of working capital which is considered as one of the most important facets of financial management. This was further highlighted in several past researches that concluded that the failure of small businesses was attributed by inefficient working capital management (WCM) and long-term financing [3, 4]. Hence efficient management of WC is considered as one of the pre-conditions for the firm's ability [5] in ensuring sufficient level of working capital to continue its operation [6] Consequently, SME has a larger proportion of current assets, less liquidity, volatile cash flows and heavy reliance on short-term debt such as trade credit and bank overdrafts for short-term financing as compared to larger firms [7].Thus, , WCM is an important issue that should be addressed by SMEs especially in understanding the basic working capital drivers and the minimum level of working capital that firms should maintain. These are pertinent to SMEs as compared to their larger counterparts [6] given the limited financial resources available and heavy reliance on working capital as a vital source of finance [8]. Despite the importance of WCM, limited number of domestic studies was found on working capital of SME even though Malaysian firms showed unsatisfactory working capital performance over the years [9]. In addition, the preliminary study conducted within a small sample of SMEs in Malaysia by [10] revealed that the selected sample of SMEs was less efficient in managing their working capital. Thus, it is important to identify and examine the working capital policy used by the SMEs in managing their current assets and liabilities. There are two alternative strategies of working capital management, i.e. conservative and aggressive working capital management policy, which have raised an extensive debate on the risk/return trade-off between the two different policies [11]. This study has attempted to expand the preceding analysis by [12] that focused solely on the investment policy of working capital among the SMEs. The current study is differentiated from the previous study in two different aspects ;i) the working capital policy was analyzed from the viewpoint of both financing and investment parts of working capital; and ii) ascertaining the effects of investment and financing working capital policies towards SMEs' financial capabilities.

2. LITERATURE REVIEW

The working capital policy was represented by the approach in providing guideline to manage the current assets and current liabilities with the main objective of reducing default risk [13]. Thus, the need for a policy towards efficient management of working capital is indisputable. Consequently, a firm's working capital policy's decisions provide a significant influence concerning the firm's liquidity and subsequently, on the firm's profitability [14]. Consequently, the firm's ability in optimizing the required amount of working capital that could boost a firm's profitability and minimize risks is considered as an optimal policy.

The trade-off theory between risk and return can be explained through two different working capital policies with two distinct approaches, namely the conservative approach and the aggressive approach (see in [15,16,17,18,19]. The conservative approach is a strategy of keeping a large amount of capital in current assets as compared to the fixed-assets. This strategy will help the firms to reduce the risk of short-term cash shortage. However, in the long run, it may affect the profitability; which is offset by the opportunity cost of the unproductive assets that could have been utilised in

generating return on working capital. The implication of this approach is that it yields a lower expected profitability resulting from a lower risk [16].

In contrary, the aggressive approach of working capital policy refers to the higher risk with higher return strategy. The aggressiveness of working capital management is evidenced from the capital being minimized in current assets over fixed-asset which may increase liquidity risk. It indicates that the firm uses its long-term capital to finance all of its fixed assets; while short-term credit is used in the financing of its current assets [20] that could lead to higher risk of default and bankruptcy. The aggressive approach will yield to a higher profitability resulting from higher risk and lower working capital [16]

[15] were considered as one of the pioneers in the issues of working capital management policy by discussing the aggressive and conservative working capital management policies. Their study concluded that industries had distinctive and significantly different working capital management policies. [17] also indicated similar results from the viewpoint of seventeen industrial groups of public limited companies in Karachi Stock Exchange. Their study also depicted significant differences among firm's working capital investment and financing policies across different industries. A study conducted by [21] for a sample of Jordanian firms for the period of 2004 to 2007 indicated a negative relationship between the firm's profitability with the degree of aggressiveness in working capital investment and financing policy. Their study has proven that a firm yields negative returns if the firm follows an aggressive working capital policy. Furthermore, the study conducted on a sample of Malaysian listed firms by [19] has disclosed significant relations between return factors with the firm's working capital management policy. In addition, [12] focused only on the effects working capital policy from the investment point of view on the SME in Malaysia and found a significant relationship between the level of aggressiveness of investment policy and SME's financial performance.

The previous cited study provided a foundation towards initiating the idea of working capital management and its components. Nonetheless, reported studies on working capital management policy measures with reference to SME in Malaysia are yet to be published. Hence on the basis of previous researches done in different countries, the established review of the literature has provided an ideal reference, source of materials and research writings concerning working capital profile of SME in Malaysia that has resulted in the development of the research's hypotheses:

H1: There is a significant relationship between working capital policy and SME's financial performance

3. RESEARCH METHODOLOGY

To accomplish the aforementioned research objectives, this study focuses on SME registered under Small and Medium Industries Development Corporation (SMIDEC) within a time period of 6 years, from year 2009 to 2014. From a sample of 250 selected manufacturing firms, only 107 companies were considered valid for analysis as the rest were deemed ineligible due to missing information with odd reported figures.

For the dependent variable, the selected variable was based on the definition of financial capabilities as the capacity to manage financial resources and use financial services in a way that best suits individual needs and the prevalent social [22].Therefore, it is pertinent that the measures of financial capabilities of SMEs in terms of growths and sustainability of these companies within their respective industries are incorporated in the model. Thus, following the study conducted by [12], the Return on Total Assets (ROA) was used as an indicator to represent SME's financial capabilities. ROA is known to be an acceptable measurement of profitability, thus, one could use ROA to gauge the financial success of a firm. Another variable that was used to represent the financial capabilities is the Z-score developed by [23], which was intended for the manufacturing sector. The function of Z-score in predicting the firm's financial distress can be used to measure the SME's financial capability. In this study, Altman's Z-score model utilises the financial ratios in predicting and estimating the overall financial health of Malaysia's SMEs. The relevance of Altman's model in representing the financial capabilities of SMEs in Malaysia is practical since it is considered as a reliable statistical model in determining a firm's financial health and the likelihood of bankruptcy within 1 to 2 years. It is calculated according to the [23] model for manufacturing firms given by the following expression:

ZSCORE= 3.3*X1 + 1.2*X2 + 1.0*X3 + 0.6*X4+
1.4* X5

Where X1= (Earnings before Interest & tax/Total Assets)
X2= (Net Working capital /Total Assets)
X3= (Sales/Total Assets)
X4= (Market Value Equity / Book Value Debt)
X5 = (Accumulated Retained Earning / Total Assets)

The Z-SCORE was used to rank the firms according to the index developed by [23]. The distress reference values were categorised into three different ranges as per below:

Z-Score< 1.81 indicates bad financial capabilities with larger likelihood of bankruptcy
1.81 <Z-Score< 2.99 is a grey area
Z-Score> 2.99 indicates good financial capabilities with less likelihood of bankruptcy.

As for the independent variable, this study utilized investment policy (IP) and financing policy (FP) to represent working capital policy following the studies done by [12,15,17,18,,19] IP relates to an approach that identifies the level of investment in current assets against the fixed assets. The SMEs are said to follow the conservative IP by increasing investment in the current assets. On the contrary, an aggressive IP is denoted by the reduction of investment in current assets. The following ratio was used to measure the degree of aggressiveness, whereby a lower ratio of IP indicates a relatively conservative policy:

Investment Policy (IP) = Total Current Assets / Total Assets,

In term of the firms financing policies, SME firms can use the current or long term debt to finance its operations. The conservative financing policy is represented by the firm's financing policy that heavily relies on long term debts. As oppose, the aggressive policy is more dependable on the usage of current liabilities to finance its operations. The following ratio was used as proxy to measure the Financing

Policy (FP) whereby higher ratio means a relatively aggressive policy:

Financing Policy (FP) = Total Current Liabilities / Total Assets.

For the control variable, this study used asset tangibility (FATO), leverage (LEV) and firm size (SIZE). The asset tangibility was measured by using fixed assets turnover (FATO). Since the financial capability is represented by the probability of distress, thus, asset tangibility can be used to measure the liquidation value of SMEs in the event of distress. It reflects the function of fixed assets as the collateral with higher liquidation values on the firm's leverage [24]. Next, Current Ratio was used to represent the liquidity of SME by taking Current asset over Current Liability. Meanwhile SIZE indicated the size of SMEs using log value of sales.

Subsequent, the relationship between the market performance and market indicators was estimated using the following regression equations:

$ROA = a + ß_1IP_1 + ß_2FP_2 + ß_3CR_3 + ß_4FATO_4 + ß_5SIZE_5 + e$

$ZSCORE = a + ß_1IP_1 + ß_2FP_2 + ß_3CR_3 + ß_4FATO_4 + ß_5SIZE_5 + e$

4. RESULTS AND DISCUSSION

Table 1. Correlations Analysis

	ROA	ZSCORE	IP	FP	CR	FATO	SIZE
ROA	1	.278**	.100*	-.147**	.190**	0.042	-0.016
ZSCORE	.278**	1	.230**	-.549**	.653**	.101*	.233**
IP	.100*	.230**	1	.180**	.181**	.308**	-.108**
FP	-.147**	-.549**	.180**	1	-.500**	0.041	-.252**
CR	.190**	.653**	.181**	-.500**	1	0.068	-0.016
FATO	0.042	.101*	.308**	0.041	0.068	1	-0.036
SIZE	-0.016	.233**	-.108**	-.252**	-0.016	-0.036	1

**. Correlation is significant at the 0.01 level (2-tailed

*. Correlation is significant at the 0.05 level (2-tailed)

.The existence of the multicollinearity within the selected variable was tested using Pearson correlation analysis as reported in Table 1. The results depicted low correlations between the variables indicating that there were no multicollinearity problems. According to [25], multicollinearity problems will exist when the correlations value exceeds 0.80.

ROA has indicated a positive significant coefficient with IP (0.100) and CR (0.190), while negative significant coefficient FP (-0.147). For ZSCORE, the results depicted positive significant coefficient with IP (0.230), CR (0.190), FATO (0.101) and SIZE (0.233), while negative coefficient with FP (-0.549). This study thus corroborates with the study done by [19] indicating positive significant coefficient between ROA and firm's Investment policy and Financing policy in its working capital management. The magnitude of the Pearson correlation coefficient determines the strength of the correlation but there are no rules that specify the strength of association to particular values. [26] indicated that the coefficient with $r < 0.3$ does designate a small coefficient as exhibit by the correlations' result in Table 1. Though results of the estimated correlation coefficient illustrate the negative and positive correlations among the variable selected, the values are still considered low to cause any concern in the regression model.

The multiple regression analysis was performed using 642 firm-years observations to test the hypothesis that a firm's level of ROA and ZSCORE is a function of five tested variables, which are investment policy, financing policy, fixed asset turnover, current ratio, and size. The results for the multiple regression analysis are presented in Table 2.

Table 2. Regression Results of ROA and ZSCORE with Working Capital Policy

	ROA	ZSCORE	Collinearity Statistics	
	B (t)	B (t)	Tolerance	VIF
IP	4.296 (2.163*)	2.222 (7.415**)	0.796	1.256
FP	-3.618 (-2.367*)	-2.175 (-9.433**)	0.621	1.611
CR	0.446 (2.383)	0.402 (14.239**)	0.658	1.521
FATO	0.001 (0.219)	0.001 (0.816)	0.905	1.105
SIZE	-0.484 (-0.812)	0.61 (6.777**)	0.91	1.099
R	0.221	0.753		
R Square	0.049	0.566		
F (p-value)	6.546 (.000)	166.077 (0.000)		
D-Watson	2.025	2.067		

**. Correlation is significant at the 0.01 level (2-tailed

*. Correlation is significant at the 0.05 level (2-tailed).

The severity of multicollinearity for this study was tested using the variance inflation factor (VIF) which is simply the reciprocal of Tolerance (i.e., 1 divided by Tolerance). The results will indicate a sign of collinearity problem if the Tolerance value is less than 0.1; and VIF of greater than 10.

Based on Table 2, the Collinearity Statistics indicates that all the Tolerance values are greater than 0.1 (the lowest is 0.621).

Thus, it can be concluded that the problem of collinearity is non-existent in this particular data set. Even though there are no formal VIF values, the values of VIF that exceed 10 are

often regarded as indicating multicollinearity [27]. In addition, Durbin-Watson statistic was used to assess the independence of residuals. The Durbin-Watson statistic can range from 0 to 4, but a value of approximately 2 indicates that there is no correlation between residuals. Based on the results, Durbin-Watson statistic is 2.025 for ROA and 2.067 for ZSCORE which is very close to 2, so it can be safely presumed that there is an independence of errors (residuals).

Results of the regression analysis in Table 2 reaffirm the research hypothesis. The results for ROA and ZSCORE depict a significant positive coefficient with Investment policy (+4.296) at 5 % significant level and (-2.614) at 1% significant level respectively. The positive coefficients of ROA and ZSCORE with IP signify a negative relationship between the degrees of aggressiveness in a firm's investment policy with both financial capabilities measurements. IP represents the level of investment in current assets over fixed assets, thus higher ratio implies an increase in the level of investment in the current assets. Consequently, it indicates a conservative's management of investment policy which emphasizes more investment in liquid assets [15]. The results showed that the implementation of conservative investment policy among SME's in Malaysia will contribute towards a significant improvement in SME's financial capabilities. The results portrayed from this research are similar to the studies conducted by [18] and [19] which also indicate a positive relationship between ROA and conservative investment policy. Surprisingly they are also similar to the previous study done by [19] on listed firms in Bursa Malaysia. This shows that SMEs in Malaysia exhibit working capital policy consistent with its larger counterparts.

In term of financing policy, the results indicate negative coefficients with ROA (-2.367) at 5% and ZSCORE (-9.433) at 1% significant level. This results mark the negative relationships between financing policy with SMEs' financial capabilities. The negative coefficients of ROA and ZSCORE with FP signify a negative relationship between the degrees of aggressiveness in firm's financing policy with both financial capabilities. A decrease in FP indicates a conservative's management of financing policy whereby firms focus more on long-term financing as compared to current liability financing. The results of the current study also corroborates with those reported by [18].

In addition, CR has depicted positive significant relationships with ROA (2.383) at 5% and ZSCORE (14.239) at 1% significant level. This results evidence the positive relationships between the CR with SME financial capabilities, which implies that the higher the liquidity of SMEs, the better their financial capabilities. This has portrayed the importance of maintaining liquidity from the viewpoints of SMEs in ensuring a smooth running of business in meeting their financial obligations and their day-to-day operations [28]. The positive relations between CR and ZSCORE signify the importance of liquidity among the SMEs in assessing the SME financial strength. Higher values of CR signify good SME's financial capabilities with less likelihood of bankruptcy. [29] emphasized that uncontrolled illiquidity contributes towards the risk of insolvency and eventually, bankruptcy as the amount of liabilities exceed the total assets. FATO does not provide any significant results for both ROA and ZSCORE, while SIZE is only significant with ZSCORE (6.777) at 1 % significant level. Thus, it indicates the effects of size on SME's financial capabilities; the larger the size, the lower the likelihood of bankruptcy.

The regression results support hypotheses 1 as depicted in Table 2 and the F statistics is substantiated at the 1% significant level for ROA (6.546) and ZSCORE (666.077). Therefore, the results imply that the null hypotheses can be rejected at 5% and 1% level of significance. The estimated regressions for hypotheses 1 is efficient for predictions, and the hypotheses can be accepted implying that there are associations between investments and financing policies of working capital with SMEs' financial performances in Malaysia.

5. CONCLUSION

This paper attempts to find the effects of working capital management policy towards SMEs' financial performances from the Malaysian SMEs' perspectives. In confirming the postulated hypotheses, this study tested ROA and ZSCORE model along with the investment policy and financing policy for 107 selected SME registered with the SME Development Corporation of Malaysia for the period of 2009 until 2014. By applying multiple regression analysis, the results evidence the significant linkage between working capital policies and SME's financial capabilities. Nonetheless, it is hoped that this study could provide significant contribution towards the literature on working capital policy for SME by studying the effects of the level of conservativeness and aggressiveness of the investment and financing policies in the management of working capital from Malaysia perspectives. It is recommended that the study is further improved with more samples of SMEs; testing with other measures for SME's financial performance; and external variables which could contribute towards a stronger relationship within the selected variables. The future enhancement on this issue could help to uncover the efficient working capital management in the perspective of the SMEs in Malaysia. Thus, this study is left to be further explored in the future.

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7. REFERANCE

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