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Relationship between financing facilities and small and medium industries: empirical evidence from ARDL bound testing approach

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Abstract

A major challenge to the competitiveness of sustainable economic development is a country's global economic position. Small and medium industries, supposed to be drivers of economic development of a country, receive much of negative impact following the global economic uncertainty environment. This includes facing increasingly critical financial facilities. This study seeks to analyze the empirical relationship between small and medium industries and the financing facilities in the short-run and long-run in the state of Sabah, Malaysia. The ARDL bound testing approach was applied, using annual time series data for the years between 1976 through 2005. The successes of small and medium industries have been related to availability of financing facilities. Results show that the relationships between small and medium industries and financing facilities seem to exist in the long-run. In addition, there is a causal relation between small and medium industries and financial loan. The conclusion is that financing facilities may not be the most important factor in the development of small and medium scale industries, but small and medium industries on the other hand functions as the paramount important factor in the development of financing facilities.

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1. INTRODUCTION

The establishment of Malaysia's Small and Medium Enterprise Bank (SME Bank) in the year 2005 has become a catalyst to the growth and development of small and medium enterprises (SME) in Malaysia. This establishment of SME Bank was the result of the reunification of the Development Bank & Malaysia Infrastructure Limited (*Bank Pembangunan & Infrastruktur Malaysia Berhad (BPIMB)*) and the Industrial Bank & Malaysia Technology Limited (*Bank Industri & Teknologi Malaysia Berhad (BITMB)*). Its establishment is expected to be able to give significant positive impact to the enterprise sector's growth which has become the country's economic development (Mohd Sani 2005). The establishment of the SME Bank in the year 2005 has further accelerated the development in the SME sector through the provision of MYR1 billion in funds. There are approximately 600,000 SMEs nationwide involved in various fields such as agriculture, manufacturing and service (Berita Harian, January 2006; Bank Negara Malaysia). Based on the information from the Ministry of Industrial Development (Sabah), Small and Medium Industries (SMI) have existed in Sabah since 1978. At the time, SMI in Sabah comprised of only four units and this number has increased over the years. By 2005, the same records show as many as 576 SMI in Sabah.

SMI is not an emerging industry in Malaysia. This industry started to expand in other countries such as the United States of America, Japan, Britain and South Korea. Since its beginnings, there already exist many studies made by researchers to gain deeper insights of SMI both in and out of Malaysia. Developed countries such as the United States of America, Britain and Japan have paid close attention to SMI because this industry is able to contribute tremendously to the Gross Domestic Product of the country. Similarly in Malaysia, studies are continuously conducted to further develop SMI so that this industry can contribute to the national economy such as providing work opportunities to local people and be a driving force to large industries.

Most of the previous researches on SMI are more focused on ways to obtain loans from financial institutions, problems in obtaining loans, interest rates imposed by the banks and so forth using surveys and questionnaires. However, there have been no studies that used secondary data done on the relationship between SMI and financing facilities especially in Malaysia. This study however, more focused in analyzing (empirically) the relationship between small and medium industries and financing facilities both in short-run and long-run in the state of Sabah.

This study is divided into five parts. Part 1 was the introduction. Part 2 provides a short literature review. Data and methodology are discussed in Part 3, while the outcome of the empirical decision is elaborated in Part 4. Part 5 will discuss the findings and conclusion to the study.

2. SELECTED LITERATURE REVIEW

Currently, there is no solid definition of SMI in Malaysia. Different organizations that support SMI have their own different definitions. These definitions are often based on fixed quantitative criteria, such number of employees, amount of capital, amount of assets and more recently, sales turnover. A study conducted by the Georgia Institute of Technology in United States of America has identified about 55 different definitions of SMI from 75 countries in the world (Mohd Asri 1997). Based on the report of the Ministry of International Trade and Industries (MITI) in Malaysia, a small industry is a manufacturer who possesses a paid-up capital of not more than MYR0.5 million or employs no more that 50 full-time workers. A medium industry refers to a company that has asset ownership between MYR0.5 million to MYR2.5 million or has 50 to 199 employees. Therefore, SMI is defined as an industry that has assets not exceeding MYR2.5 million or has not more 200 full-time workers.

In relation to SMI, although banks provide various forms of credit and loan facilities, there is still difficulty to obtain credit and loan facilities for most SMI operating in Malaysia. This is often due to problems related to the absence of equivalent collateral or a suitable guarantor which led to their applications having being turned down by banks or financial institutions. Apart from that, lack of proper business documentations is another reason for banks to reject their applications. Such situation is due to most SMI lacking orderly account management system which can be used as evidence in loan application. According to Ishak and Wook (1989), the industry also faces some problems especially when obtaining loans. Their study shows that this is due to competition with large-sized industries. Their research also showed that most SMI faced financial problems and found it difficult to get loans from commercial banks. Although there are loan facilities provided by financial agencies, lots of SMI entrepreneurs are not able to afford to take up loans because of problems in repayment and interest rates. According to Mohd Asri (1997), in his study on SMI loan problems, capital or credit is amongst the most common problems faced by SMI. This problem was not only faced by Malay entrepreneurs but also amongst Chinese and Indian entrepreneurs. His findings showed that about 71 percent of SMI faced problems in seeking financial assistance or credit from commercial banks and other financial institutions. In addition, his results also indicated the lack of capital or credit to be due to several factors. Firstly, there is a lack of financial funds and capital in SMI due to low rate of return and little or low profit. Secondly, in most cases, SMI also gives a credit facility to their customers. This granting of credit surely influenced the funds status and reduced their revolving capital. There also exist cases where SMI entrepreneurs are forced to bear the loss when their customers do not repay the credit facilities given to them.

Mohd Khairuddin (2002) did a study on the effect of loan guarantee schemes on SMI in Kedah and Penang in 1972. This study was carried out to explain how the establishment of the Credit Guarantee Cooperation in 1972 was to provide loans to SMI entrepreneurs through commercial banks. According to him, one of the major objectives of the Credit Guarantee Cooperation was to help SMI get financial assistance especially for SMI which has no or little capital to carry out their business operations. This is because the Credit Guarantee Cooperation will provide specific loan schemes to SMI for them to get loans from commercial bank. However, the outcome of his research show that loan processes through this scheme was not as successful as expected. Mohd Nor (2003) found there are numerous problems between SMI and banks such as moral disaster (moral hazard), conflicting selection (adverse selection) and symmetrical problems. Symmetrical problem occurs when the manager of an SMI has more information on its financial and business positioning compared to the loan provider, namely the bank. Usually in SMI cases, information is difficult to be acquired due to security reason. SMI entrepreneurs do not disclose the actual quantity or quality of their financial positioning although the company is doing well. SMI entrepreneurs are also fear that such information can be used against by their competitors. Inability to provide such important information leads to their failure in securing a loan from the bank.

Hasnah and Rahmah (1989) study on SMI in South Korea focusing on the development and problems encountered by the industry found that the South Korean government played an important role in developing their local SMI. This is because the government would propose, or use the cooperative laws with financial institutions to provide credit to SMI. Among the schemes provided by commercial bank was Production Loans for Small Industries, Loans from Vested Property Funds and Loans from Counterpart Funds. Meanwhile, Ennew and Binks (1996), in a survey report which made by Forum Private Business (FPB) based on 6,101 respondents in England and Scotland tried to study the relationship and its effect between banks and SMI. In their study, although Scotland and England are two province located in the same country namely Britain, there still exist differences in their respective SMI. The result of their survey found that 29 percent of the firms were experiencing returns of less than 150,000 pound sterling each year (30% in England and 25% in Scotland).

Madeline and Faridah (1989) conducted a research SMI in Japan and found that the Japanese government also helped in developing local SMI by providing several facilities and laws to meet the needs of SMI. According to their research, there are three main sources which enabled SMI to acquire financial assistance: government institutions, private and special financing programmes (dubbed as credit guarantee programme) and credit insurance. Three major government financial institutions established specifically to aid SMI are Small Business Finance Corporation (SBFC), Peoples Finance Corporation (PFC), and Central Bank for Commercial and Industrial Cooperatives (CBCIC). Among the financial support given by SFBC and PFC include providing funds for equipment and also capital to develop SMI which did not manage to acquire any aid from other financial institutions.

In general, private institutions which gives financial assistance to SMI is divided into two, namely banks and private financial institutions which specialize in SMI. Banks comprise of commercial banks, local banks, banks that give long-term credit and also trust bank. These banks are the most important financial institutions in providing financial aid because it is found that 47 percent of loans towards SMI are derived from this source. Specific private financial institution for SMI on the other hand comprises of mutual loan and saving bank, credit union and co-operative credit. Although there are some similarities between the roles of these institutions with the bank, one important difference is that these institutions impose tighter conditions to the borrower and usually priority for loans is given to SMI members (Madeline and Faridah 1989). Harper's (1984) study on SMI focused on their problems, financial resources, management system and marketing tactics. On SMI financial resource, it involved various parties which greatly affected those involved in SMI financial loan transactions. For example, it affected banks which acted as lenders to SMI firms. The banks operate by gaining as much profit as possible through their products to those who are interested in using the banks' facilities. A bank's principal activity is to provide loans to those who need capital in starting a business or in financing houses, vehicles and the like. With this, banks would try profit by offering interest rates which seem to able to give high return value. As such, banks will impose a low or special interest rate to SMI through advice from the central bank. This is a common practice in most countries whereby the central bank will intervene to determine the interest rates for SMI firms when obtaining any loan from local banks.

3. METHODOLOGY

The data on the number of Small and Medium Industries (*SMI*) firms were obtained from the Ministry of Industrial Development (Sabah), while the amount of financial loan (*L*) as a proxy for financing facilities was obtained from the Central Bank of Malaysia's Annual Economic Report. Time Series data used is annual data starting from the year 1976 to 2005.

A long-run and short-run dynamic relationship analysis was made using the ARDL bound testing approach. In order to test the existence of unit root or stationary test, the Dickey-Fuller test (DF) or Augmented Dickey-Fuller (ADF), Phillips-Perron (PP) and Dickey-Fuller-Generalized Least Squares (DF-GLS) were used. The selection of suitable lag length was made based on Schwarz Information Criterion (SIC). Generally, we only have limited knowledge about the economic processes that determine the observed data. Thus, while models involving such data are formulated by economic theory and then tested using econometrics techniques, it has to be recognized that theory in itself is not enough. For instance, theory may provide little evidence about the processes of adjustment, which variables are exogenous and indeed which are irrelevant or constant for the particular model under investigation (Hendry, Pagan and Sargan, 1984). A contrasting approach is based on statistical theory, which involves trying to characterize the statistical processes whereby the data were generated.

To begin with, the functional exact relationship between the two variables where y_t is a function of x_t can be specified using mathematical expression as follows:

$$y_t = f(x_t) \tag{1}$$

or in a linear form:

$$y_t = \alpha + \beta x_t \tag{2}$$

where y_t is small and medium industries (*SMI*) at time *t*, x_t is financial loan (*L*) at time t, and where α and β are unknown parameters of the model. The purely mathematical model of the *SMI* function given in equation (2) is of limited interest to the most researchers, for it assumes that there is an exact or deterministic relationship between *SMI* and *L*. But relationships between economic variables are generally inexact because, in addition to *L*, other variables may affect *SMI*. Thus, to allow for the inexact relationship between economic variables, this can be modifying the deterministic *SMI* function as follows:

$$y_t = \alpha + \beta x_t + u \tag{3}$$

where *u*, known as the disturbance, or error term, is a random (stochastic) variable that has well-defined probabilistic properties. The disturbance term *u* may well represent all those factors that affect SMI but are not taken into account explicitly.

In the first step, this study conducts unit root tests to check the order of the variables used by using the Dickey-Fuller (DF) or Augmented Dickey-Fuller (ADF), Phillips-Perron (PP) and Elliott-Rothenberg-Stock (DF-GLS) tests. The DF and ADF (Dickey and Fuller, 1979) test are based on the following regressions,

$$\Delta y_t = \alpha + \delta y_{t-1} + \varepsilon_t \tag{4}$$

where Δ is the first difference operation, ε_t is the stationary random error and y_t is variable series. The null hypothesis for this test was $\delta = 0$. If the null hypothesis $\delta = 0$ cannot be rejected, then the data set y_t contain unit root (non-stationary).

$$\Delta y_t = \alpha + \delta y_{t-1} + \sum_{i=1}^{n} \beta_i \Delta y_{t-i} + \varepsilon_t \tag{5}$$

where n is the maximum autoregressive levels, α is constant, t is a linear time trend, δ and β_i are slope coefficients, ε_t is the error term. The null hypothesis of non-stationary series is $H_0 : \delta = 0$ against the one-side alternative hypothesis of stationary series, $H_1 : \delta < 0$. The length, n, for the ADF test was chosen by minimizing the Schwarz information criterion. The SIC criterion is defined as

$$SIC = -2\left(\frac{l}{T}\right) + k\frac{\log(T)}{T} \tag{6}$$

where l is the value of the log of the likelihood function with the k parameters estimated using T observations. The various information criteria are all based on -2 times the average log likelihood function, adjusted by a penalty function.

Another alternative approach is Phillips-Perron (PP) test that suggested by Phillips (1987) and extended by Perron (1988) and Phillips and Perron (1988). Rather than taking account of the extra terms in the data-generating process (d.g.p) by adding them to the regression model (as in ADF test), a non-parametric correction to the t-test statistic is under-taken to account for autocorrelation that will be present when the underlying d.g.p. is not autoregressive at first level, AR(1). Phillips and Perron (1988) propose an alternative (non-parametric) method of controlling for serial correlation when testing for a unit root. The PP method estimates the non-augmented Dickey-Fuller (DF) test equation (4), and modified the t-ratio of the δ coefficient so that serial correlation does not affect the asymptotic distribution of the test statistic.

In addition, for maximum power against very persistent alternatives, the third unit root test, the DF-GLS test proposed by Elliott, Rothenberg and Stock in 1996 was used in this study. Elliott et al. (1996) propose a simple modification of the ADF test in which the data are detrended so that explanatory variables are "taken out" of the data prior to running the test regression. They construct the *t*-statistics as follows. First, using the trend parameters $\hat{\beta}_{\bar{\phi}}$ estimated under the alternative, they defined the detrended data as

$$y_t^d = y_t - \hat{\beta}_{\bar{\phi}}' \mathrm{D_t} \tag{7}$$

Elliott et al. (1996) call this detrending procedure as GLS detrending. Next, using the GLS detrended data, estimate by least squares the ADF test regression which omits the deterministic terms as follow

$$\Delta_{y_t}^d = \alpha y_{t-1}^d + \sum_{i=1}^{n} \beta_i \Delta y_{t-i}^d + \varepsilon_t \tag{8}$$

and compute the t-statistic for testing $\alpha = 0$. When $\mathrm{D_t} = 1$, Elliott et al. (1996) show that the asymptotic distribution of the DF-GLS test is the same as the ADF t-test, but has higher asymptotic power (against local alternatives) than the DF t-test.

In the second step, this study employs the Autoregressive Distributed Lag (ARDL) bounds testing approach for cointegration by Pesaran et al. (2001) to check for the long-run movement of the variables as well as to consider the robustness of the results. The ARDL bounds testing approach are given as follow:

$$\Delta y_t = \alpha_0 + \alpha_1 y_{t-1} + \alpha_2 x_{t-1} + \sum_{i=1}^{m} \beta_i \Delta y_{t-i} + \sum_{j=0}^{m} \gamma_j \Delta x_{t-j} + \varepsilon_t \tag{9}$$

where α_0 is the drift component, and ε_t are white noise errors. Following Pesaran et al. (2001), two separate statistics are employed to 'bounds test' for the existence of a long-run relationship: an *F*-test for the joint significance of the coefficients of the lagged levels in (12) (so that $H_0 : \alpha_1 = \alpha_2 = 0$), and a *t*-test for the null hypothesis $H_0 : \alpha_1 = 0$ (see also Banerjee et al., 1998). Two asymptotic critical value bounds provide a test for cointegration when the independent variables are *I*(*d*) (where $0 \le d \le 1$): a lower value assuming the regressors are *I*(0), and an upper value assuming purely *I*(1) regressors. If the test statistics exceed their respective upper critical values we can conclude that a long-run relationship exists. If the test statistics fall below the lower critical values we cannot reject the null hypothesis of no cointegration. If the statistics fall within their respective bounds, inference would be inconclusive. The main advantage of this approach is that it can be applied whether the regressors are *I*(0) or *I*(1) and avoids the pre-test problems associated with standard cointegration analysis (Pesaran et al., 2001). However, Ouattara (2004a) argues that in the presence of *I*(2) variables the computed F-statistics provided by Pesaran et al. (2001) are no more valid because they are based on the assumption that the variables are *I*(0) or *I*(1); therefore, the implementation of unit root tests in the ARDL procedure might still be necessary in order to ensure that none of the variables is integrated of order two or beyond. This technique is also appropriate and robust for small or finite sample size (Pesaran et al., 2001).

The causal relationship issue in this research is tested by using Error Correction Model based on ARDL (ECM-ARDL). Generally, time series variables which are not stationary should not be applied in the regression model to avoid spurious regression. Based on the cointegration test, if both y_t and x_t cointegrated, by the definition $\hat{\varepsilon}_t \sim I(0)$, the said cointegration vector must be used as the error correction element (*error correction term*) in modeling a short run relationship. Generally, in the case where y_t and x_t are stationary variables *I*(0), equation (10) and (11) without the error correction term can be estimated using the least squares method in level form. However, if y_t and x_t are non-stationary variables, *I*(1) and do not cointegrated, the VAR model such as equation (10) and (11) without the error correction term in the first difference form can be used. Whereas equation (10) and (11) in ECM-ARDL framework exactly can be used in the case where y_t and x_t are *I*(1) and cointegrated.

$$\Delta y_t = \alpha_0 + \sum_{i=1}^{m} \alpha_{1i} \Delta y_{t-i} + \sum_{j=0}^{m} \alpha_{2j} \Delta x_{t-j} + \alpha_3 \varepsilon_{t-1} + u_t \tag{10}$$

$$\Delta x_t = \beta_0 + \sum_{i=1}^{m} \beta_{1i} \Delta x_{t-i} + \sum_{j=0}^{m} \beta_{2j} \Delta y_{t-j} + \beta_3 \varepsilon_{t-1} + v_t \tag{11}$$

where ε_{t-1} is error correction term or cointegration obtained from cointegration tests. x_t is Granger cause to y_t if the total of a_{2i} in equation (10) is significant without taking into account β_{1i}. On the other hand, y_t would Granger cause to x_t if the total of β_{1i} in equation (11) is significant without taking into account a_{2i}. Bilateral causal relationship exists between y_t and x_t if both the total of α_{2i} and the total of β_{1i} are significant. Coefficient α_3 and β_3 are referred to as error correction coefficients because both coefficients show a number of variables in y_t and x_t reacting to the cointegration error which is $y_{t-1} - \alpha_0 - \alpha_1 x_{t-1} = \varepsilon_{t-1}$ or $y_{t-1} - \beta_0 - \beta_1 x_{t-1} = \varepsilon_{t-1}$. The rationale is that such error will lead to the correction caused by conditions imposed upon α_3 and β_3 to ensure the stability conditions are fulfilled which are ($-1 < \alpha_3 \leq 0$) and ($0 \leq \beta_3 < 1$).

4. EMPIRICAL RESULTS

The outcome of the unit root tests using ADF, PP and DF-GLD such as in Table I shows that *SMI* series is not stationary at level, but stationary at first difference, *I*(1). *L* on the other hand, is stationary at level if only constant was included in the equation. Nevertheless, if the assumption of constant and trend is hold, *L* series is stationary at first difference for the case of ADF and PP tests, while *L* series seem to be stationary at level when DF-GLS is applied. The cointegration test is made based on the ARDL bound testing approach. This test concludes that both *SMI* and *L* variables could cointegrate in the long-run (see Table II). In other words, there is long-run relationship towards equilibrium between *SMI* and *L*.

Table I: Unit Root Tests

Test Type	Variable	Level		First Difference	
		Constant	Constant & Trend	Constant	Constant & Trend
ADF	SMI	0.312056 (0)	-1.873697 (0)	-3.400997** (0)	-3.256564* (0)
	L	-3.142818** (0)	-3.111475 (0)	-7.052644*** (0)	-6.941081*** (0)
PP	SMI	0.092225 [3]	-2.231237 [4]	-3.337863** [2]	-3.167104* [2]
	L	-3.091014** [1]	-3.077380 [2]	-7.226442*** [4]	-7.077187*** [4]
DF-GLS	SMI	-0.353368 (1)	-1.648185 (1)	-2.850449*** (0)	-3.219810** (0)
	L	-2.718254*** (0)	-2.940946* (0)	-7.108750*** (0)	-7.175659*** (0)

Notes: Figures in ( ) and [ ] indicates number of lag and bandwidth structures respectively. *, **, *** indicates significance at 10%, 5% and 1% levels respectively.

Table II: ARDL Bound Test

Equation: ARDL(1, 1)	F-Statistic
$F\left(SMI\middle|L\right)$	6.5633***
Diagnostic Tests	
R^2 = 0.4346	$Q^2(1)$ = 1.7523
White Statistic = 2.9051	JB = 2.5077
SIC = 8.0359	LM(1) = 1.6986
Q(1) = 0.7057	ARCH(1) = 1.5295
Equation: ARDL(2, 3)	**F-Statistic**
$F\left(L\middle|SMI\right)$	2.3525
Diagnostic Tests	
R^2 = 0.4499	$Q^2(2)$ / $Q^2(3)$ = 0.0063 / 3.3876
White Statistic = 22.8074	JB = 0.8067
SIC = 16.9170	LM(2) / LM(3) = 2.0772 / 3.1223
Q(2) / Q(3) = 0.0232 / 0.8714	ARCH(2) / ARCH(3) = 0.0004 / 2.7680

Notes: ***, **, * denote significant and rejected at the 1%, 5% and 10% levels respectively. Q = Q-statistic for correlogram of residuals, Q^2 = Q-statistic for correlogram of squared residuals, JB = Jarque-Bera statistic, LM = Breusch-Godfrey Serial Correlation LM statistic, and ARCH = Autoregressive Conditional Heteroskedasticity statistic. Figures in ( ) indicates number of lag structures selected based on the SIC. For bound test, the asymptotic critical value bounds are obtained from Pesaran et al. (2001), page 300. Table Case III, intercept and no trend with k = 2. Lower bound, *I*(0) = 5.15 / 3.79 / 3.17 and upper bound, *I*(1) = 6.36 / 4.85 / 4.14 at 1% / 5% and 10% respectively.

Table III: ECM-ARDL Bivariate Causality Test

Variable	VAR(*k*)	*t*-statistic	Wald Statistic
$\Delta L \not\Rightarrow \Delta SMI$	3		1.6034
ε_{t-1}		-0.0140	
Diagnostic Tests			
	SIC = 8.6682	JB = 2.2806	
R^2 = 0.2785	Q(3) = 0.3917	LM(3) = 5.9657	
White Statistic = 8.6624	$Q^2(3)$ = 3.8108	ARCH(3) = 5.6563	
Variable	**VAR(*k*)**	***t*-statistic**	**Wald Statistic**
$\Delta SMI \not\Rightarrow \Delta L$	2		9.6166**
ε_{t-1}		0.2825	
Diagnostic Tests			
	SIC = 16.7372	JB = 0.9057	
R^2 = 0.3952	Q(2) = 0.3934	LM(2) = 1.4590	
White Statistic = 7.6670	$Q^2(2)$ = 0.7961	ARCH(2) = 0.6830	

Notes: ***, **, * denote significant and rejected at the 1%, 5% and 10% levels respectively. Q = Q-statistic for correlogram of residuals, Q^2 = Q-statistic for correlogram of squared residuals, JB = Jarque-Bera statistic, LM = Breusch-Godfrey Serial Correlation LM statistic, and ARCH = Autoregressive Conditional Heteroskedasticity statistic. Figures in ( ) indicates number of lag structures selected based on the SIC.

Therefore, the analysis on the ECM based on ARDL (ECM-ARDL) such as in equation (10) and equation (11) are suitable to be used because a cointegration vector does exists between *SMI* and *L*. Interestingly, the results in this study (see Table III) show that the existence of short-run causality running from the *SMI* to the *L*, but not on the other way round. This leads to the conclusion that, although there is no short-run causality running from the *L* to the *SMI*, but there is single causal relationship running from the *SMI* to the *L* especially in the short-run. This study proposes that *SMI* could contribute to *L* growth in the short-run. Nevertheless, the insignificance of the ECM component, ε_{t-1} for both variables, SMI and L indicates that these variables are weakly exogenous to the model (see Table III). In addition, the diagnostic tests (see Table III) show that the residual follow the normal distribution, no serial correlation, no heteroskedasticity, lastly there is no autoregressive conditional heteroskedasticity (see also Table II).

5. CONCLUSION

SMI is a slow paced industry except for SMI firms which have been in operation for a long time. The total profit acquired in this industry is less, chances for survival is smaller compared to other industries (other than SMI industry) due to competition with other industries and there is also less management organization compared to other industries. The government's move to provide low interest rate to SMI firms would give a silver lining to small industry. Through this, SMI entrepreneurs may be able to pay or settle their debts faster. Therefore, SMI firms also can continue their operation without being burdened by debts and their turnover can be re-invested in their business to as revolving capital. Hence, SMI firms can develop and survive longer this SMI sector.

SMI which has a role to spur the economic development of a country, has received many negative impact following the uncertainty in global economic environment which is further augmented with problems in acquiring financing facilities (financial loan). Problems in acquiring financial aid are often the obstacle faced by most small time entrepreneurs especially when starting a business. Late approval process, stringent loan terms especially when involving guarantors etc. are among the many factors that can stunt SMI growth and development.

This study attempted to answer the question of whether financing facilities are a central element to growth for SMI. Findings show that although the success of SMI is much linked to the availability of financing facilities whether in short-run or long-run, it does not mean that financing facilities is the most important factor in the development of small and medium scale industries. In fact, it's probably has a larger role to accelerate the industrial growth especially in the state of Sabah. However, even without financial loan facilities, there are small time entrepreneurs who are still able to start their business. Their sources of capital may be acquired from their own personal reserve or funds after working with other people or institutions, loan from friends, family and so forth. The result from our study also indicates that SMI plays a paramount important role in the development of financing facilities. This study proposes that SMI in this case could contribute to the growth of financing facilities. In other words, the development in SMI could contribute to the development in financing facilities and eventually indirectly provide more funds to boost the SMI growth. Therefore, the availability of loan facilities from financial institutions and banks, are undoubtedly necessary in order to accelerate the growth and development of the SMI. However, there is a question of the availability of the financing facilities and issue of equality, especially for those small time entrepreneurs. This issue could provide an avenue for future research.

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