Evaluating the Credit Management of Micro-Enterprises

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Abstract: This study assesses the credit management of micro-enterprises in East Malaysia. The micro-enterprises in Malaysia form 80 percent of the Malaysian SMEs and play a significant role in the country's development. Similar to the micro-enterprises in the West and those in the developing countries, securing financing and credit management remain challenging to this group of enterprises. Other than evaluating the credit repayment practices, this study also examined whether factors such as education level, indebtedness as well as capacity to repay credit affects repayment performance. Findings showed that about 59 percent of the respondents did not pay their loans on time. Level of education attained by respondents reported a significant predictive power over their credit management practices. A higher level of education level attained implies better credit management. Besides, it was also found that there was a significant gap between genders in terms of credit management. Meanwhile, higher total liability per month was found to be significantly associated with a higher level of loan defaults. Finally, respondents' financial capability, represented by household income, was proved as not having any significant impact on the credit management of micro- enterprises.

Key-Words: - Credit management, SMEs, Micro-enterprises, Indebtedness, Financial capacity.

1 Introduction

The Small and Medium Enterprise (SME) is the backbone of the economic growth of Malaysia. It represents 99.2 percent of total business establishments in Malaysia. However, 80 percent of the SMEs in Malaysia are micro enterprises (defined as business concerns with less than five full-time employees, and an annual sales turnover of less than RM250,000 in the manufacturing sector and RM200,000 in the agricultural and services sectors). In additional to that, micro-enterprises also represent 78.7 percent of the total business establishments in the country (Bank Negara Malaysia Report, 2009).

In 2005, SMEs contributed 32 percent of GDP and 19 percent of the total exports of Malaysia. In terms of the contribution of SMEs towards the country's employment opportunities, SMEs manage to create 5.6 million employment opportunities, equivalent to 56.4 percent of the workforce in Malaysia (Census of Establishments and Enterprises, 2005). Nevertheless, compared to more developed Asian countries like Japan and China where the SME's contribution is already above 55 percent of the country's GDP, the contribution of

Malaysian SME is still far behind (SME Annual Report, 2007).

The National SME Development Blueprint has made improving the competitiveness, productivity and resilience of the SME sector in Malaysia its main agenda. Besides that, both the Ninth Malaysian Plan and The Third Industrial Masterplan outline key strategies for SME development for the 2006-2010 and 2006-2015 periods respectively. Many agencies were set up to provide assistance to SMEs, nevertheless, a lack of coordination and transparency among these agencies has affected their efficiency (APEC survey, 1994).

According to Ting (2005), among the challenges face by SMEs in Malaysia are: an inability to adopt technology, lack of information on potential markets, difficulties in accessing loans and other forms of financial assistance, a lack of skilled and talented workers as well as global competition. Inevitably, to capitalize on investment opportunities and to adopt best business practices are the main goals for SMEs to compete successfully in the domestic and global market. However, all these can only be achieved with the availability of financing from either the government bodies or via financial institutions.

Access to financial assistance for SMEs is often problematic even in developed western economies (Asselbergh, 2002). The low loan approval rate was likely due to credit rationing of the banks. Besides, the high delinquency of many seemingly good companies due to unscrupulous borrowers who use the funds obtained for personal benefits at the expense of the company has caused banks to become very cautious when reviewing loan applications to minimise default risks.

To facilitate the expansion as well as to provide the working capital and trade financing requirements to the SMEs and the micro-enterprises, the Central Bank of Malaysia has introduced a micro-finance scheme that involves commercial banks and SME banks in the country. This is an appropriate framework in view of the fact that 80 percent of the SMEs in the country are micro enterprises. Under the scheme, no collateral is needed whilst the loan sizes range between RM 500 to RM50, 000.

Nevertheless, proper credit management on the financing received is equally essential to ensure the solvency and long-term survival of the microenterprises. Good credit management will definitely enhance the creditworthiness of the microenterprises and thus, will improve the future financing accessibility of the micro-enterprises.

2 Problem Formulation

Under the guidance of the Central Bank of Malaysia, banking and development financial institutions are targeted to approve RM70 billion in loans to 140,000 SME accounts in 2008. SME financing was accounting for 44.3 percent of total business financing in Malaysia as of the end of March 2008. The majority of the financing granted to the SMEs is micro in nature (SME Annual Report, 2007).

While many SMEs and micro-enterprises had benefited from the various loan schemes obtained from the numerous avenues made available to them, some micro-enterprises face difficulties in managing their debt. According to the Central Bank, as of the first quarter of 2008, 763 applications for loan restructuring with total non-performing loans of RM527 million have been reported. While intensifying the efforts to assist micro-enterprises with financial difficulties, factors influencing repayment problems need to be identified.

3 Literature Review

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The literature discussed in this section includes micro-enterprises in Malaysia, financing for microenterprises and factors affecting credit management practices.

3.1 Micro-enterprises in Malaysia

Every country has its own definition of SMEs (Hooi, 2006). In Malaysia, the definitions are based on the total number of workers, the total amount of capital and total turnover per annum. SMEs are broadly divided into three business sectors, namely manufacturing, services and agriculture. Micro establishments (defined as business concerns with less than five full-time employees, and an annual sales turnover of less than RM250,000 in the manufacturing sector and RM200,000 in the agricultural and services sectors) constituted slightly more than three quarters of the total SME formations.

This group of micro enterprises represented 80.4 percent in the services, 93.3 percent in the agricultural sector and lastly, 53.4 percent of the manufacturing sector (Aris, 2007). Apart from offering employment opportunities to alleviate poverty, this group of enterprises also supports big companies as well as contributing to the country's exports. Table 1 presents the total output and value created by sector over the national's total while Table 2 demonstrates the total output, value added and employment of the SMEs in 2005 and 2006.

Table 1: Output and Value Added by Sector, 2003

Sector	%	%
Manufacturing	34.9	37.1
Services	56.7	54.7
Agriculture	42.1	39.7
Total	43.5	47.3

Source: Aris, 2007

Table 2: Total Output, Value Added and Employment of SME in 2005 and 2006.

Employment of SIME in 2005 and 2000.						
SME	Value		% Share of			
	Level		Manu	facturing		
			Se	ector		
Year	2005	2006	2005	2006		
Total Output	81990	88266	29.6	29.8		
Value Added	16576	17798	25.9	26.0		
Employment	394670	402496	31.3	31.3		

Source: BNM report (2009)

3.2 Financing for Micro-Enterprises

Similar to other developed and emerging economies, inadequacy in access to finance is one of the key obstacles which hinder the growth of microenterprises (Asselbergh, 2002 and Beck et. al, 2007). According to Ganbold, (2008) the main reasons attributed to this problem are as follow:

- (i) Policy distortions in the financial sector where interest rate ceilings and state-owned enterprises are present.
- (ii) Inefficient processing of small loans to micro-enterprises due to the relatively high processing costs.
- (iii) Difficulty of both financial suppliers and micro-enterprises in adopting new lending technologies.
- (iv) Information asymmetries due to high cost of obtaining information on micro-enterprises, inconsistent financial statements as well as lack of references in the marketplace.
- (v) High risks of operations as microenterprises are easily subject to vulnerability and volatile turnover.
- (vi) Weaker management compared to more established firms.

Some of the constraints in accessing financing of the Malaysian micro-enterprises are similar to those of Ganbold (2008). Micro-enterprises in Malaysia generally used their own savings or borrowings from friends and relatives as the prime source of capital for their businesses. Aris (2007) contended that the most significant problem faced by the Malaysian micro-enterprises in obtaining financing was the lack of collateral. The other major difficulties included insufficient documents to support loan applications and insufficient financial track record. The break-down of these constraints is given in Table 3.

Table 3: Constraints of Micro-enterprises in Accessing Financing

List of Difficulties	Total
	(%)
Lack of collateral	55.2
Insufficient documents to	13.1
support loan application	
No financial track record	10.7
Long loan processing time	9.8
Business plan deemed not	5.3
viable by financial institution	
Others	6.0

Source: Aris (2007)

Since micro-enterprises are a dominant part of the national economy, the Central Bank of Malaysia has introduced a micro-finance scheme to spur the development of these enterprises. This scheme aims to provide small loans (less than RM50, 000) in a speedier manner with no collateral required, and less emphasis on business track record. By having financial institutions to provide access to financing under this scheme, the potential for micro-enterprises to expand would be enhanced and this has a spill over effect on the country's economy. According to the Central Bank statistics, 80 percent of the population now have access to financial services, compared with 60 percent three years ago before the introduction of this scheme.

Nonetheless, due to the global financial crisis in 2008, the loans outstanding of the SMEs and microenterprises reported a 2.8 percent contraction due to a more cautious stance taken by both financial institutions and business owners. As at the end of 2009, SME loans outstanding accounted for 39.6 percent of the total business loan in the banking system (BNM Report, 2009).

3.3 Factors Affecting Credit Management Problems

From the literature, numerous factors have been identified as having an impact on credit management. Pang (1991) proposed that collateral (assets to secure the debt), capacity (sufficient cash flow to service the obligations), character (integrity), condition of the economy as well as capital (net worth) need to be included in the credit scoring model. The credit scoring model is a classification procedure in which data collected from application forms for new or extended credit line are used to assign credit applicants to 'good' or 'bad' credit risk classes (Constantinescu et al., 2010)

Weinberg (2006)'s study provided support to some of Pang's (1991) suggestions. He contended that two main determinants of household repayment obligations are the amount of debt and the interest charged.

Meanwhile, prior studies also indicated that the lack of entrepreneurial competencies and the lack of ability and skills of co-founders of the SMEs are the two main factors which have attributed to the failure of the SMEs (Kiggundu, 2002 and Longenecker et. al, 1999).

The lack of entrepreneurial skills and abilities could be partially related to the level of education of the SMEs founders, as it results in 'non-rational'

behaviour of the founder in managing the business (Beaver and Jennings, 2005). In a related study, Martin (1997) analysed the determinants of the repayment performance of Grameen Bank borrowers and discovered that education has a positive impact on repayment performance. Similar evidence was documented by Oni et. al (2005) in their study on factors influencing loan default among poultry farmers in Nigeria.

In Malaysia, the qualifications attained by SME owners are similar to those of the large enterprises. As illustrated in Table 4, more than three quarters of those engaged in manufacturing only attained secondary education. Meanwhile, more than 90 percent of SME owners and employees in the agriculture sector received secondary education whilst about 70 percent of the SME owners and employees in the services sector have secondary education. Among the three sectors, those engaged in services sector are more educated compared to their counterparts in the manufacturing and agriculture sectors.

Table 4: Persons engaged in SME by Educational Oualification, 2003

	Category			
	Degree	Diploma	Secondary	
		/ A level	and Below	
	(%)	(%)	(%)	
Sector				
Manufacturing	4.1	10.2	85.7	
Services	7.6	20.3	72.1	
Agriculture	1.1	4.1	94.7	

Source: Aris (2007)

This education profile indicates that there could be some problems for the micro-enterprises in managing their credit facilities efficiently. This is because the financial system is very complex as it incorporates budget planning and implementation systems, procurement systems, financial statement preparation systems and audit systems. Furthermore, internal controls that incorporate usage and restriction of funds need to be taken care of and implemented strictly. In addition, timely accounting also needs to be prepared to the fund providers (Horhota and Matei, 2010).

Wealth is another factor that has an impact on credit management. This is supported by Martin (1997) who posited that the area of land possessed (proxy of wealth) by the borrowers has a positive impact on credit management performance. Further evidence was provided by Weagley (1988) when he highlighted a significant positive correlation

between income and mortgage payment performance in Canada.

On the other hand, Godquin (2004) reported that both age and size of loan have an inverse relationship to repayment performance. These results confirmed the findings of an earlier study conducted by Freimer and Gordon (1965). Besides age, gender is another demographic factor which could influence credit management practices among micro-enterprises. Halkias (2008) postulated that in relation to entrepreneurial involvement and business ownership, there is still a significant and systematic gap between genders. Evans and Winston (2008) made a similar claim to that of Halkias (2008). In their study on loan delinquency among small business owners in Ghana, they found that single college educated women managed their credit more prudently than both men in general and married women.

Women's participation in the work force of Malaysian SME was approximately 36.8 percent (Aris, 2007). Specifically, among this group of woman workers, only 30 percent of them were involved as business partners or working proprietors. However, a majority of the women work force were engaged in the managerial and professional category rather than the technical and supervisory category (Aris, 2007).

A more recent study by Young, Glennon and Nigro (2008) documented that both 'soft' and 'hard' information have an impact on the repayment patterns of the borrowers. Hard information such as borrowers' capacity, indebtedness and monthly instalments need to be taken into consideration. On the other hand, soft information like borrowerlender distance is important. A larger borrowerleader distance is associated with higher default risk because distance interferes with information collection.

Meanwhile, the condition of the economy is equally important; the recent U.S. economic slowdown has resulted in total delinquencies and monthly defaults climbing approximately 65 percent (Anonymous, 2009). Agarwal et. al. (2008) showed that weak microeconomic conditions results in more defaults and fewer prepayments in the automobile loans. Additionally, Caselli et.al (2008) examined the default loans in Italy and found that diverse microeconomic conditions explain the deterioration of the repayment performance of both household and SME loans. Moreover, they documented that during the economic downturn, SMEs would downsize their businesses and consequently their assets are not enough for financial institutions to recover their defaulted credits.

In Malaysia, the economy contraction of 6.2 percent in the first quarter of 2009 due to the Global Financial Crisis has made business confidence seem gloomy and uncertain (Bank Negara Malaysia Report, 2009). According to SMIDEC (2009), a survey conducted by the Small and Medium Industry Development Corporation revealed that 21.6% of the local SMEs were severely affected by the global economic downturn in the first quarter of 2009. In a related study, Kamaruddin and Jusoff (2008) examined the industrial growth pattern in the Malaysian manufacturing sector and contended that domestic consumption, which is closely tied up to the economic conditions has a strong effect in the industrial growth pattern. Hence, they posited that good micro-management by the government in providing conducive settings is essential for industrial growth.

Besides being affected by the economic crisis, Athmer and Vletter (2006) added that 70 percent of the defaulters in their samples were facing a crisis related to health or experiencing death in the family. Moreover, loans that are too big also lead to repayment problems, dissatisfaction and high drop outs (Hietalahti and Linden, 2006). Recently, commitment to environmental and social need has become another challenge to the companies (Kralj and Markic, 2008). Focuses on environmental excellence could incur additional financial burdens and financial problems to the companies, especially the micro-establishments.

Finally, an early study by Paul (1973) had suggested the need for non-traditional measures of psychological attributes such as stability, a sense of commitment and future orientation when assessing factors affecting credit management. These attributes might be reflected in religious body or club membership and newspaper readership. This was documented after the author failed to develop a scoring system with predictive power after studying 800 respondents in the Washington D.C. area.

A later study by Hoque (2000) and Godquin (2004) provided similar evidence to that of Paul (1973) as they contended that loan defaults could be associated with borrowers' behaviour because he discovered that borrowers who have enough money to reimburse might also default strategically.

4 Methodology

In this section, the objectives of the research, method of analysis, the objectives as well as the sampling technique will be discussed.

4.1 Objectives of the research

Based on the literature survey, the main objectives of this study are:

- to identify the type of setup funds used by micro-enterprises,
- to examine whether gender affects credit management practices,
- to assess the wealth effect on credit management practices,
- to investigate how factors such as education attained, repayment capabilities as well as indebtedness explain credit management among micro-enterprises.

4.2 Method of Analysis

Descriptive statistics will be used to analyze all the objectives stated in the previous section. To examine whether there is a difference in credit management between genders, the Wilcoxon-Mann-Witney test is used. Additionally, to capture the relationship of education attained, repayment capability as well as indebtedness and the dependent variable, the following model was used:

CM=
$$\alpha$$
 - β_1 EDU- β_2 HI + β_3 INDEBT + ϵ (1)

In this study, credit management (CM) is proxied using repayment pattern which refers to whether the borrowers pay on time, pay after 1, 2, 3, 4, 5 or 6 months of arrears or stopped paying. EDU refers to the level of education attained. A higher level of education attainment is foreseen to improve the ability of credit management among microenterprise loan recipients. Therefore, the higher the level of education attained, the shorter the time would be required for the borrowers to settle their monthly obligations.

HI refers to the capacity of the borrower which is calculated using total household income per month in this study. A higher household income is expected to be associated with a shorter repayment period and hence, a better credit management performance.

Finally, INDEBT represents the indebtedness of the micro-enterprises borrowers. Higher indebtedness leads to poorer credit management performance. Hence, a positive relationship between indebtedness and the length of time taken to settle monthly instalments is expected in this study.

4.3 Sampling

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The sampling frame of this study consists of microenterprises in East Malaysia. Micro-enterprises are defined as SMEs with an annual sales turnover of less than RM250,000. To collect the requisite information for further analysis, structured questionnaires were used. Apart from collecting data on the types of financing used by micro enterprises, respondents' demographic profile, data on credit management as well as factors influencing micro-enterprises repayment capability collected for further analysis.

After excluding incomplete questionnaires, a total of 120 samples collected using a combination of simple random sampling and snowballing techniques were used for further analysis.

5 Problem Solution

Section 5.1 discusses the general profile of the respondents using descriptive statistics. Following that, the differences of credit management across genders are presented. Section 5.3 presents the Pearson correlations coefficient analysis of the variables under study. In addition, multiple regression analysis results are discussed in this section. Last but not least, the impact of wealth on credit management practices is discussed in Section 5.4.

5.1 Descriptive Statistics on the Profile of the Respondents

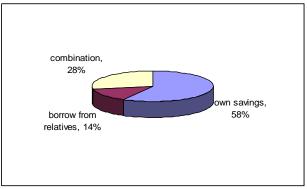


Figure 1: Type of Setup Funds

As shown in Figure 1, owners of the microenterprises use various means of financing to start their businesses. 58 percent of the respondents mentioned that they utilized their own savings, 14 percent used borrowings from friends and relatives while the remaining used a combination of the above instruments plus bank loan as their start-up funds. Almost all the credits granted to the microenterprises come from the various micro-financing schemes available in the country. For those who managed to secure financing from banks either at the beginning or sometime after the setting up of their businesses, credit management practices on their loans were examined.

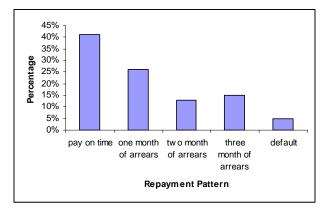


Figure 2: Repayment Patterns of the Respondents

With reference to Figure 2, the credit management on loans received by the respondents can be broadly divided into pay on time, pay within one month, two months, three months and more than three months of arrears or do not pay at all. 41 percent of the respondents disclosed that they pay on time, 26 percent pay within one month of arrears, 13 percent pay within two months of arrears, 15 percent pay within three months of arrears while the remaining 5 percent pay after three months of arrears or do not pay at all.

Table 5: Descriptive Statistics of the Respondents' Profile

Variables	Mean	Min	Max	Std. Dev.
Total debt per month (RM)	2049	200	9300	1525.84
Total household income	6040	2300	18000	4505.71
per month (RM)				

	Secondary and below (%)	Diploma / A level (%)	Degree (%)	
Education attained	47.3	32.5	20.2	

Descriptive statistics of the variables under study are shown in Table 5 above. Mean household income for the respondents is reported at RM6040 per month with the minimum household income at RM2300 while the highest at RM18000.00 per month. On the other hand, the average total debt per

month for the respondents is RM2049 with the highest at RM9300 and the lowest at RM200 per month. Last but not least, a majority of the respondents (43.9 percent) attained secondary education ('O' level'). 32.5 percent are 'A' level or diploma holders, 20.2 percent are university graduates while the remaining only attained primary education.

5.2 Credit Management Across Genders

A total of 68 percent of the micro-enterprise respondents were male while the remaining 32 percent were female. In terms of credit management, referring to Table 6, 35 percent of the male respondents paid their monthly debt obligations on time while 53 percent paid within one to three months of arrears. The remaining 12 percent had stopped paying their loans.

On the other hand, 46 percent of the female respondents paid their credit line on time whilst the remaining 54 percent paid within one to three months of arrears. Nonetheless, none of the female respondents had stopped paying her credit line. Generally, the female micro-enterprise owners exhibited better credit management practices compared to their male counterparts.

Table 6: Credit Management between Genders

- 110-10 01 0-1011-11 80-11-11-11 0-011 0-01-11-1						
Gender		Credit Management				
	Pay	Pay Pay 1-3 Stopped Total				
	on	months of	paying			
	Time	arrears				
	(%)	(%)	(%)	(%)		
Male	35	53	12	100		
Female	46	54	-	100		

Evidence of credit management differences across gender was further enhanced using a Mann-Whitney Test.

Table 7: Mann-Whitney Test Results: Credit Management between Gender

Dependent variable: Credit Management				
Grouping: Gender				
	N	Mean Rank		
Male	81	65.52		
Female	39	50.08		
Total	120			
Z	-2.389	<u>.</u>		
P value	0.017			

Based on the results portrayed in Table 7, the test reported a z-value of -2.389 and a p-value of 0.017 which is significant at the 5 percent level. From the findings, it was obvious that there is a significant difference between the credit management of the micro-enterprise owners across genders.

5.3 Pearson Correlation Coefficient Analysis and Multiple Regression Analysis Results

Overall, a majority of the respondents (59.0 percent) exhibited poor credit management. This group of respondents did not pay their loans on time; instead, they either paid after the due date or had stopped paying their loans.

Table 8: Pearson Correlation Coefficient Analysis for Variables under Study

101 Variables under Study				
	Education	Household	Indebtedness	Credit
	Attained	Income		Management
Education	1			
Attained	1			
Household Income	.222*	1		
Indebtedness	.034	.282**	1	
Credit Management	270**	.123	.265*	1

^{*} Correlation is significant at the 0.05 level

A Pearson Correlation Coefficient Analysis was performed to examine whether factors such as level of education attained, household income (repayment capacity) and indebtedness associated with the credit management of the respondents. Referring to Table 8, it was found that whether or not the respondents paid on time was significantly related to the level of education attained and total debt per month. From the correlation matrix above it was also found that none of the correlations between variables under investigation are 0.75 and above, therefore, this rules out the possibility of multicollinearity (Cavana et. al, 2001). With that, this study proceeds to the multiple regression analysis.

Multiple regression analysis was employed to assess the predictive power of the level of education attained, repayment capacity and indebtedness on the credit management performance of the microenterprise borrowers. Referring to Table 9, the model employed in this study reported an F value of

^{**} Correlation is significant at the 0.01 level

10.004 and adjusted R-square of 0.193 which is significant at the 5 percent level.

Table 9: Results of Cross-Sectional Regressions Analysis

Dependent variable: Credit Management Practices				
Independent variables	β	t-stat		
Education attained	-0.434	-3.420**		
Household Income	4.664E-05	1.836		
Total liability per month	0.001	3.367**		
F value	10.004**			
R^2	0.214			
Adjusted R ²	0.193			

^{**}Significant at 5% level.

Findings implied that the level of education attained and indebtedness of the respondents have a significant predictive power over their credit management practices. Respondents' level of education attained was found to have a significant negative relationship with the time taken to pay outstanding credits. Higher education attainment leads to on time repayment practices and thus, better credit management. However, findings also reported a positive significant relationship between monthly total liability (indebtedness) and repayment performance. Respondents with higher indebtedness are more likely not to fulfil their financial obligations on time.

Nonetheless, as shown in Table 9, respondents' repayment capability which is represented by household income does not show any significant impact on respondents' credit management performance. This could be attributed to the psychological attributes of the respondents. As documented by Gordon (1965), borrowers with the capacity to pay might opt to default on their credit obligations strategically.

5.4 Wealth and Credit Management Performance

Evidence from the multiple regression results shows that wealth (represented by total household income) does not have any explanatory power over credit management practices. Hence, the samples in this study were partitioned further based on the total household income per month for further analysis.

Three sub-samples were created after the partition exercise.

With the total household income ranging from a minimum of RM2300 to a maximum of RM18, 000 per month, after partitioning into three groups, the low income group comprises those with a total household income from RM2300 to RM7533, the medium income group is defined as respondents earning a household income of RM7534 to RM12766 per month whilst the high income group consist of those who earn between RM12767 to RM18000 per month. Credit management among these three income groups is shown in Table 10.

Table 10: Credit Management versus Level of Income

Income	Credit Management			
groups	Pay	Pay 1-3	Stopped	Total
	on	months of	paying	
	Time	arrears		
	(%)	(%)	(%)	(%)
Low	40	52	8	100
income				
Medium	57	43	-	100
Income				
High	26	74	-	100
Income				

Referring to Table 10, 40 percent of the respondents from the low income group pay on time. On the other hand, the majority of the high income respondents (74 percent) did not pay on time. The figures for the repayment of credit of the medium income group are distributed roughly equally between the *pay on time* and *pay within three months of arrears* categories. Nevertheless, only the low income group reported default or stopping paying (8 percent); the medium as well as the high income group did not have such a problem. These results also highlighted that capacity (wealth) – which is frequently used in the credit scoring model might not be an accurate predictor for credit risk among micro-enterprise borrowers.

6 Conclusion

From the secondary data collected, this study found that many types of financing have been set up by the government to assist micro-enterprises to grow and expand. However, a majority of the micro-enterprise founders disclosed that it is difficult for them to obtain financing due to stringent measures taken especially by established financial institutions in assessing credit risk.

Generally, established financial institutions prefer to grant credit facilities to rated companies. This is because there are differences with regards to the method of running a business between SMEs and rated companies (Masca and Gall, 2008). According to them, SMEs normally focus on the strategy of survival and stability while a rated company aims to maximize profit. Due to this practice, 72 percent of the respondents indicated that they relied on their own savings and borrowings from friends and relatives for financing at the beginning stage.

Nonetheless, financial institutions should not be blamed for being careful in granting loans to the micro-enterprises. From the results of this study, 59 percent of the respondents exhibit poor repayment on their credit. This is not a surprise finding as micro-enterprises are riskier borrowers than large firms. The reason for this is that micro-enterprises are more vulnerable to market changes and often have inadequate management capacities due to their smaller size (Ganbold, 2008). Besides that, since most of the financing provided is micro in nature whereby collateral is not required hence, paying these loans becomes unimportant and this could be another possible explanation for the poor credit performance.

Moreover, consistent with the credit scoring model suggested by Pang (1991) and Weinberg (2006), this study discovered that proxies of indebtedness have significant impacts on the credit repayment performance at the 5 percent level of confidence. A higher indebtedness will result in poorer credit management among the respondents.

On the other hand, the proxy of wealth or repayment capability - household income - was not significantly related to the credit performance. These results were supported when the samples were partitioned into three different income levels for further analysis. In the sub-sample analysis, it was found that 40 percent of the low income respondents paid on time versus 26 percent of the high income borrowers group. This could be due to attitude problems on the part of the borrowers. As argued by Godquin (2004), even though with enough money, some borrowers also opted to default their loan repayments intentionally.

In terms of gender, female respondents were found to be practicing better credit management in relation to the male respondents. Apart from that, female respondents also did not report any defaulters whilst 12 percent of the male respondents had stopped paying their credit obligations. The empirical evidence of the significant difference of credit management between male and female

respondents was proven using the Mann-Whitney

Educational attainment was shown to be another factor that affected credit management practises. Findings showed that 47.3 percent of the respondents attained secondary and below education. Despite the fact that this is not an impressive education level, it is an improvement compared to the national standard in 2003 as stated in Table 4. Besides, the percentage of degree holders at 20.2 percent was much higher than the national percentage in 2003.

In conclusion, the availability of credit is crucial as it allows the micro-enterprises financial flexibility in meeting their business obligations and expansion needs. Nevertheless, "debt" is viewed as bad as it represents a lack of self discipline. Therefore, in order to survive and prosper in the long-run, micro-enterprises need wisdom in managing their debts.

Finally, the policy makers can set up a microenterprises bureau to provide financial advisory services to this group of enterprises. Among the supporting services that could be provided by the bureau are: facilitate credit evaluation so that financing activities can be expedited, highlight weakness that need to be addressed to improve business operation, offer financial restructuring programmes, programmes to improve financial literacy rates and other financial advisory services which are deemed necessary to support the financial health of the micro-enterprises in Malaysia.

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