# Sourcing Working Capital Finance: The Case of Mauritian SMEs

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***Abstract:*** **For almost three decades, small firm finance has captured the attention of academicians and policy makers across the world. Despite the government efforts to bridge the 'financial gap' yet the small to medium-sized enterprises(SMEs) rated access to finance, especially working capital finance (WCF) as a main hindrance to move along the business life cycle. This study is an attempt to identify the main factors affecting the Mauritian SMEs access to WCF. The methodology used for this study involves the collection of primary data through a comprehensive survey questionnaire administered to the owner manager of firms operating in six main industry groups of the Mauritian manufacturing sector. The research findings provided some new evidences as regards to the difficulties which firms faced while procuring working capital. They are often constrained by their lack of financial knowledge and their inability to formulate good business plan. Access to finance is also constrained by the market conditions, where the seasonality of the market has a greater incidence on the working capital requirements. Further, firms experiencing significant information costs have difficulty getting access to traditional sources of finance. There was also evidence to support that financially constrained firms suffer from late payment problem, have longer production cycle and operate in seasonal markets. The findings of the study will be useful to financial institutions funding SME and policy makers. The study finds working capital is the major concern for the SME and its timely availability is critical for the success of ventures. In many cases, SMEs have no option but to extend or provide longer credit period and it needs not be seen negatively for funding. This paper provides evidence on the difficulties which Mauritian manufacturing SMEs faced while procuring WCF and adds to the growing literature on SMEs financing.**

***Keywords: SMEs; Working Capital Finance; Financial Knowledge; Sources of Finance; Logistics Regression.***

## I. INTRODUCTION

Although working capital (WC) is the concern of all firms, it is the small firms that should address this issue more seriously as a significant variation in cash flow may be detrimental to their survival. Given their vulnerability to a fluctuation in the level of WC, they cannot afford to starve of cash. Peel, Wilson and Howorth (2000) revealed that small firms tend to have a relatively high proportion of current assets, less liquidity, exhibit volatile cash flows, and a high reliance on short-term debt. Thus, working capital finance (WCF) is of particular importance to the SMEs. With their limited resources and access to long-term finance, these firms have no choice than to rely on owner financing, trade credit, cash credit and short-term bank loans to finance their needed investment in stock, debtors and cash balances.

One of the biggest challenges of starting and operating a business is financing. New business owners rarely have many options. Most start with '*bootstrap financing*': launching ventures with modest personal funds which typically include personal savings, investment by family and friends, second mortgages, and credit cards (Bhide, 1992; Winborg, 1997, 2000). The characteristics of SMEs can change as the business develops and this has a bearing on the financing options available to the owner manager. Initial owner finance is nearly always the first source of finance for a business, whether from the owner or from family connections. Trade credit finance is important at this point too, although it is nearly always very expensive if viewed in terms of lost early payment discounts. Poutziouris *et al.*, (2006) revealed that small business owner managers are unaware of the opportunity costs of trade discounts forgone, when delaying payment to suppliers.

Attempt has been made to explain the financing behaviour of firms and the most cited theory is '*Pecking Order Theory*' (POT) of business financing (Myers, 1984). According to this theory, firms has a preference for internal finance and if external finance is required, firms will start with debt followed possibly by hybrid securities such as convertible loans, then perhaps equity as a last resort. Small firms tend to be more highly geared than large firms (Bolton, 1971; Cosh and Hughes, 1994; Hamilton and Fox, 1998) primarily because they have less equity on the balance sheet. It is also widely accepted that small firms have greater difficulty raising finance due to higher levels of information asymmetry and agency costs (Jensen and Meckling, 1976; Myers and Majluf, 1984). The empirical evidence about a pecking order in the financial choices of SMEs was confirmed in the study of Watson and Wilson (2002). Using a sample of 629 UK SMEs over a five year period from 1990 to 1995, they found evidence consistent with a pecking order in which retained equity was preferred over debt. This was more pronounced in the case of closely-held firms.

Many of the studies (Peel and Wilson, 1996; Peel et al., 2000; Howorth and Westhead, 2003) have focus on financial management practices of small firms

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with little attention to the factors affecting sourcing of WC which is of utmost importance for the survival of SMEs. In Mauritius, the government has placed lots of emphasis on the creation of SMEs and have a number of schemes[1] to better accompany the start-ups along the business life cycle. This area has not received the same consideration as the many other areas, ranging from start-ups to schemes promoting the growth of the sector (Dewhurst and Burns, 1989; Jarvis *et al*, 1996; Johnson and Soenen, 2003). There is a substantial amount of literature providing detailed and carefully tailored advice to small business owners on financial management. This study therefore helps in identifying the difficulties which Mauritian manufacturing SMEs faced while procuring WC. A second objective is to investigate whether significant differences exist between SMEs financing provision and the constraints faced by the enterprises when accessing finance from the institutions. The study also attempts to examine the extent to which firms' and owner managers' characteristics influence access to WCF.

The rest of the paper is organised into four sections. Section II reviews the literature on WCF and the SMEs financing decision, with emphasis on the POT. The next section provides support for the methodological approach and briefly elaborates on the data collection. The econometric model and the variables used are also covered. Section IV reports on the analysis and findings of the study and the discussion of the results. The last section concludes on the results of the study.

## II. LITERATURE REVIEW

### *A. Working Capital Financing*

WCF determines the level of investment in current assets and what should be the financing-mix to support current assets. Under a conservative policy, the investment in current assets is high while under an aggressive policy, a low level of current assets is maintained to support the level of activity (Chandra, 2003). These two policies lie on each extreme of the continuum and an optimal policy tend to strike a balance between profitability and liquidity. Having determined the level of current assets, the firm must determine how these should be financed. In other words what mix of long-term capital and short-term debt should the firm employ to support its current assets? Many studies have reported the high level of investment in WC, as well as substantial amounts of short-term payables used as a source of financing (Shin and Soenen, 1998; Narasimhan and Vijaylakshmi, 1999; Deloof, 2003; Padachi *et al*., 2010). Support to the heavy reliance on short-term financing by small manufacturing firms was reported by Burns and Walker (1991) and this was obtainable mainly by contracting loans from commercial banks and stretching accounts payable.

Weinraub and Visscher (1998) study's examined the WC investment and financing of a cross-section of ten different industries over a ten year period with the primary objective of determining if significant industry differences exited in WC policies. They found a strong tendency for firm to adopt different combination of aggressive/conservative WC policies and one particular policy tends to counter balance by another policy. For example, industries which tend to have an aggressive approach to WC asset management seem to balance it by a relatively conservative financing policy. Weinraub and Visscher (1998) found that significant industry differences do exist in the relative degree of aggressive/conservative WC policies for both asset and liability management.

They also noted that financing policies may change overtime as a result of industry factors than the changes in investment policy. But, however, their results demonstrated that the WC investment policies between industries may be influenced by some external macroeconomic factors such as business cycle. Ooghe (1998, p. 222) study of financial management practices found that for many of the firms studied, there is a strong link between investment and financing: *'short-term financing for WC needs and long-term financing for fixed assets investments'*. But when it comes to seek finance the small firms have difficulties in obtaining bank financing and complain that bankers do not evaluate their proposals on their economic merits.

Burns and Walker (1991, p. 64) study of WC policy among small manufacturing firms found that *'although WC constitutes over a third of total assets, less than a fourth of the manager's time is spent on it'*. The empirical findings disclosed that as low as 6.5% of firms had a written WC policy while 35.3% of the respondents admitted that they did not have one. However, there was evidenced that small firms prefer to adopt a cautious WC policy since only 11.6% practice an aggressive policy.

Following this line of research, Narasimhan and Vijaylakshmi (1999) studied the inter-industry analysis of WCM for large Indian corporate firms for the period 1991 to 1998 in order to assess its efficiency and financing pattern. Their analysis revealed that the cash to current assets component is more volatile and this is attributed to the lack of cash management policy.

[1] Financing Schemes for Booster (Micro Credit) Loan Scheme; Small Business Development-Related Scheme; Micro Credit Financing Scheme (through Trust Fund for the Social Integration of Vulnerable Groups); Quasi Equity Financing Scheme and Transitional Support Scheme to Finance Small Companies in Difficulty or which are preparing for Recovery and more recently the SME Partnership Fund.

Firms tend to use cash credit as a first choice for financing their WC needs. However, the excessive reliance on the banking system for WCF exert some pressure on the banks and a significant part of available resources are first channeled to the large firms (Narasimhan and Vijaylakshmi,1999). They also noted that the long-term source of funds for WC seems to be dominant in many industries and cash credit is the next major source of financing of WC. Another important dominant source of funding working capital requirement is trade credit. It is usually called spontaneous source of finance and normally available as part of the trade terms.

*B. Small Business Finance*

Based on research conducted in the area of demand side of small business finance, it is possible to classify them into three different approaches. Firstly, the life cycle approach, which assumed that the use and access of financial sources evolve as the business moves along the different stages of development. Secondly, there is the pecking order approach, which is an approach that applies Myers' (1984) pecking order reasoning on the small business context[2]. A third situation is the managerial choice approach, which focus on the small business manager's financial preferences regarding financial decision taken in the business.

In terms of small business finance, the life cycle approach provides an understanding of the diverse financial sources that become available as the business moves along the different stages of development (see, e.g Churchill and Lewis, 1983; Scott and Bruce, 1987; Gregory *et al.*, 2005). It is the wide belief that as the firm moves on and establishes itself, a wider spectrum of financial sources become available and the financial costs become lower. However, this approach has been criticised on the following counts: firstly, it provides a very static and deterministic view of a business development (Landstrom, 1987, as cited in Winborg, 1997). Secondly, there has been limited empirical evidence that actually confirms the assumptions in the life cycle approach (Hanks *et al.*, 1993 as cited in Winborg, 2000). Thirdly, there is no consensus as to what dimension constitute the basis for a life stage. Finally, this approach assumes that the small business manager has no prior experience about managing a business and may thus have many business contacts, has a solid personal track record.

Studies about small business managers' financial preferences (such as Holmes & Kent, 1991; Scherr, Sugure and Ward, 1993) have confirmed the reasoning made by Myers (1984) about a pecking order of financial preferences. In other words, these studies have revealed a similar financing pattern as found in large quoted companies, whereby small business manager also rank their financial preferences in a given order. Firstly, internally generated equity followed by debt financing, and external equity. However, this preference may not be relevant for start-up firms as they may prefer to admit new business partners to supplement their business skills. This was confirmed by Paul, Whittam and Wyper (2007, p.17). They found that for start-up businesses, *"a bridged pecking order may be in operations as entrepreneurs find that financing through external equity adds value via the transfer of management skills from the investor to their businesses, does not require them to provide personal guarantees and does not have a negative impact on their WC"*.

Although the POT was formulated for large quoted companies, the reasoning is found to be equally applicable to small unlisted businesses (Holmes & Kent, 1991). This is so since the relationship between the small business manager and the lender is largely characterised by information asymmetry, which is the basic assumption of the pecking order approach. The problem of information asymmetry is endemic to small business lending and it compounds concerns about the principal (bank) - agent (small business) relationship (Storey, 1994). However, its application to the small businesses is far more complex than that implied by Myers' (1984) pecking order approach. Holmes and Kent (1991) argued that the integration of management and ownership in small businesses is a more likely situation which influences the way financial resources are dealt with. Thus the pecking orders are influenced by their desire to maintain control over operations and assets (Holmes and Kent, 1991, Howorth, 2001). If debt financing becomes necessary, short-term sources (trade credit, cash credit) is favoured, since their use does not require the pledge of security. Equally Barton and Mathews (1989) argued that the pecking order mentality in the small business is reinforced by the manager's wish to stay in control over the business' operations which can be threatened if external long-term capital is used.

However, Holmes and Kent (1991) stressed that the pecking order may as well be constrained for the small businesses since the option of raising external equity is often not available. Thus a truncated pecking order may also be influenced by the supply side of finance (Howorth, 2001). Further, the financial decisions may be influenced by owner manager's risk-taking propensity, and by his goal for the business (Barton and Mathews, 1989). The need for finance may be greatly felt if the owner manager strives for rapid growth as compared to one not going for growth. This need for resources has to be met, either with internal or external finance. In line with this reasoning, the owner manager's desire to maintain control and independence

[2] see Cosh and Hughes (1994) and Chittenden et al. (1996) for applications of this framework to smaller unquoted firms.

are enough to support the explanation of his/her financial preferences. It is perceived that external providers of funds may interfere in the management of the business.

It may thus be concluded that the three approaches discussed above lend support to the financial choices of the small businesses. Most of the studies in small business finance have in one way or the other bring evidences as to the dual factors, that is, the characteristics of the small business and that of the small business manager are important to explain the financial preferences and choices (Pettit and Singer, 1985; Levin and Travis, 1987; Barton and Mathews, 1989; Ang, 1991; Scherr *et al.*, 1993; Cosh and Hughes, 1994; Hamliton and Fox, 1998; Winborg, 2000; Padachi *et al*., 2011). Small firm owners will try to meet their finance requirements from a pecking order of, first, their own money (personal savings, retained earnings); second, short-term borrowings; third, long-term debt; and, least preferred of all, from the introduction of new equity investors, which represent the maximum intrusion (Cosh and Hughes, 1994). However, a slight variation to the POT may be relevant for start-up firms, where they may have a different need at this stage of their businesses (Paul, Whittam and Wyper, 2007).

Further, Hall *et al.* (2000, p. 299) argued that information asymmetry and agency problems arising between owner managers and outside investors providing external finance which give rise to the POT are *"more likely to arise in dealings with small enterprises because of their close nature, i.e. being controlled by one person or a few related people, and their having fewer disclosure requirements"*. Scherr *et al.* (1993), indicated the costs information asymmetry creates are more pronounced for SMEs for the obvious reasons than for large enterprises, thus widening the finance costs between internal equity, debt, and external equity. However, Hamilton and Fox (1998) concluded that debt levels in small firms do reflect a demand side preference ordering and may not be the result of a deficiency in the supply side.

## III. METHODOLOGY

The data for this study was collected as part of a comprehensive survey on financial and WCM practices of small to medium-sized manufacturing firms operating in six diverse industry groups[3]. The study was confined to the manufacturing sector (an important sector of the economy in terms of job creation and contribution to economic growth) where WC is more significant. The sample was drawn from the directory of SMEDA[4]. The survey instrument contains a section which deals with 'Accounting and Finance' issues and is designed to help assess the financing preferences of the respondents and the difficulties they face while sourcing WC. In fact decision as regards to financing of WC is often constrained by both the demand side and the supply side, and at times it does not capture the attention of the owner manager. This is often lacking in SMEs and thus owner manager is deprived of an important sources of finance.

A total of 145 survey forms were collected out of a sample of 420 firms, representing 20% of the population, which satisfies the sampling criteria (firms employing up to 50 employees). A stratified sampling was used so that each industry group is represented. Four questionnaires had to be excluded as they were not properly filled in and many sections were left unanswered. This gives a total of 141 usable responses, representing an effective response rate of 33.5% .It is to be pointed out that the Mauritian business community is not used to this kind of survey. Despite this non-familiarity of survey instrument, such a response rate was possible through network with the SMEs Association and the support institutions and the multi-channels used to collect the data.

The survey instrument attempts to capture primary data on both the small business and owner managers' characteristics, the factors perceived as impediments to business performance, sources of finance and a number of statements to gauge into the main research question. The data was analysed using the Statistical Package for Social Sciences (SPSS), applying both parametric and non-parametric tests. ANOVA and t-tests, Mann-Whitney and Kruskal-Wallis tests, and chi-square tests were used for continuous, ordinal and binary variables respectively. In order to discriminate between firms having difficulty sourcing working capital and firms having only some difficulty, a binary logistic regression is used.

Factor analysis is used to organise and reduce the number of items used to capture the main variables of interest. The technique determines linear composites of the original variables that display certain desirable properties which in reducing the number of variables into succinct variables that could be used as a continuous variable in subsequent multivariate analysis. The means *t-test* was used to see if there are significant differences between the two sub-samples of firms with *'More Difficult'* and *'Some Difficulty'* while sourcing working capital using basic firms' characteristics, trade credit variables and working capital measures. Finally the analysis made use of multivariate regression model

[3] The industry groups include Chemical, Rubber and Plastics (**CRP)**; Metal Products (**MP);** Paper Products and Printing (**PPP**); Jewellery (**JW)**; Leather and Garments (**LG)**; Pottery and Ceramics (**PC)** and Wood and Furniture ( **WF**) and Food and Beverages (FB).

[4] Small and Medium Enterprises Development Authority (SMEDA), the agency responsible to register manufacturing SMEs

to estimate the important determinants for firms with difficulty obtaining finance.

## IV. DATA ANALYSIS AND RESULTS

### *A. Sample characteristics*

The majority of the questionnaires were completed by the owner manager of the firm or his/her representatives which in most of the cases were close family members appointed as director. This gives confidence in the completeness and reliability of the information provided. The variables definition are given in *Appendix I* and where applicable the mean value for the variables of interest are reported.

*Ownership and structure*

Table 1 displays the sampled firms' ownership structure; namely family members involved in decision making, business legal entity and the owner manager's main role in the business. The majority of the companies (63%) are family-owned business and some 25% do not involve anyone in the decision making process. In nearly 50% of the cases, the owner manager assumes overall responsibility of the business while another 44% occupy the post of managing director. Thus, in the majority of the cases, the owner manager oversees all the operational aspects of the enterprise and may thus have no time to perform even some of the basic accounting routines.

TABLE 1. FAMILY MEMBERS, LEGAL ENTITY AND MAIN ROLE OF OWNER MANAGER

| **Family Members** | **Percent** | **Legal Entity** | **Percent** | Main Role | **Percent** |
|---|---|---|---|---|---|
| No one else | 25.5 | Sole proprietorship | 36.2 | Overall Responsibility | 49.6 |
| Close Family | 40.4 | Partnership | 8.5 | Purchasing and Production | 2.8 |
| Other Family Member | 23.4 | Private Limited Co. | 54.6 | Administrative and Finance | 3.5 |
| Non Family Member | 10.6 | Societe | 0.7 | Managing Director | 44.0 |
| Total (n=141) | 100.0 | | 100.0 | | 100.0 |

In terms of the business organisation, 54.6% are private limited companies where in the majority of cases, a second director is appointed solely to comply with the statutory formalities (this was made obvious during the interviews with the respondents).

*Size and age*

Table 2 gives descriptive statistics for the three commonly used measures of size. It also shows the age of the companies. Small firms represent a bulk of the business stock and as per the CSO 2009 bulletin, firms employing up to 9 employees outnumber those employed 10 and above, the threshold used for compiling statistical data on the Mauritian business stocks. The average employment size is 15. In line with the national statistics on the SMEs population, the sample distribution of companies by size is positively skewed: 60% had up to 10 employees, while only 7% employed above 50 employees and out of which only three firms have engaged full time employees in the range 101 and 150.

TABLE 2. SAMPLE COMPANIES BY SIZE AND AGE

| | **N** | **Minimum** | **Maximum** | **Mean** | **Median** | **Std. Deviation** | **Skewness** |
|---|---|---|---|---|---|---|---|
| Number of F/T Employees | 134 | 0 | 82 | 14.95 | 9.00 | 16.131 | 2.083 |
| Age of Business | 134 | 1 | 50 | 13.56 | 12.00 | 9.510 | 1.099 |
| Size of firm in terms of: | | | | | | | |
| Net assets | 52 | 200,000 | 80,000,000 | 12,530,391 | 6,333,175 | 1.700E7 | 2.304 |
| Sales | 93 | 100,000 | 52,000,000 | 9,167,113 | 4,500,000 | 1.078E7 | 1.910 |

The age profile of the respondents reveals that 56% of the firms are over 10 years, and may be considered as matured firms. It is to be noted that some 20% of the firms are in existence only for up to 5 years and they employ relatively few employees.

*A. Difficulty in Sourcing WCF*

Respondents were asked to state the degree of difficulty they faced to obtain finance and what are the procedures and control they have in place to better deal with financial management issues. These variables were subjected to some bivariate tests and the Kruskal-Wallis (KW) test was performed on the firm and industry characteristics which previous authors had considered to influence the financing decision of SMEs.

In that respect, respondents were asked to indicate on a 5 pt ordinal scale the *'extent of difficulty they faced while obtaining WCF'*. This was re-coded first into a dichotomous variable where the scale 4 and 5 are labeled as *'More Difficult'*, taking the value of 1 (62 firms, representing 44.6% of the sample) and the scale 1 to 3 as *'Some Difficulty'*, taking the value of 0 (77 firms, 55.4%). *A priori*, firms facing such a problem would tend to exercise more control over WCM. However, the literature review chapter attributes the small firms' lack of financial discipline due to resource constraint and would thus concentrate their time and efforts where it is mostly felt.

Table 3 displays the two sample *t-tests* on the variables of interest using both parametric and non-parametric tests. The differences between the two groups are discussed under the appropriate headings.

*Firms' and Industry Characteristics*

Size may be a constraint when it comes to arrange for WCF. Small firms may be financially constrained due to the fact that they may be viewed as *'informationally opaque'* which makes lending to them as costly. Berger and Udell (1998) suggested that the most important characteristic of small business finance is *'informational opacity'*, such that small firms cannot credibly convey quality information. Contrary to the hypothesised relationship between size and access to finance, the means *t-test* fail to give conclusive evidence that size of the responding firms is a determining factor while requesting for WCF. The *'more difficult'* group is smaller in size. However, there is no significant difference between the two groups. The age distribution between the two groups is more or less the same and the life cycle model would assume that firms beyond a certain age would face less difficulty getting finance. The non-parametric K-W tests on the variable age reveal no significant differences at the 10% level; except a weak significant difference between the variable age and difficulty obtaining finance during difficult economic situation (results not reported). This may indicate that the small to medium-sized Mauritian manufacturing firms is financially constrained based on factors other than size and age and therefore need to be investigated further.

TABLE 3. CHARACTERISTICS OF FIRMS WITH DIFFICULTY SOURCING WCF

| **Variable** | **Description** | **Mean** | | | **Sig.**[1] |
|---|---|---|---|---|---|
| | ***Finance related Characteristics*** | ***Some Difficulty (n=77)*** | ***More Difficult (n=62)*** | ***All Firms*** | |
| **WCMFIN** | WCM: Financing working capital | 3.17 | 3.44 | 3.29 | 0.104 |
| **WCMCFM** | WCM: Cash flow monitoring | 3.70 | 3.89 | 3.79 | 0.254 |
| **ODFAC** | Have Overdraft facilities | 78 | 73 | 74 | 0.466 |
| **SECURIT** | Have Collateral | 83 | 79 | 81 | 0.539 |
| **BPLAN** | Business plan | 64 | 63 | 62 | 0.929 |
| **FREODF** | Frequent use of OD | 3.55 | 3.98 | 3.73 | 0.046 |
| **FREBLO** | Frequent use of Loans | 2.86 | 3.03 | 2.92 | 0.318 |
| | **Trade Credit Variables** | | | | |
| **DEBDAYS** | Debtor days | 46.32 | 47.69 | 46.47 | 0.826 |
| **CREDAYS** | Creditor days | 45.53 | 38.65 | 41.82 | 0.131 |
| **LATEPAY** | Late payment problem | 3.16 | 4.02 | 3.51 | 0.000 |
| **SALCRED** | Trade credit | 57 | 68 | 61 | 0.385 |
| **CPOLICY** | Credit policy | 75 | 68 | 71 | 0.323 |
| **ADPAYT** | Advance payment | 64 | 53 | 59 | 0.156 |
| | **Firms' Characteristics** | | | | |
| **EMPLOYF** | Size of firm | 19.82 | 14.92 | 17.50 | 0.205 |

| | | | | | |
|---|---|---|---|---|---|
| **AGE** | Age of business | 13.53 | 14.10 | 13.68 | 0.729 |
| **SECTORG** | Industry – Heavy | 45.5 | 39.3 | | 0.626 |
| | Light | 16.9 | 23.0 | | 0.626 |
| | Food | 37.6 | 37.7 | | 0.626 |

[1] Continuous, ordinal and dichotomous variables were tested using t-test, Mann-Whitney and chi-square tests respectively on dependent variable DIFOWCF (1= 'More Difficult' and 0= 'Some Difficult')
[2] For chi-square tests, cell indicates percentage of dependent group who gave an affirmative response.
***,**,* represents significance level at 1%, 5%, and 10% respectively.

Firms operating in industry where competition is more intense and are thus exposed to changes in the external environment may face greater difficulty obtaining WCF. The K-W tests on the three sub-samples industry group show a significant difference while seeking finance in the early development phase among the industries. There is also a weak significant difference between the industry and their demand for finance at the start-up phase. Details of the results are in *Appendix II*. However, the Mann-Whitney test fails to confirm that there is a gender bias among the sample firms when seeking finance during the business life cycle, except for WCF where a weak significance is found.

*Finance related Characteristics*

Further variables examine the role of finance, which has been reported in the SME literature to be a major concern and are expected to affect firms' sensitivity to WCF. This may include frequent use of cash credit and bank loans and frequent review of WCF. This is confirmed in Table 3, showing a weak significant difference between the two samples on the financing WC variable. Though not statistically significant, the *'more difficult'* group is the one monitoring cash flow more often and makes frequent use of bank loans. As expected, the same group report the most frequent use of cash credit and the difference is significant at the 5% level.

*Trade Credit variables*

The trade credit variables in the above table are expected to give an insight into the possible causes of the problem. As expected, the sample firms which claimed a *'more difficult'* problem reported a high debtor days, a much lower creditor days and a more acute late payment problem. Also fewer respondents of this group have a credit policy and therefore a lower % asked for advance payment. However, except for the late payment problem (Levene's test of inequality of variance was highly significant at 0.000 level) the differences are not significant.

*B. Evidence of a pecking order*

Respondents demonstrate an aversion to raising equity finance, with a mean score of 5.97 which conforms the 'POH'. The evidence provided above is congruent with Myer's (1984) pecking order, in that firms would generally used retained profits, followed by debts and as a last resort to raise external equity capital. Whilst this may be the reasons given by the respondents, it is equally possible that the demand for finance is constrained on the supply side. A number of questions attempt to assess the respondents perception to this and in line with similar studies, the Mauritian manufacturing SMEs have difficulties to arrange for acceptable collateral. However, this could be partly answered by analysing the respondents' perceptions to information asymmetries in debt markets.

*Retention of Control*

One of the reasons commonly cited for the observed financing preferences of SME owners is the desire for independence and to maintain control of the enterprise (Cressy, 1996; Chittenden *et al*., 1996; Holmes and Kent, 1991, Howorth, 2001). This is confirmed by the survey results where the owner managers would consider issuing equity as a last resort. An intra-industry comparison revealed that there are not so much variations in the willingness to retain control of the enterprise. Only a few respondents of the FB and LG industry groups claimed that they get resort to equity financing before considering other sources. Independent two-sample t-tests showed that there is a significant difference in the financing preferences in so far as bank overdrafts/loans and family sources between the Family member and Non-family member firms. Thus where the family involvement is less pronounced, the firms make more use of the traditional sources of funds.

*Information Asymmetries*

Almost 80 per cent of respondents are satisfied with their banks and this could be linked to the fact they are a frequent user of cash credit and easily avail of bank loans (though not that often) to finance both the current and seasonal requirements of their businesses. Over 60 per cent of the sample firms

reported that their banks have maintained or increased their overdraft limit. This would suggest that respondents generally do not perceive information asymmetries in the debt market. Additionally the respondents do not seem to have difficulty establishing a banking relationship. In fact among a list of business problems, rated on a 5-point Likert scale, where 5 represents an 'acute problem' and 1 'not a problem at all', establishing a banking relationship had a mean score of 2.36.

*Collateral*

The size and age variables were first used to see if there is a significant incidence on the availability of collateral assets. The results (*Appendix II*) confirmed that size of firms has a significantly high (Chi-square = 19.252; Sig. = 0.000) impact on assets which could be pledged as security for loan. As expected, the VS and S size category reported that they have no assets to pledge as collateral. However, age of firms has no incidence (Chi-square = 3.062; Sig. = 0.690) on the availability of collateral, though it may be expected that as firms get older, investment in fixed assets are expected to increase. The finding lends limited support to the hypothesis that older firms tend to have large fixed assets base which could be used as security to support demand for finance.

Further analysis shows that the 71% younger firms in the age bracket [0 to 5] and [6 to 10] are having the most difficulty to provide collateral as a requirement to secure short-term borrowing. This indicates that the younger and smaller firms' categories are having the most difficulty to negate the problem of information asymmetries. The parametric *t-tests* of means were used to compare firms experiencing difficulty obtaining finance during the business life cycle[5] and the availability of assets to pledge as security for finance. Only one set of mean showed a weak significant (10% level, Levene's F-statistic = 6.501; Sig. =0.012) difference for firms seeking finance during the expansion phase. In fact this is theoretically sound as firms in that stage are expected to have adequate security when making demand for finance. The results indicate that even where the small firms claimed that they have collateral assets, yet they face difficulties to obtain finance, and this may be interpreted as to the securitization of the assets. Along the same line the *t-tests* means were used to compare firms having problem obtaining debt finance, securing adequate working capital and arranging for bank guarantee to the dichotomous variable on collateral. A significance difference was found between firms having collateral and arranging for bank guarantee.

This is consistent with the findings of previous studies which highlighted the reliance of SMEs on short-term bank debt (Winborg, 1997; Howorth, 2001; Bhaird and Lucey, 2006). *The survey result* gives some information regarding the ability of the sample firms to avail of bank finance. As high as 85 per cent of the respondents perceive that financial institutions insist on collateral as part of their short-term borrowing. However, only 20 per cent reported that they have tangible assets which could be used as security and this confirmed the low frequency (26%) of using bank loans to finance business operations. Thus, firms which have a low fixed assets base and or have more intangible assets would find it difficult to access bank loans (Myers, 1984). They instead make heavy use of cash credit. This finding also accords well with that of Chittenden *et al*. (1996), where access to long-term debt was found not to be associated with profitability but strongly related to collateral.

### *C. Financial related constraints*

The Principal Component Analysis (PCA) data reduction technique was applied to the 13 variables identified to cause difficulty while accessing finance and problems faced by the SMEs. Initial statistics suggested that the variables would factor well and could be used to discriminate between firms facing the distinct problem. The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.729 (meritorious) and Barlett's test of sphericity was 531.34 (Sig. 0.000). The three components in *Table 5* accounted for 65% of the cumulative variance with satisfactory communalities for all the variables. They have eigen values greater than one and the Cronbach Alpha scale reliability test reported high values, thus confirming the internal consistency of the variables falling under each component.

[5] Respondents were asked to rate their difficulties in obtaining finance during the start up phase, early development, working capital requirement, expansion phase and economic situation.

TABLE 4: ROTATED COMPONENT MATRIX OF RESPONDENTS' FINANCIAL RELATED CONSTRAINTS

| | **Component: Difficulty** | | |
|---|---|---|---|
| ***Difficulty obtaining Finance/ Represented a Problem*** | ***Obtaining Finance*** | ***Managing Working Capital*** | ***Establishing Bank Relationship*** |
| Start up | **.715** | | |
| Early development | **.840** | | |
| Working capital finance | **.816** | | |
| Excessive compliance costs | **.746** | | |
| Difficult economic situation | **.671** | | |
| Managing cash flow | | **.863** | |
| Securing operating capital | | **.602** | |
| Credit control and invoicing | | **.765** | |
| Developing accounting system | | **.758** | |
| Establishing bank relationship | | | **.871** |
| Arranging bank guarantee | | | **.830** |
| *Eigen value* | 3.98 | 1.83 | 1.41 |
| *% of Variance explained* | 27.69 | 22.76 | 15.15 |
| *Cronbach's Alpha* | .838 | .774 | .721 |

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

The three components are labeled as difficulty obtaining finance, difficulty managing working capital and difficulty establishing bank relationship. Component 1 (DIFOFIN) accounts for 27.69% of the cumulative variance and measures the difficulty in getting finance during the business life cycle; variables which loaded heavily include early development, WCF and excessive compliance costs. The second component (DIFMWC) represents the difficulties which the Mauritian SMEs face while handling important tasks to deal with WCM. These include managing cash flow, securing operating capital, credit control and invoicing and developing an accounting system; all loaded well into this component. Establishing bank relationship is the third component (ESBKRE). The PCA confirms to some extent that the sample firms faced two critical problems; difficulty sourcing finance and difficulty managing working capital.

*D. Multivariate Analysis*

This section attempts to investigate into the factors affecting the sample firms' financial constraint. For the purpose of the analysis the variable 'DIFOFIN' is used since it was derived from a number of variables which addressed the firms' financial constraint throughout the business life cycle. It is thus a better indicator which measures the sample firms' financial problem from start-up to difficult economic situation. The Cronbach Alpha scale reliability test is high enough to support this argument.

*Financial Constraint Model*

The multivariate model incorporates the main variables which are expected to affect the sample firms demand for finance . The results of the OLS regression between the dependent variable and the independent variables with some variations for the three variables AGE, GENDER and FUSEOD are reported in *Table 5*. The *F-statistics* for the five models are highly significant and are a good indicator that the model fits the data fairly well. Regression models were also run with two more surrogates variables, namely SECURITY (a measure for collateral) and INFOCON (deficient information). The results (not reported) have the expected sign, but were not significant. The main variables of interest are defined in *Appendix I.*

TABLE 5: REGRESSION MODELS FOR DIFFICULTY OBTAINING FINANCE (DIFOFIN)

| **Variables**[a] | **Description** | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** |
|---|---|---|---|---|---|---|
| Constant | Intercept | -1.798<br>-4.107*** | -1.401<br>-3.581*** | -1.668<br>-3.866*** | -1.356<br>- | -1.606<br>- |
| SIZE | Number of employees | -0.165<br>-1.851* | -0.133<br>-1.508 | -0.151<br>-1.696* | -0.122<br>-1.447 | -0.136<br>-1.603 |
| AGE | Age of business | 0.040<br>0.466 | 0.038<br>0.440 | 0.049<br>0.571 | | |
| Heavy | Industry dummy | -0.020<br>-0.222 | -0.008<br>-0.085 | 0.001<br>0.007 | -0.010<br>-0.110 | -0.001<br>-0.016 |
| FOOD | Industry dummy | 0.195<br>2.202** | 0.201<br>2.244** | 0.206<br>2.318** | 0.196<br>2.213** | 0.199<br>2.271** |
| GENDER | Gender of owner manager | 0.118<br>1.472 | 0.120<br>1.477 | | 0.123<br>1.521 | |
| LATEPAY | Late payment problem | 0.276<br>3.466*** | 0.295<br>3.715*** | 0.282<br>3.536*** | 0.296<br>3.730*** | 0.282<br>3.552*** |
| SEASON | Seasonality of product | 0.166<br>2.089** | 0.167<br>2.075** | 0.173<br>2.173** | 0.160<br>2.035** | 0.165<br>2.110** |
| KNOWLESS | Lack of financial knowledge | 0.191<br>2.211** | 0.186<br>2.132** | 0.209<br>2.425** | 0.190<br>2.198** | 0.215<br>2.516** |
| WCMFINR | WCM: Finance review | -0.133<br>-1.560 | -0.136<br>-1.578 | -0.154<br>-1.820* | -0.144<br>-1.706* | -0.165<br>-1.994** |
| PCYCLE | Production cycle | 0.151<br>1.812* | 0.142<br>1.686* | 0.168<br>2.023** | 0.143<br>1.714* | 0.170<br>2.065** |
| BPLAN | Have a business plan | -0.250<br>-3.060*** | -0.230<br>-2.807*** | -0.263<br>-3.223*** | -0.229<br>- | -0.263<br>- |
| FUSEOD | Frequency of overdraft | 0.152<br>1.897* | | 0.155<br>1.925* | | 0.155<br>1.927* |
| $R^2$ | | 0.274 | 0.254 | 0.262 | 0.253 | 0.261 |
| Adjusted $R^2$ | | 0.205 | 0.189 | 0.199 | 0.194 | 0.203 |
| F-Statistics<br>N | Number of cases | 3.963***<br>139 | 3.925***<br>139 | 4.108***<br>139 | 4.325***<br>139 | 4.510***<br>139 |

[a] Variables definition and measurement scale as in Appendix I.
***,**,* represents significance level at 1%; 5% and 10% respectively.

Based on the results in Table 5, the following relationships are established:

- The size variable is negatively associated with the dependent variable for the five models, though showing only a weak significance for models 1 and 3.
- There is no statistically significant relationship between the age of firms and their financial constraint and thus overall model fit is improved without the age variable.
- The first industry dummy (Heavy) is not significant and has a very low coefficient. However, there is a positive and statistically significant relationship for the food industry dummy.
- The regression coefficient gender is positive, but showing no statistically significant relationship with the dependent variable.
- There is a highly positively significant relationship between the late payment problem of Mauritian manufacturing SMEs and their financial constraint.
- There is a positive and statistically significant relationship between the degree of seasonality in the firms' primary product and their difficulty getting finance.
- There is a positive, and statistically significant association between the lack of financial knowledge of the Mauritian owner managed SMEs and their degree of financial constraint.
- There is a negative relationship between the variable finance review (derived from the PCA technique) of Mauritian manufacturing SMEs and their financial constraint, but showing statistical significance only for models 3, 4 and 5.
- There is a positive, and statistically significant, relationship between the production cycle of the sample firms and their degree of difficulty getting finance.

- There is a highly negatively significant relationship between a well prepared business plan of the Mauritian manufacturing firms and their difficulty in getting finance.
- There is a weak significantly positive relationship between the frequent use of overdraft by the Mauritian SMEs and their financial constraint.

*Interpretation and Discussion of Results*

The negative relationship between size of firms and financial constraint is in line with the life cycle model (Scott and Bruce, 1987). Though a weak significance, the result corroborates the arguments of several studies that smaller firms are less transparent as they are *'informationally opaque'* and their request for finance are less attractive because of the transaction cost theory. Therefore as the size of the sample firms increases, they become less financially constrained. Contrary to expectation, the age variable is positively related to the dependent variable, which contradicts the life cycle model. However, the result is not significant. Older firms are expected to have more retained profits and thus become less dependent on external finance.

The finance literature has showed that lending institutions tend to discriminate between male and female owner managed businesses on their lending decision. The result obtained in this study goes against this and revealed that male owner manager of the sample firms faced difficulty getting finance, but this relationship is not significant. However, the research finding reinforces the argument that owner managers who are less sophisticated in terms of financial knowledge are more financially constrained.

The positive relationship between the extent of late payment problem and financial constraint is consistent with previous studies where small firms are reported to suffer from late payment. The result suggests that companies with more severe late payment felt a greater need for finance and thus are more financially constrained. A positive relationship between seasonality of the sample firms' product and difficulty getting finance was found, which supports the argument that firms operating in seasonal market have a greater need to finance working capital. The Mauritian SMEs operating in seasonal market tend to have a greater need for working due to higher level of stocks and debtors. Along the same line of reasoning, the result finds support for the greater need of finance where the Mauritian manufacturing SMEs production cycle is longer.

The negative relationship between finance review and difficulty getting finance in small to medium-sized Mauritian manufacturing firms suggests that firms which are financially constrained would take up the finance review as part of WCM routines more seriously. However, except for model 1 and 2, the coefficient is statistically significant. It is a common practice for lending institutions to request detailed business plan to support the demand for finance. This is more prevalent among the small firms as they do not produce a full set of financial statements. The empirical results obtained in this study confirm this argument and the regression coefficient is highly significant. Alternatively SMEs that are expected to be financially constrained make the frequent use of cash credit. The existence of a positive relationship is confirmed, thus validating this relationship.

*E. Logistic Regression Analysis*

Given the focus of the study on WCF of manufacturing SMEs the study moves on to use a logistic regression model to test the severity of the problem using the binary dependent variable (DIFOWCF) as discussed earlier. Logistic regression is used rather than ordinary least squares in this instance, because the dependent variable is dichotomous rather than continuous (Hair *et al*., 1998).

Table 6 presents the results of the logistic regression analysis for the firms which claimed having difficulty, relative to the firms which did not claim. The model summary appears to be a good fit as indicated by the Hosmer and Lemeshow value (Chi-square value = 7.526; Sig. = 0.481). A good model fit is indicated by a non-significant chi-square value which is the case for the model. The H&L measure showed non-significance, indicating no difference in the distribution of the actual and predicted dependent values. Overall the estimated model appears well determined (model chi-square = 35.029, p = 0.001; 82.1% of observations correctly classified)[6].

*Interpretation and Discussion of Results*

The earlier result for the OLS regression that firms with late payment problem are deprived of an important source of working capital is confirmed. The coefficient is positive and significant at the 5% level. This result suggests that firms may partly negate their difficulty getting WCF by a close monitoring of their receivables. The variable (DEBDAYS) capturing the effect of debtor days had

[6] Independent variables were tested for multicollinearity using bivariate correlations of all variables. The tests appeared satisfactory as the maximum correlation coefficient between any pair of variables was 0.43 (for KNOWLESS and MARSEC)

the expected sign (results not reported) but is not statistically significant. Firms that claimed having difficulty getting WCF receive less credit from

TABLE 6: MEASURES OF FIRM DIFFICULTY OBTAINING WCF: DIFFICULT V. NOT DIFFICULT LOGISTIC REGRESSION ANALYSIS[A]

| Variable | Description | Coefficient | Wald value | Sig. |
|---|---|---|---|---|
| EMPLOYFT | Size of firm | .029 | 1.798 | .180 |
| CREDAYS | Creditors days | -.008 | .317 | .573 |
| LATEPAY | Late payment problem | .618 | 4.409** | .036 |
| MARSEC | Large competitors | 2.123 | 5.782** | .016 |
| MARSEC1 | Large buyers | -.766 | .970 | .325 |
| ACCTSYST | Accounting systems | -1.795 | 4.862** | .027 |
| FINCON | Financial constraints | 1.539 | 8.828*** | .003 |
| KNOWLESS | Less sophisticated financial knowledge | .877 | 4.029** | .045 |
| WCMDEBTR | Focus on debtor review | .118 | .094 | .759 |
| AGE | Age of business | -.043 | 1.467 | .226 |
| BPLAN | Have a business plan | -.731 | .745 | .388 |
| HEAVY | Industry dummy | -.111 | .021 | .885 |
| FOOD | Industry dummy | .383 | .127 | .722 |
| Constant | | 4.896 | 4.436** | .035 |
| % correctly classified 82.1% (Not Difficult = 63.2% and Difficult = 85.7%)<br>Model Chi-square 35.029 (p = 0.001) | | | | |

[a] Dependent variable DIFOWCF is coded 1 = Difficult, 0 = Not Difficult.
***, **, denotes significance level at 1% and 5% respectively.

suppliers of goods (negative coefficient), but result not statistically significant. As a counter measure, firms tend to focus on WCM routines, which include stock review, debtor review and finance review. Only the variable (WCMDEBTR) is reported in Table 6.

The variable (FINCON) is positive and highly significant indicating that, firms which had most difficulty in getting WCF were also more likely to have experienced difficulty obtaining finance during the business life cycle. Firms which are financially constrained had to provide collateral (SECURITY) as well a business plan (BPLAN) to support their demand for finance. Only the variable BPLAN is included in the model and though it attracts the expected sign, it is statistically insignificant.

The variable which proxies respondents' education level (KNOWLESS) is positive and significant, showing that owner managers who are less sophisticated in financial management knowledge are more likely to lose track on the components of working capital and thus report difficulty getting WCF. The implication of this finding suggests that training in financial knowledge is an area that demands attention of owner managers as they often fail to recognise the importance of training. Peel *et al.* (2000) confirmed a similar finding, where SMEs perceived their poor performance solely to external factors. Along the same line, firms that report having accounting systems are expected to properly monitor the working capital elements and thus report less difficulties getting WCF. The coefficient for this variable (ACCTSYST) is negative and statistically significant.

The control variable age which gives an insight into the life cycle model, although exhibiting a negative relationship is statistically insignificant. While the variable size is not having the expected sign and is also not significant. The variable indicating firms operating in a market dominated by large firms (MARSEC) is statistically significant at 5% level. This confirms the difficulties small to medium-sized Mauritian manufacturing firms' face where the market is dominated by large firms. In order to win customers they have to compete on non-price strategy and would thus need to support a

higher working capital requirement. The other variable demonstrating the presence of dominant customers (MARSEC1) is not significant and not displaying the expected sign.

## B. CONCLUSION AND POLICY IMPLICATIONS

This study has demonstrated to some extent that the small to medium-sized Mauritian manufacturing firms have difficulties procuring finance through the traditional sources. The findings lead us to believe that the SMEs are not well organised and tend to rely on informal networks for important matters as financing of the business. However, it was observed that because of the product and market characteristics the firms failed to follow good practices. The analysis has showed that firms operating in markets dominated by customers and suppliers have difficulties procuring WCF.

Overall, the firms report different degree of difficulty getting finance, more particularly to meet their working capital requirements. The sample firms meet their requirement differently based on size, stage of business life cycle and the trade credit variables. Most important and in line with other studies, it is the smallest firms that reported the most difficulties getting finance and operated on less favourable credit terms. The trade credit variables have an incidence on firms which are financially constrained.

Further the research findings showed no significant difference between male and female in terms of difficulty to obtain finance. Equally the size grouping revealed no significant difficulty while accessing finance at the difference stage of the business life cycle. Further the age variable turned out to be insignificant and thus lent limited support to the hypothesis that older firms tend to have large fixed assets base which could thus be used as security to support demand for finance.

The result suggests that companies with more severe late payment felt a greater need for finance and thus are more financially strained. This financial gap is partly met by an overreliance on cash credit and by making frequent use of bank loans. The Mauritian SMEs operating in seasonal market tend to have a greater need for working capital as they need to finance a higher level of stocks and debtors. Along the same line of reasoning, the result finds support for the greater need of finance where the Mauritian manufacturing SMEs production cycle is longer.

The multivariate analysis has confirmed the importance of formal accounting systems, financial management knowledge of owner manager, and the ability to prepare business plan to support the demand for finance. The research findings are expected to have important implications for the business practitioners, lending institutions and government agencies while formulating policy decisions to better serve this heterogeneous group of firms.

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APPENDIX I: DEPENDENT AND INDEPENDENT VARIABLES DEFINITION AND SUMMARY STATISTICS

| *Variable* | *N* | *Variable Definition* | *Measurement Scale* | *Mean value* |
|---|---|---|---|---|
| EMPLOYFT | 137 | Number of employees | Continuous | 17.50 |
| AGE | 137 | How old is the business | Continuous | 13.68 |
| HEAVY | | Heavy industry group dummy | 1= heavy; 0= else | |
| LIGHT | | Light industry group | 1= light; 0= else | |
| FOOD | | Food and Beverage dummy | 1= food; 0= else | |
| GENDER | 141 | Gender of owner manager | Dichotomous (1= male, 0= female) | 84* |
| KNOWLESS | | Unsophisticated financial knowledge | Continuous: Factorˆ scores | |
| TERMPCR | 132 | Terms of purchases - % on credit | Percentage (1 – 100) | 56.99 |
| LATEPAY | 131 | Late payment problem | Ordinal: (1=not a problem to 5=a very high extent) | 3.51 |
| BDEBT | 136 | % of bad debts | Continuous | 3.29 |
| DIFFMWC | 131 | Difficult managing working capital | Continuous: Factorˆ scores | |
| WCMDEBR | 131 | Focus on debtor review | Continuous: Factorˆ scores | |
| WCMFINR | 131 | Focus on Finance review | Continuous: Factor^ scores | |
| PCYCLE | | Production cycle | Ordinal: (1= highly influenced to 5=not influenced at all) | |
| SECURITY | | Have collateral | Dichotomous: (1=yes, 0=no) | 81 |
| BPLAN | | Have a business plan | Dichotomous: (1=yes, 0=no) | 62 |
| ODFAC | | Have overdraft facilities | Dichotomous: (1=yes, 0=no) | 74 |
| FUSEOD | | Frequent use of overdraft | Ordinal: (1=never to 5=very often | 3.73 |
| FREBLO | | Frequent use of Loans | Ordinal: (1=never to 5=very often | 2.92 |
| SALCREDI | 130 | Terms of sales -% on credit | Percentage (1 – 100) | 56.51 |
| DEBDAYS | | Debtors days | Continuous | 46 |
| CREDAYS | | Creditors days | Continuous | 42 |
| CPOLICY | | Have a credit policy | Dichotomous: (1=yes, 0=no) | 71 |
| ADPAYT | | Advance payment | Dichotomous: (1=yes, 0=no) | 59 |
| SEASON | 137 | Seasonality of market demand | Ordinal: (1=not at all seasonal to 5=highly seasonal | 2.43 |
| MARSEC | | Large competitors in the market | Dichotomous: (1=yes, 0=no) | 73 |
| ACCSYS | 141 | Accounting systems | Nominal: (0=no records kept to 4=formal accounts kept) | |
| CCONINV | 136 | Difficulty with credit control and invoicing | Ordinal: (1=not a problem to 5=acute problem) | 2.80 |
| DACCSYS | 136 | Difficulty developing accounting systems | Ordinal: (1=not a problem to 5=acute problem) | 3.01 |

ˆ The mean and std. dev for factor score is 0 and 1 respectively.

* For dichotomous variable cell indicates percentage of dependent group who gave an affirmative response.

APPENDIX II: KRUSKAL-WALLIS - DIFFICULTY OBTAINING FINANCE * INDUSTRY

| Have you experienced difficulty obtaining finance | Industry: Grouped as Heavy, Light and FB | N | Mean Rank | Chi-square Sig. |
|---|---|---|---|---|
| - Start up | Heavy Industry | 60 | 62.87 | |
| | Food n Beverage | 27 | 83.48 | |
| | Lighter Industry | 52 | 71.23 | 5.283 |
| | Total | 139 | | (0.071) |
| - Early development | Heavy Industry | 60 | 62.68 | |
| | Food n Beverage | 26 | 85.46 | |
| | Lighter Industry | 50 | 66.66 | 6.804 |
| | Total | 136 | | (0.033) |
| - Working capital finance | Heavy Industry | 59 | 68.48 | |
| | Food n Beverage | 27 | 74.19 | |
| | Lighter Industry | 52 | 68.22 | 0.503 |
| | Total | 138 | | (0.778) |
| - Expansion | Heavy Industry | 58 | 74.15 | |
| | Food n Beverage | 28 | 73.68 | |
| | Lighter Industry | 51 | 60.58 | 3.911 |
| | Total | 137 | | (0.141) |
| - Difficult economic situation | Heavy Industry | 58 | 63.47 | |
| | Food n Beverage | 26 | 73.58 | |
| | Lighter Industry | 49 | 67.68 | 1.353 |
| | Total | 133 | | (0.508) |