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WORKING CAPITAL FINANCING PREFERENCES: THE CASE OF MAURITIAN MANUFACTURING SMALL AND MEDIUM-SIZED ENTERPRISES (SMEs)

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ABSTRACT

This paper investigates the approach of small- to medium-sized Mauritian manufacturing firms to working capital finance using a survey-based approach and case studies. Financing has been cited as one of the most common problems faced by SMEs and is often viewed as one of their main barriers to growth. Using parametric and non-parametric techniques, the important variables that affect the demand for financing are examined. Interestingly, it is observed that the sample firms adopted more informal sources of financing and networking to meet their financing requirements. The financing preferences of the firms were predominantly short-term and there was conclusive evidence that they were reluctant to move down the pecking order for fear of losing control of their businesses. The findings confirmed that internal resources, non-bank sources and short-term debt represent the main sources of financing. The research findings provided some new evidence in support of the different approaches to financing working capital. These SMEs used more informal sources such as shareholder loans and bootstrap finance. These results indirectly suggest that firms experience significant information costs that prevent them from gaining access to the traditional sources of financing. The findings of the study will be useful to the financial institutions that fund SMEs and to policy makers.

Keywords: working capital finance, Mauritian SMEs, financing preferences, pecking order, informal sources

INTRODUCTION

This paper investigates the working capital finance (WCF) of small- to medium-sized Mauritian manufacturing firms. Finance has been cited as one of the main barriers to SMEs' growth, and many governments have attempted partial solutions through the creation of specific financing schemes. There are various traditional sources of financing for SMEs ranging from bank loans, bank

overdrafts, own funds/savings, loans from family or friends, and equity funding. However, non-traditional sources of finance also exist that entrepreneurs can use in the financing of their businesses; these have been described by many researchers as *bootstrapping finance*.

Working capital is a significant and important issue during financial decision making because it is a part of the investment in total assets that requires an appropriate financing investment (Bhunia, 2010). Generally, working capital (WC) is financed by a combination of long-term and short-term funds. Long-term sources of funds consist of capital (equity from owners) and long-term debt, which only provide for a relatively small portion of the WC requirement (finance theory dictates that only the permanent portion of WC should be supported by long-term financing (Gitman, 2000)). This portion is the net WC; that is, the excess of the current assets over the current liabilities. On the other hand, the short-term sources of WCF consist of trade credit, short-term loans, bank overdrafts, tax provisions and other current liabilities that can be used to finance temporary WC needs. Sometimes, a WC deficit exists if the current liabilities exceed the current assets. In such a situation, short-term funds are used to also finance part of the non-current assets and the firm is said to be adopting an aggressive WC policy (Bhattacharya, 2001). No doubt, the easy accessibility of finance is an important factor when selecting the source of financing, but its impact on the risks and returns cannot be ignored (Gitman, 2000). Thus, the working capital management policies are guidelines that are helpful to direct businesses; the policies aim to manage the current assets, generally cash and cash equivalents, inventories and debtors, and to manage the short-term financing so that the cash flows and returns are acceptable (Kumar, 2010).

The financing preferences of firms are often explained using Myers' (1984) pecking order theory. Although this theory was developed for large, quoted companies, it is equally applicable to small firms. 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 exerts some pressure on the banks, and a significant portion of their available resources are first channelled to the large firms (Narasimhan & Vijayalakshmi, 1999). Narasimhan and Vijayalakshmi also noted that the long-term sources of funds for WC appear to be dominant in many industries and that cash credit is the next major source for financing WC. Another important dominant source for funding the WC requirement is trade credit. Trade credit is usually called a spontaneous source of finance and is normally available as part of the trade terms. Olomi (2008) reported that medium-sized textile firms with limited access to the long-term capital markets tend to rely more heavily on owner financing, trade credit and short-term bank loans to finance their operations.

The few studies that have addressed the financing and capital structure of SMEs are mostly for developed countries (Hughes, 1997; Watson & Wilson, 2002; Zoppa & McMahon, 2002; Hussain & Matlay, 2007); only a few address developing countries (Peterson & Shulman, 1987; Aidis, 2005; Abor, 2005; Bhaird & Lucey, 2011). Research into this area for small, island economies is scant, particularly research investigating the WCF of SMEs. Therefore, this paper investigates the WCF practices of small- to medium-sized firms in an attempt to bridge this gap and to add to the growing literature on the financing decisions of SMEs.

In developing countries, SMEs serve as a useful bridge between the informal economy of family enterprises and the formalised, corporate sector. As such, most policymakers consider the health of the SME sector to be highly important to an economy. Mauritius is not an exception to this concern. In Mauritius, it is the small firms that constitute the majority of firms, and they account for nearly 47% of the workforce (Central Statistics Office, 2009). Based on the statistical data compiled by the Central Statistics Office[1], the number of small establishments and employment generated has increased by over fivefold, as shown in Table 1. From 1985 to 2010, the number of small establishments in Mauritius has increased to 94,000, and they provide an estimated 250,000 jobs. The SMEs' contribution to Gross Domestic Product amounts to nearly 37% or MUR 120 billion. The estimates based on the latest figures suggest that SME exports could represent approximately 20% to 25% of total exports. These figures clearly provide evidence of a vibrant private sector in Mauritius, with its population of 1.2 million.

Table 1
Evolution of small businesses

Years	Number of firms	Employment generated	% of labour force
1985	16,000	47,608	22
1992	40,497	113,274	24
2002	75,267	200,000	36
2007	92,388	211,582	37
2010*	94,000	250,000	47

Source: CSO (1985, 1992, 2003, 2009 – Census of Establishments; Census of Economic Activities and Collection of Statistics of Economic Activities respectively).*official figures not yet published

SMEs are the key drivers of the Mauritian economy through their important contribution to GDP growth and socio-economic development. Because of their significance and their proven resilience in responding to fast changing conditions, even during the global economic crisis, SMEs have now become even more important in advancing the government's efforts to overcome

socio-economic disparities. For this reason, the Government has focused on facilitating a secure and conducive business environment for SMEs. Over recent years, much attention has been paid to tackling the constraints faced by SMEs relating to finance, capacity building, marketing, business development services, infrastructure and institutional support frameworks. In the wake of the global financial crisis, the government budget for 2009–2010 and the subsequent budgets have made additional efforts to help the SME sector. However, because most SMEs are privately owned, the owner managers need to pay attention to the working capital financing of their businesses to ensure that the intervention funded by the public purse demonstrates benefits to the wider society.

The objective of this study is to examine the working capital financing preferences of small- to medium-sized manufacturing firms operating in diverse industry groups. A second objective of this study is to identify the main factors influencing the demand for WCF from the sample firms and to highlight the use of informal sources of financing. A principal components analysis (PCA) and a cluster analysis are used to group and identify the types of firms with respect to their financing decisions for their businesses. The paper is organised into four main sections. The primary literature surrounding the topic is discussed and the methodology is described along with the profiles of the interviewees. Thereafter, the results are discussed and the implications for practitioners and policy makers are highlighted.

LITERATURE REVIEW

Working capital structure refers to the elements of WC and it shows which of the possible components is responsible for investment in WC. Working capital structure is encapsulated in the concept of working capital management (WCM), which refers to the financing, investment and control of the net current assets within the policy guidelines. WC can be regarded as the lifeblood of the business and its effective provision can do much to ensure the success of the business, while its inefficient management or neglect can lead to the downfall of the enterprise.

In many countries, empirical studies have indicated that small business managers experience problems in raising capital for the development of their businesses. Different studies (e.g., Bolton, 1971; Wilson, 1979; Holmes & Kent, 1991; Winborg, 2000) have frequently referred to the concept of a *financial gap* to explain why many small businesses face this type of problem. Access to finance has been identified as a key element for SMEs to succeed in their drive to build productive capacity, to compete, to create jobs and to contribute to poverty alleviation in developing countries. Despite their dominant numbers and their

importance in job creation, SMEs have traditionally faced difficulty in obtaining formal credit or equity. A study conducted in Lithuania (Aidis, 2005) revealed that the most important barriers were low purchasing power, followed by the lack of WC and official bureaucracy. Traditional commercial banks and investors have been reluctant to service SMEs for a number of well-known reasons:

1. SMEs are regarded by creditors and investors as high- risk borrowers due to insufficient assets, low capitalisation, vulnerability to market fluctuations and high mortality rates;
2. Information asymmetry arising from SMEs' lack of accounting records, inadequate financial statements or business plans makes it difficult for creditors and investors to assess the creditworthiness of potential SME proposals;
3. The high administrative/transaction costs of lending or investing small amounts do not make SME financing a profitable business.

Hughes' (1997) study of the financial structure of large and small U.K. businesses found that small businesses tend to rely more on short-term debt in comparison with large businesses. These results show that small businesses have a higher proportion of debt as trade credit, which is attributed to the fact that small firms face greater problems in attracting long-term debt than large businesses. However, this difference could also be explained by the mere preferences and attitudes of the owner manager toward debt capital. The more recent study of Bhaird and Lucey (2011) brought evidence that connected the life cycle theory to the financing of firms' capital structures. An analysis of the respondents' capital structure across age groups indicates distinct changes in the sources of finance employed by firms over time. They found that the financing choices are consistent with Myers's pecking-order hypothesis, and the importance of profitability in financing SMEs is emphasised. Contrary to conventional wisdom, the respondents in the youngest age category report a relatively high use of debt financing. This high use is explained by the provision of the firm owners' personal assets to secure the firm debt.

Bootstrap Finance

Studies have shown that small firms can tap into other informal sources of finance instead of relying solely on financial institutions and government agencies for capital. A business itself has the capacity to generate capital. This type of financing, called bootstrap financing, is available to virtually every small business and includes a combination of social and economic transactions; for example, buying low-cost equipment and having family members help during peak periods. Bootstrap financing also encompasses factoring, leasing, the use of credit cards and the frugal management of the business. Different researchers

have put forward their own definitions, which include some of the following techniques:

1. Launching ventures with modest personal funds (Bhide, 1992).
2. Highly creative ways of acquiring the use of resources without borrowing money or raising equity financing from traditional sources (Freear, Sohlt, & Wetzel, 1995).
3. The sale of the entrepreneurs' personal properties and the entrepreneurs' personal indebtedness (Neeley & Van Auken, 1995).
4. Quasi equity, outsourcing, foundation grants. (Bhide, 1992; Freear et al., 1995; Winborg & Landstrom, 2001).

InfoDev (2006) argued that bootstrapping, i.e., making use of savings, investments from friends and family and retained earnings, is by far the most common strategy used by successful technology companies. Lahm and Little (2005) described bootstrapping as a creative financing strategy and expanded on two methods of bootstrapping: the acquisition and control of resources (both tangible and intangible) and the efficient use of those resources to finance the enterprise for growth. According to the authors, bootstrapping is entrepreneurship in its purest form and is the transformation of human capital into financial capital.

Windborg and Landstrom (2001) identified 19 bootstrapping measures that aim to minimise the need for capital and 13 measures that can be used to meet the need for capital. Among the first group of measures are the following: buy used equipment instead of new, borrow equipment for shorter periods, hire temporary personnel, employ relatives/friends at below market salaries, run the business from home, share premises, share equipment, etc. The second group of measures consists mainly of negotiating the best terms from suppliers, deliberately delaying payments to suppliers, withholding the managers' and the owners salary for some period of time, obtaining capital via the managers' assignment in other businesses and obtaining subsidies and grants, among others. Based on a sample of 91 Swedish business founders, Winborg (2009) identified 7 motives for seeking bootstrap financing: cost reduction, managing without long-term external finance, lack of capital, risk reduction, gaining freedom of action, saving time, and enjoyment in helping others. A more recent study that is based on a longitudinal study of 211 entrepreneurs in the U.K. found that social networks help new ventures acquire resources through bootstrap financing (Jones & Jayawarna, 2010). These authors explored how these resources influence the business performance as measured in sales growth and turnover at the early operating stages. The study distinguishes three types of social ties—strong, weak, and brokerage — and how they affect three different types of bootstrapping finance—payment-related, owner-related and joint utilisation.

Pecking Order Hypothesis (POH)

Myers (1984) has tried to explain business managers' financial preferences using a *pecking order approach*. According to Myers, business managers prefer internal to external financing and debts to external equity. In summary, the 'POH' states that businesses adhere to a hierarchy of financing sources and prefer internal financing when available; if external financing is required, debt is preferred over equity.

This hierarchical *ranking* is due to the presumed fact that the relationship between the financier and the manager is characterised by information asymmetry. Holmes and Kent (1991) suggested that even though Myers' discussion of the 'pecking order approach' is related to large, listed businesses, the reasoning is equally applicable to small firms. Several empirical studies have supported Myers' reasoning (e.g., Holmes & Kent, 1991; Norton, 1991; Scherr et al., 1993; Paul et al., 2007; Gebru, 2009). Holmes and Kent (1991) found that owner managers prefer internal funds because this form of funding ensures that they can maintain control over operations and assets. If debt financing becomes necessary, the managers are assumed to favour short-term debt because this source does not tend to involve any demand for collateral security. Zoppa and McMahon (2002) found that there is increased dependence on short-term financing for the less profitable firms. The less profitable an SME is, and therefore the less self-sufficient it is through the reinvestment of profits, the more likely that it will need to depend upon short-term debt financing for its assets and activities. The authors also observed that growth in sales creates financing pressures that are most likely met by short-term funding.

Zoppa and McMahon (2002) also revealed that as SMEs grow in size (measured in terms of assets), the more dependent they become on short-term funds for those assets. This relationship would be the case when the sample units have limited access to long-term debt and equity financing arising from an alleged 'financing gap' that prevents the business from following the financial management dictum of matching the term of the financing used to the term of assets acquired (the so-called 'matching' or 'hedging' principle). Because SMEs are often characterised by a low fixed assets base (Padachi, 2006), the dependence on short-term funds is proportionately high, which conforms to the matching or hedging principle (Bhattacharya, 2001). Consistent with this reasoning, the owner manager's desire to maintain control and independence are enough to support the explanation of his/her financial preferences. Owners might perceive that any external providers of funds can interfere in the management of the business.

Consistent with the POH, Paul et al. (2007) found that the entrepreneurs in start-ups turn to internal sources first, that is, their own funds. Contradicting the POH, however, the evidence in this paper showed that where external funds are required, the main source is equity rather than debt. In the majority of cases, in-depth interviews showed that a bridged pecking order applies in that the businesses move from self-funding to external equity in preference to, or instead of, bank financing. Two reasons for this pattern can be identified. First, entrepreneurs consider debt to be a personal liability because it invariably requires underwriting by personal guarantees. Entrepreneurs generally place a self-imposed limit on the extent to which they are prepared to mortgage their assets. Second, entrepreneurs deliberately seek out equity investment as a means of obtaining added value over and above the finance invested. Rather than the external equity being viewed as expensive, it is viewed as being a good value because a well-chosen investor can add business skills and social capital in the form of commercial contacts and access to relevant networks.

It can thus be concluded that the two approaches discussed above lend support to the financial choices of small businesses. Most of the studies in small business finance have, in one way or another, found evidence regarding how these dual factors, that is, the characteristics of the small business and of the small business manager, are important to explain the firms' financial preferences and choices (Pettit & Singer, 1985; Levin & Travis, 1987; Barton & Mathews, 1989; Ang, 1991; Scherr et al., 1993; Cosh & Hughes, 1994; Hamilton & Fox, 1998; Winborg, 2000; Gebru, 2009). Small firm owners 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 & Hughes, 1994).

Support regarding the firm owner characteristics is found in Gebru's study (2009). Consistent with other studies, the key findings include that the POH holds true for MSE (micro and small enterprises) owners in Tigray regional state as the educational level of the owners decreases and there is less intrusion in the form of ownership. However, MSE owners with a higher degree of entrepreneurial skills are found to conform to the predictions of the POH. Furthermore, factors such as ownership type, acquisition type, owner's level of education and the reason for the business start-up are found to be major determinants of the MSE owners' financing preferences. Along the same line, Hussain and Matlay (2007) found that family and close associate networks were very important for the support of both ethnic minority and white owner/managers. All of the respondents required loans from banks and other financial institutions, both at the start-up stage and in the subsequent years.

However, for the ethnic minority owner/managers, the initial importance of the financial institutions declined over the years. The ethnic minority owner/managers showed a preference for less intrusive and more "user friendly" financing options that allowed them to remain in full control of their businesses. Neeley and Van Auken (2009) analysed how three characteristics of the business owner can influence financing: education level, age and gender.

METHODOLOGY

The data for this study were collected as part of a comprehensive survey[2] on the financial and WCM practices of small- to medium-sized Mauritian manufacturing firms operating in eight 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].

A total of 145 survey forms were collected out of a sample of 420 firms, representing 20% of the population (firms employing up to 50 employees), which satisfies the sampling criteria. A stratified sampling was used so that each of the eight main industry groups is represented. Four questionnaires had to be excluded because they were not properly filled in and many sections were left unanswered, giving a total of 141 usable responses and representing an effective response rate of 33.5%. It must be noted that the Mauritian business community is not used to this type of survey. Despite their non-familiarity with survey instruments, this response rate was possible through the development of a network with the SME Association and other support institutions and the use of multiple channels to collect the data.

This paper focuses on the financing variables and examines the financing preferences of the firms that are requesting WCF. In an attempt to measure the severity of the financing problem, the survey instrument included a number of questions to capture the variables of interest. The data were analysed using the Statistical Package for Social Sciences (SPSS), applying both parametric and non-parametric tests. The PCA is used to reduce the variables on the 'sources of finance' used both during 'start-up' and to finance the 'current needs' of the business. To avoid generalising on the results, the cluster analysis technique was then used to identify the different types of firms with respect to small business finance preferences. Based on the industry classification and the size category, important industry and size differences are investigated. Additional rigour in the analysis was possible through the selection and analysis of 12 mini cases selected from the survey respondents. The profiles of the interviewees are given in

Appendix A. We also examine the extent of trade credit, short-term borrowing, traditional sources (bank loans and bank overdrafts), formal WCF, equity finance, bootstrap finance (ascertained from the 12 mini cases) and retained profits as sources of finance among the Mauritian manufacturing SMEs.

DATA ANALYSIS AND RESULTS

Descriptive Statistics

The survey instrument contains a number of variables to test for significant differences based on the firms' characteristics and the owner managers' profile. Tables 2 and 3 provide summary statistics on the main variables of interest and information about Mauritian SMEs. 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 that had been appointed as director. The presence of family members increases confidence in the completeness and reliability of the information provided.

Table 2
Family members involved, 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

Ownership and structure

Table 2 displays the sampled firms' ownership structure in three columns: the family members involved in decision making, the business legal entity and the owner manager's primary role in the business. The majority of the companies (63%) are family-owned businesses and some (25%) do not involve anyone in the decision-making process. In nearly 50% of the cases, the owner manager assumes the overall responsibility for the business, while another 44% occupy the post of managing director. Thus, in the majority of the cases, the owner manager oversees all of the operational aspects of the enterprise and may thus have no time to perform even some of the basic aspects of financial management.

Table 3
Sample companies by size and age

	N	Min.	Max.	Mean	Median	Std. Dev.	Skew-ness
Number of Employees– FT	134	0	82	14 .95	9.00	16.131	2.083
How old is the business?	134	1	50	13.56	12.00	9.510	1.099
Size of your firm in terms of:							
-Net assets in 2007	52	200,000	80,000,000	12,530,391	6,333,175	1.700E7	2.304
-Sales in 2007	93	100,000	52,000,000	9,167,113	4,500,000	1.078E7	1.910

In terms of the business organisation, 54.6% of the firms 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). The contingency table in Appendix B (Table A) shows that family involvement and non-family involvement have a relationship with the firm's size, where the larger size category tends to have more non-family members compared to the other size categories, with a Chi-squared value of 33.345 at the 1% significance level.

Size, age and industry

Table 3 provides descriptive statistics for the three commonly used measures of size. It also shows the age of the companies, which was calculated by deducting the year that the business was established from 2008, the year that the data were collected. Small firms represent a bulk of the business stock and, as per the Central Statistics Office 2007 bulletin, the firms employing up to 9 employees outnumber those employing 10 and above, the threshold used for compiling the statistical data on the Mauritian business stocks. The average employment size is 15. Consistent 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. The size of the companies in terms of turnover is in the range of Rs 100,000 to Rs 52,000,000, with a mean value of Rs 9 million (the median firm value is Rs 4.5 million). However, the net assets and turnover as a measure of size were not used for this study because fewer than half of the respondents provided a figure for the net assets. For analysis purposes, the sample firms were grouped into different size brackets and into four sub-samples, very small (VS), small (S), medium (M) and large (L), to better reflect the size of firms in Mauritius.

The sample was spread across eight main industry groups, as shown in Appendix B, Table B. It is observed that 3 industry groups have a low number of firms, which thus precludes a detailed analysis by sector. The industry classifications were re-coded into three main groups[5] and are labelled as Heavy Industry (CRP, MP, PPP); Food and Beverages (FB) and Light Industry (JW, LG, PC, WF).

Financing Preferences

The sample firms were asked about their sources for the funds used during the start-up phase and also for financing their current needs. Their responses regarding these different sources of funds should provide an indication as to whether the financing pattern follows a pecking order. The survey results demonstrate a clear preference for using their own savings and short-term borrowing to finance the start-up phase and for relying mostly on internally generated funds (retained profit) and short-term borrowings (bank overdrafts and bank loans) to finance the current needs of the business. These findings accord well with the previous studies (Cosh & Hughes, 1994; Hussain & Matlay, 2007; Paul et al., 2007). The respondents were asked to rank in order of priority the source of funds they would consider as part of their WC requirements. Table 4 shows the mean score for each source of finance, and a lower score indicates that this source is more preferred.

Table 4
Ranking on use of finance for current needs

		Mean rank
1	Reinvest the profits from operations in the company	1.85
2	Delay payment to suppliers of goods and services	3.41
3	Offer trade discounts for customers to make prompt payments	3.72
4	Convert short-term loan to long-term loan	3.94
5	Get a long-term loan	4.10
6	Sell some of the fixed assets	5.66
7	Sell some equity of the business	5.97

The result shows a clear preference for using retained profit, with a mean score of 1.85, to finance the business WC requirements. A number of comments (qualitative section) on the survey forms reiterate this preference: "we prefer to keep the business within the family and additional funds are met through shareholders loans rather than to accept outside capital" ($Case_{num9,\ 10}$). The K-W

tests were used to see if there are any significant differences in the sources of funds on account of the firms' size and age. The tests revealed no significant differences, contrary to the research finding of Neeley and Van Auken (2009), for the two sub-samples (age and size), except for two variables (reinvest profit and offer discounts to customers) for the age sub-samples. In addition, no significant industry differences were found in the use of bank loans and cash credit, retained profits and the other common sources of funds available to SMEs to finance the business current needs. This finding indicates that the small to medium-sized Mauritian manufacturing firms do not attach enough importance to the financial decisions of their businesses.

The respondents demonstrate an aversion to raising equity finance, with a mean score of 5.97. This evidence is congruent with Myer's (1984) pecking order, in that firms would generally used retained profits, followed by debt and, as a last resort, would raise external equity capital. Whilst these reasons may be 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' perceptions regarding this possibility and, consistent with similar studies, the Mauritian manufacturing SMEs have difficulties arranging for acceptable collateral. However, the supply side of finance could be partly answered by analysing the respondents' perceptions regarding the information asymmetries in debt markets.

Information asymmetries

Approximately 80% of the respondents are satisfied with their banks, which could be linked to the fact that they are frequent users of cash credit and can easily avail themselves of bank loans (though infrequently) to finance both the current and the seasonal requirements of their businesses. Over 60% of the sample firms reported that their banks have maintained or increased their overdraft limit. This finding suggests that the respondents do not generally perceive information asymmetries in the debt market.

The size and age variables were first used to see if there is a significant effect on the availability of collateral assets. The results (Appendix B, Table C) confirmed that the size of the firms has a significantly high (Chi-squared = 19.252; Sig. = 0.000) impact on the assets that could be pledged as security for loans. As expected, the VS and S size category reported that they have no assets to pledge as collateral. However, the age of the firms has no incidence on the availability of collateral, though it could be expected that as firms get older, their investments in fixed assets increase, which could be used as security to support demand for finance.

Table 5 gives some information regarding the ability of the sample firms to avail of bank finance. As high as 85 % 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.

Table 5
Status on the use of bank finance

		Mean or %[1]
1	Banks are willing to provide bank overdraft facilities	75
2	Bank require collateral as part of borrowing requirement	85
3	Tangible assets which can be used as security for finance	20
4	Frequency on the use of overdraft facilities	3.73
5	Frequency on the use of bank loans	2.92

[1] measurement in binary scale indicates proportion of respondents giving an affirmative answer

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 their enterprise (Cressy, 1996; Chittenden et al., 1996; Holmes & Kent, 1991, Howorth, 2001). The reluctance to dilute control is confirmed by the survey results, where the owner managers consider issuing equity as a last resort. An intra-industry comparison revealed that there is not much variation in the willingness to retain control of the enterprise. Only a few respondents in the FB and LG industry groups claimed that they resort to equity financing before considering other sources. This finding could be explained by the need to bring added value over and above the finance invested. External equity is viewed as a good value because a well-chosen investor can add business skills and social capital in the form of commercial contacts and access to relevant networks (Paul et al., 2007). Independent two-sample t-tests show that there is a significant difference in the financing preferences in so far as regards bank overdrafts/loans and the family sources between the family member and the non-family member firms. Thus, where the family involvement is less pronounced, the firms make more use of the traditional sources of funds.

Sources of Finance

The traditional sources of finance used by SMEs are clustered as internal and external sources. The supply of finance has tended to discriminate among firms using the theoretical framework of agency theory, transaction cost theory and credit rationing, while the demand side is constrained by the POT, the life cycle model and managerial preference. Table 6 shows the mean score for each source of internal and external funds used by the sample firms. The three most common sources of funds used to finance business start-up are own savings, with a mean score of 4.09, bank loans (4.07) and bank overdrafts (3.74).

However, as firms begin generating revenue, retained profits are the most preferred means to finance the current needs, supplemented by bank lending. This form of financing ensures the maintenance of control over operations and assets and confirms the findings of previous studies (Holmes & Kent, 1991; Hussain & Matlay, 2007). Factoring is the least preferred source for financing the current needs of the business. This finding could indicate that SME owners are not prepared to outsource the credit function on the grounds that they might distract customers (this was confirmed by most of the interviewees during the qualitative part of the study and, if used, factoring is solely for a specific case, such as overseas customers: $Case_{num4}$). Alternatively, the size of the receivables could be unattractive to the factor or this financing mode might not be well perceived by the Mauritian SME sector.

The K-W tests were used to compare the mean score for the different sources of funds to the firms' characteristics (size, age, industry) and the education level of the owner managers. The non-parametric tests display the mean rank for each group, the number of cases in each group, and the chi-squared statistic and its significance level. The significance level for the majority of the sources is greater than 0.05, thus indicating that the size differences did not influence the financing decision of firms at start-up or when meeting the current financing requirements of the business. However, a significant difference is observed for bank overdrafts at the 1% level and bank loans at the 5% level and a weak significance is observed for shareholder/director loans, trade credit from suppliers and the leasing of plant and equipment between the firms in the very small, small, medium and large size categories.

Age can be used to capture a firm's information readiness and it would be of interest to see if there is a significant difference between firms in the different ages groups in the types of WCF being requested. On the same note, the age of the business (using the six sub-samples) failed to reveal any significant difference in the sources of funds use to meet the operational requirements, except for the use of bank overdrafts, which was highly significant. This finding lends support

to the allegation that banks discriminate in their lending decisions based on the age of firms, with the younger firms viewed as more informationally opaque. Furthermore, no significant industry differences were noted in the use of financing, except for factoring and shareholder loans, which were significant at the 5% level and which were the two least popular uses of funds among the sample firms. The owner manager's level of education is expected to influence the use of the least popular sources of financing, namely leasing and factoring.

The non-parametric test confirms the effect of the level of education and hire purchase/leasing were found to be highly significant along with the use of bank overdrafts. Details of the results are provided in Appendix B (Table D). The education variable is important in understanding the financial preferences of SMEs; evidence of this importance is found in Gebru's (2009) study.

Table 6
Sources of funds –mean score at start-up and for current needs[a]

Start Up	*N*	Mean	***Current Needs***	*N*	Mean
Compensation from previous job	100	2.48	Retained profits	141	**4.01**
Own savings	134	**4.09**	Bank overdrafts	135	**3.64*** **
Loan from family/friends	118	2.77	Bank loans	138	**4.00**
Trade credit from suppliers	119	**3.40***	Hire purchase/leasing	124	2.87
Leasing of plant and equipment	112	2.92*	Factoring	106	1.84
Bank loans	134	**4.07****	Delay payments to creditors	133	**3.16**
Bank overdrafts	120	**3.74**	Shareholders/Director loan	127	2.91*
Empowerment fund	44	2.43	Family members	119	2.48
Start-up grant scheme	43	2.37			
Equity financing scheme (DBM)	88	2.66			

[a] measured on a 5-pt ordinal scale, where 5 = most important and 1 = least important.
***,**,* indicates significance level at 1%, 5% and 10% respectively.

Focus on financing modes

The pattern of responses regarding the sources of finance used both at 'start-up' and to meet the 'current needs' of the business was analysed using PCA. After a number of iterations, three clear factors emerged under both instances based on their individual communalities and factor loadings. Table 7 displays the results of

the analysis for the sources of finance used to start a business and to sustain its current operations.

The sources of funds used during the start-up phase of the business include government financing schemes, short-term sources (trade credit, cash credit and bank loans) and bootstrap finance. The consistency of the items included under each component was verified using the Cronbach's Alpha reliability test and the values obtained confirmed the internal consistency of each item (except for the bootstrap finance and internal equity (IE) factors). The initial statistics (displayed below the table) suggest that the variables would factor well. The varimax rotated factor loadings show that the variables cluster as predicted. The components were labelled as indicated in the table. Component 1: STB accounts for 25.45% of the cumulative variance and measures the focus on the use of short-term borrowing. The variables that loaded heavily onto this component included cash credit, bank loans and trade credit.

Component 2: Formal working capital (FWC) represents a focus on formal channels of WCF, with hire purchase/leasing and factoring attracting the heaviest loadings. The variable shareholder/director loans has a side loading onto this component. The use of internal equity is the third component, having two variables that load fairly heavily and one variable with a factor loading below 0.50.

The PCA removed the distorting effect that the strong inter-correlations among the 8 WCF variables would have on the calculation of the various 'distance' and 'variance' measures used in the grouping procedure. The PCA has confirmed that there is a distinct pattern to WCF in each of the three discrete areas (both at start-up and for current needs) and suggests that the firms might use one source of finance more than others. This finding is investigated using K-means clustering to identify these cases and to develop a profile for each firm type.

Cluster analysis – financing patterns

Three components have been identified that measure the different sources of WCF. The next step of the analysis is to identify (Table 8) the principal clusters and the sources of funds that are associated with each Cluster. The final cluster centres are the highest for the short-term borrowing in cluster 1 and the formal WC in Cluster 2, suggesting that the firms in these clusters rely more on these forms of financing. Cluster 3 used, to some extent, internal equity and the other factors take negative values. The next cluster, with 14 members, has the highest score for FWC and also has a positive score for IE; it is thus labelled accordingly. All three factors have negative values for the firms in Cluster 5, which would

indicate that these 7 firms are the least active in using the different sources of financing. An analysis of variance showed highly significant differences between the clusters on all of the three variables.

Table 7
Rotated component matrix of respondents' sources of funds

Sources of funds used at start-up	Component			Sources of funds to finance current needs	Component		
	Financing Schemes	*Short term Sources*	*Bootstrap Finance*		*S-Term Borrowing*	*Formal WC*	*Internal Equity*
Empowerment fund	**0.903**			Bank overdrafts	**0.776**		
Start-up grant	**0.881**			Bank loans	**0.786**		
Equity financing scheme	**0.778**			Delay payments to suppliers	**0.567**		
Trade credit from suppliers		**0.578**		Hire purchase/leasing		**0.704**	
Bank loans		**0.849**		Factoring		**0.817**	
Bank overdrafts		**0.827**		Retained earnings			**0.666**
Own savings			**0.643**	Shareholders/ Director loan		0.478	**0.489**
Loan from family and friends			**0.838**	Family members			**0.609**
Eigenvalue	2.39	1.81	1.25	*Eigenvalue*	2.04	1.61	1.17
% of Variance explained	29.88	22.63	15.61	*% of Variance explained*	25.45	20.12	14.58
Cronbach's Alpha	0.836	0.649	0.412	*Cronbach's Alpha*	0.605	0.584	0.158

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser normalisation
Percentage of variance explained: (68, start-up and 60, current needs)
Barlett's Test of Sphericity: 92.82 (.000) and 106.63 (0.000) respectively
Kaiser-Meyer-Oklin Measure of Sampling adequacy = 0.602 and 0.645 respectively

Profiles of clustering firms

The profiling of cluster membership provides an insight into the firms' characteristics and the financing difficulties of each type of firm. The cluster analysis was used as an explanatory technique to identify the distinct types of

firms with different financing preferences. The profiles of the firms belonging to each of the clusters were developed using an analysis of variance, K-W tests and Chi-squared tests on continuous, ordinal and binary/nominal variables.

Table 8
WCF Cluster analysis – Final cluster centres

Cluster	***N***	**STB**	**FWC**	**IE**
1. MORESTB	35	0.85945	–0.41817	0.34450
2. FORMALWC	21	0.25850	0.78670	–0.81575
3. LOWIE	21	–1.03140	–0.81838	0.29154
4. FWC + IE	14	–0.72162	1.42550	0.83307
5. NONE	7	–0.53529	–0.66507	–1.81600
ANOVA (F-prob)		0.000	0.000	0.000

Based on the literature review, a number of firm and industry characteristics as well as trade-credit variables and finance-related variables were used to find a distinguishing pattern among the 'types' of firms. Table 9 reports the results of testing these surrogates, which include the size of firm, the age of business, the industry group, business originated as, and three finance related variables, namely difficulty getting start-up capital, WCF and access to finance. The trade credit variables include debtor and creditor days and terms of sales and purchases. The discussion first considers the overall comparison across clusters and then an attempt is made to examine each cluster separately.

The results in Table 9 show significant differences between the groups across a number of variables with a varying level of significance. It is clear that the size of firm is very important when making a request for finance. Cluster 1 is larger in size as measured by the number of full-time employees and is thus able to rely more on bank overdrafts and bank loans to finance its WC requirements. Furthermore, the youngest cluster, where information asymmetry is expected to be more pronounced, must rely on formal WC and, to some extent, internal equity. It would appear, therefore, that both size and age are significant factors in the sourcing of finance because they have an impact on the tangible assets that could be used as collateral and because they negate the information asymmetry problems. This finding is consistent with the literature, such as Bhaird and Lucey (2011), who reported distinct changes in the sources of finance employed by firms over time. Furthermore, the individual profiles of the clusters detailed below show that trade credit variables such as the % of goods purchased on credit, the degree of competition and the finance related variables are equally important.

Table 9
Profiles of firms WCF (means or proportions for each cluster)

Characteristic	Cluster 1 STB	Cluster 2 FWC	Cluster 3 LOWIE	Cluster 4 FWC+IE	Cluster 5 NONE	All Firms[1]
Firm/Owner manager						
Age	16.12	13.06	12.64	9.80	11.17	13.66
Size	23.12	13.94	11.64	**10.70**	14.50	16.85**
Industry	1.97	1.78	2.00	1.60	2.50	1.92
Originated	4.41	3.83	4.42	3.10	**5.00**	4.16***
Education	3.15	3.83	3.21	3.90	3.67	3.45
Family members	1.38	1.33	1.14	1.00	1.46	1.22
Financing						
Start-up capital	3.25	**3.56**	3.28	3.20	3.17	3.31
Access to finance	**3.34**	**4.00**	3.64	**3.80**	3.67	3.62
Working capital finance	3.28	**3.94**	3.28	2.90	3.50	3.40*
Trade credit variables						
% Credit sales	66.87	58.61	48.92	76.50	56.67	62.31
% Credit purchases	66.09	69.44	43.93	**34.50**	51.67	57.94***
Debtor days	44	43	41	47	82	46**
Creditor days	46	39	39	34	68	43
N	**32**	**18**	**14**	**10**	**6**	**80**

[1] Differences between groups were tested using ANOVA, Kruskal Wallis and Pearson Chi square tests on continuous, ordinal and nominal variables respectively.
***, **, *, represent significant difference at 1%, 5% and 10% levels respectively.

Cluster 1: Reliance on Short-term Borrowing

The firms in Cluster 1 reported higher values on short-term borrowing, thus representing a heavy reliance on this source of financing. Cluster 1 has 32 members, and the firms in this cluster are the largest and oldest firms, which thus lends support to the stage development model where matured firms are less financially constrained. Interestingly, these firms tend to adopt a matching WC policy where the amount of credit sales equal that of credit purchases. These firms also take longer to settle suppliers' payments, which is partly explained by the need to support higher WC requirements.

Cluster 2: Reliance on Formal Working Capital

Cluster 2 comprises firms that rely mostly on FWC (leasing and factoring) and, to some extent, on short-term borrowing. They are medium-sized firms and, yet, they have difficulty raising financing as observed by the higher mean scores on all of the finance related variables. These firms, however, manage to bridge the *'financial gap'* by purchasing 70% of their supplies on credit. Because they view trade credit as an important source of WCF, they tend to pay their suppliers within a reasonable time frame. The heavy reliance on trade credit is explained by the difficulty of small firms in attracting long-term debts compared to their larger counterparts (Hughes, 1997).

Cluster 3: Reliance on Internal Equity

The firms that form Cluster 3 are in the food industry and, given their specific industry and market characteristics, they manage to fund their operations out of internally generated funds. These firms sell relatively less frequently on credit and they keep track of credit terms offered to customers. The firms in this group are quite small and have close family involvement in the business.

Cluster 4: Reliance on FWC and IE

The firms representing Cluster 4 have higher values for FWC and, thus, are frequent users of leasing and factoring, although these modes of financing are the least popular among the Mauritian manufacturing SMEs. A partial interpretation of this result could be linked to the size and the number of years that these firms have been in operation. Thus, these firms are more financially constrained, and the lending institutions tend to decline their demand for finance on the premise of transaction costs and information asymmetry theories (Howorth, 2001). The factoring decisions of these firms are driven by the high percent of credit sales (76%), and it appears that they operate in a market with dominant suppliers (reporting the least proportion of credit purchases).

Cluster 5: None of the Traditional Sources of Finance

The firms in Cluster 5 had negative scores on all of the financing modes. Interestingly, these firms all originated as a new start-up business and, in comparison with the other clusters, they reported the least difficulty in sourcing their start-up capital. It is quite normal to expect new start-up firms to use their own funds and, at times, supplement by bootstrapping techniques as reported in the literature (Winborg & Landstrom, 2001). This finding is consistent with the POH and is evidenced in Paul et al. (2007), where it was found that the entrepreneurs in start-ups turn to internal sources first, that is, their own funds.

Excluding the one firm that engaged 50 employees, the mean number of full-time employees for this cluster is 7.5.

Summary of profiles

To summarise, it would appear that the financing requirements of the sample firms differ with respect to the firms' basic characteristics, though only size appears to be statistically significant. As expected, the firms in the food industry are operating on different credit terms and thus report the lowest number of debtor days. How the business was originated is another variable of interest in distinguishing between the clusters.

If the particular characteristic of each cluster of firms were to be defined, it is suggested that Cluster 1, being the largest and oldest firms, be termed as the *matured stage*: these firms have the least difficulty obtaining financing. The Cluster 1 firms appear to have a good grip over their credit control function. Cluster 2 appears to be at the *developmental stage*, where the need for WC is greatly felt. However, these firms appear to have the most difficulty procuring financing. Cluster 3 contains the firms from the *'FB'* industry group and has the least difficulty obtaining financing. The liability of *Newness* can be conferred to Cluster 4 based on the age and size variables. As such, the Cluster 4 firms received fewer credit facilities and have close family involvement. The firms in Cluster 5 can be referred to as *Large cash gap* firms because they report high debtor days, mirrored by their creditor days; that is, they, in turn, stretch their payables.

Financial Bootstrapping Techniques

The literature review has highlighted the importance of financial bootstrapping measures as a solution to the problem that the traditional sources of finance are often inaccessible by the small firms because of their very nature. From the explorative interviews, conducted with 12 owner managers, a number of financial bootstrapping measures were indentified. These measures can be divided into measures that aim at minimising the WC requirements and those that negate the need to have recourse to long-term debt and equity financing.

These measures are summarised in Table 10, which presents in a concise form the different financial bootstrapping techniques, which, to some extent, accords with the literature (Winborg & Landstrom 2001; Winborg, 2009). A few examples drawn from the 12 mini-cases are as follows:

1. Experience acquired from previous employment (which negates the need to undergo formal training in the field of operation, $Case_{num1, 3, 7, 11, 12}$).
2. Working directors remunerated below the market rate, perform long working hours and do not receive luxury offices ($Case_{num1, 2, 6, 9}$). In another case, the owner manager does not take a salary and his son draws a salary below the market rate ($Case_{num4}$). Furthermore, for $Case_{num9}$, the experience of the owner manager and business networking were found to be most important resources when the firm experienced financial difficulties.
3. Directors that are fully involved in daily operations and prepared to perform duties at the operational level and family members to help cope during peak seasons ($Case_{num1, 10}$). Furthermore, the directors are fully conversant with the production process and, thus, have good control over the whole process and the workers cannot easily find excuses for any delays in processing ($Case_{num10}$).
4. Free advice from the founding director's two sons, who are in the same line of business in the U.K. ($Case_{num8)}$.
5. $Case_{num10,}$ operating in the printing industry benefitted significantly from the younger generation who have graduated in marketing, business management and accountancy. The directors are now convinced of the importance of formal accounting records and the adoption of sound financial management practices.

Table 10
Use of financial bootstrapping measures

Measures to:	
Minimise working capital requirements	*Meet the need for capital*
1. Directors also work at operational level	1. Business start up in the family garage
2. Family members engaged as accountants	2. Wife took employment to supplement capital
3. Family members help during peak periods	3. Prior experience as an intangible assets
4. Hire personnel for shorter periods – link to customer order	4. Low investment in office furniture and directors do not fancy luxury offices
5. Long working hours and salary below market rate	5. Shareholders loan

CONCLUSION AND DISCUSSIONS

This paper has demonstrated, to some extent, that the small- to medium-sized Mauritian manufacturing firms face difficulties in procuring financing 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 such as the financing of the business. This belief was validated during the interviews with the 12 owner managers of the SMEs.

Overall, the firms report different degrees of difficulty in obtaining financing, more particularly to meet their WC requirements. The sample firms meet their requirements differently based on their size, their stage in the business life cycle and their trade credit variables. Most important and consistent with other studies, it is the smallest firms (cluster 4) that reported the greatest difficulties in obtaining financing and that operated on less favourable credit terms. The trade credit variables have an effect on the firms that are financially constrained.

Furthermore, the research findings lend limited support to the literature-driven hypothesis that the older firms tend to have a large fixed asset base that could be used as security to support their demand for financing. We also observed that the firms with more family involvement tend to use equity as a form of financing and have a lower preference for committing through borrowing. A summary of the 12 mini-cases revealed that the firms at different stages of the life cycle have different needs for working capital and that the firms operating in the food industry make less use of trade credit.

The research findings provide some new evidence in support of the different approaches to the financing of WC. The Mauritian Manufacturing SMEs use more informal sources, such as shareholder loans and bootstrap finance (children help out with processing customer orders during their Christmas holidays – a period where most businesses need to support a higher level of WC – $Case_{num10}$ Printing industry). It therefore follows that while some Mauritian manufacturing SMEs resolve their financial constraints partly by delaying payments to suppliers, others use more informal sources of bootstrapping finance. This research has highlighted the importance of networking and bootstrapping finance as a solution to the financial difficulties of small- to medium-sized Mauritian manufacturing firms.

Furthermore, and in accord with the 'POH' and information asymmetry, the sample firms had difficulty conveying accurate information about their activities. These firms could therefore be credited as *'informationally captured'* (Howorth et al., 2003). With respect to the POH, the empirical evidence

confirmed that internal resources represent the primary source of financing for these SMEs and that there was reluctance on the part of the owner manager to move down the pecking order. The owner managers instead used a number of bootstrapping financial techniques, as deduced through the 12 mini case studies. The result indirectly suggests that the small- to medium-sized Mauritian manufacturing firms experience significant information costs, which prevent them from obtaining access to traditional sources of finance. However, the research finding provides further empirical evidence on the important use of bootstrapping financing techniques among the Mauritian SMEs. In keeping with this theoretical approach, our findings showed that the Mauritian firms can contract debt capital as they grow in size and become less informationally opaque.

The study finds that WCF is the major concern for the SMEs and its timely availability is critical for the success of ventures. In many cases, the SMEs have no option to extend or provide longer credit periods and such a decision needs not be observed negatively for funding. These research findings could be used as a basis to educate owner managers on the bootstrapping financing techniques that are available, especially during the start-up phases of their businesses. Interestingly, the SMEs owner managers should be aware that resort to equity might not always be viewed negatively if the firm can benefit from the investor's business skills and social capital in the form of commercial contacts and access to relevant networks.

Financial institutions and policy makers need to focus on educating these owner managers with the necessary WCM knowledge. Regarding working capital financing, in addition to the conventional schemes for funding WC, financial institutions and policy makers should come out with new financial instruments that are designed exclusively for funding the WC needs of SMEs. Furthermore, the primary implication is that policy makers should facilitate networking opportunities where owner managers can interact with external advisors and successful entrepreneurs to learn from best practices. However, this study is limited as to the extent to which it can be generalised to a wider population of SMEs. The conclusions could substantially benefit from further research with respect to the role of financial education and training on the financing preferences of SME's owners. Future study can deepen the exploratory nature of such study to better understand the financial management practices of SMEs.

NOTES

1. In Mauritius, the CSO uses employees' threshold to define small and large firms. The small firms are those employing up to 9 employees and anything between 10 and above is large. This is a too restrictive definition and not used for the study.
2. The data was collected as part of a doctoral thesis on the financial and working capital management practices of SMEs.
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), Wood and Furniture (WF), and Food and Beverages (FB).
4. Small and Medium Enterprises Development Authority (SMEDA), the agency responsible to register manufacturing SMEs.
5. Industry classification reduced to three groups: Heavy Industry (Chemical, Rubber and Plastics – CRP, Metal Products – MP and Paper Products and Printing – PPP), Light Industry (Jewellery – JW; Leather and Garments – LG, Pottery and Ceramics – PC and Wood and Furniture – WF) and Food and Beverages Industry.

REFERENCES

Abor, J. (2005). The effect of capital structure on profitability: an empirical analysis of listed firms in Ghana. *The Journal of Risk Finance*, *6(5)*, 438−445.

Aidis, R. (2005). Why don't we see more small- and medium-sized enterprises (SMEs) in Lithuania? Institutional impediments to SME development. *Journal of Small Business Economics*, *25(4)*, 305−317.

Ang, J. S. (1991). Small business uniqueness and the theory of financial management. *Journal of Small Business Finance*, *1(1)*, 1−13.

Barton, S. L., & Mathews, C. H. (1989). Small firm financing: Implications from a strategic management perspective. *Journal of Small Business Management*, *27*(1), 1−7.

Bhattacharya, H. (2001). *Working capital management: Strategies and techniques.* New Delhi: Prentice Hall.

Bhaird, C., & Lucey, B. (2006). *Capital structure and financing of SMEs: Empirical evidence from an Irish survey.* Conference proceedings – Entrepreneurship: Occupational Choice and Financing, CEBR, Copenhagen, 6−7 June.

Bhaird, C., & Lucey, B. (2011). An empirical investigation of the financial growth lifecycle'. *Journal of Small Business and Enterprise Development*, *18*(4), 715−731.

Bhide, A. (1992). Bootstrap Finance: The art of start-ups. *Harvard Business Review*, Nov/Dec, 109−117.

Bhunia, A. (2010). A trend analysis of liquidity management efficiency in selected private sector Indian steel industry. *International Journal of Research in Commerce and Management*, *1*(5), 618–628.

Bolton, J. (1971). *Report of the committee of inquiry on small firms.* HMSO Cmd 4811, London.

Central Statistics Office (2009). 2007 *census of economic activities: Phase 1 small establishments*. Port Louis, Mauritius: Author.

Chittenden, F., Hall, G., & Hutchinson, P. (1996). Small firm growth, access to capital markets and financial structure: A review of issues and an empirical investigation. *Small Business Economics*, *8*, 59−67.

Cosh, A., & Hughes, A. (1994). Size, financial structure and profitability; UK companies in the 1980s, In A. Hughes & D. Storey (Eds.), *Finance and the small firm* (pp. 18–63). London: Routledge.

Cressy, R. (1996). Are business startups debt-rationed? *Economic Journal*, *106*(September), 1253−1270.

Freear, J., Sohl, J. E., & Wetzel Jr. W. E. (1995). Angels: Personal investors in the venture capital market. *Entrepreneurial and Regional Development, 7*, 85−94.

Gebru, G. H. (2009). Financing preferences of micro and small enterprise owners in Tigray: Does POH hold? *Journal of Small Business and Enterprise Development*, *16*(2), 322−334

Gitman, L. J. (2000). *Principles of managerial finance,* (9th Ed.). Reading, MA: Addison Wesley & Longman.

Hamilton, R. T., & Fox, M. A. (1998). The financing preferences of small firm owners. *International Journal of Entrepreneurial behaviour & Research*, *4*(3), 239−248.

Holmes, S. & Kent, P. (1991). An empirical analysis of the financial structure of small and large Australian manufacturing enterprises. *The Journal of Small Business Finance*, *1*, 141–154.

Howorth, C. A. (2001). Small firms' demand for finance. *International Small Business Journal*, *19*(4), 78−96.

Howorth, C. A., Peel, M. J., & Wilson, N. (2003). An examination of the factors associated with bank switching in the U.K. small firm sector. *Small Business Economics*, *20*, 305−317.

Hughes, A. (1997). Finance for SMEs: A UK perspective. *Small Business Economics, 9*, 151−166.

Hughes, A., & Storey, D. J. (1994). *Finance and the small firm.* London: Routledge.

Hussain, J., & Matlay, H. (2007). Financing preferences of ethnic minority owner/managers in the UK, *Journal of Small Business and Enterprise Development*, *14*(3), 487−500.

InfoDev (2006). Promoting innovation and entrepreneurship in Asia: Strategies and partnerships. *Information for Development Program*, Manila, Philippines, 20−22 February.

Jones, O., & Jayawarna, D. (2010). Resourcing new businesses: Social networks, bootstrapping and firm performance. *Venture Capital: An International Journal of Entrepreneurial Finance*, *12*(2), 127−152.

Kolay, M. K. (1991). Managing working capital crises: A system dynamics approach. *Management Decision*, *29*(2), 44−52.

Lahm, Jr., R. J., & Little, Jr. H. T. (2005). *Bootstrapping business start-ups: A review of current business practices*. A paper presented at Conference on Emerging Issues in Business and Technology, Las Vegas.

Levin, R. I., & Travis, V. R. (1987). Small company finance: what the books don't say. *Harvard Business Review*, Nov/Dec, 30−32.

Myers, S. C. (1984). The capital structure puzzle. *Journal of Finance*, *39*(3), 575−592.

Narasimhan, M. S., & Vijayalakshmi, S. (1999). An inter-industry analysis of working capital management on components, efficiency and financing patter. *Research Bulletin (ICWAI), 18*(July-Dec), 65−75.

Neeley, L., & Van Auken, H. E. (1995). *Small business use of non-traditional financing methods.* Paper presented at 39th ICSB World Conference, 27–29 June, France.

Neeley, L., & Van Auken, H. (2009). The relationship between owner characteristics and use of bootstrap financing methods. *Journal of Small Business and Entrepreneurship, 22*(4), 399–412.

Norton, E. (1991). Capital structure and small growth firms. *Journal of Small Business Finance*, *1*(2), 161−177.

Olomi, D. R. (2008). *Demand assessment for micro finance services in Zanzibar with a gender perspective.* Report submitted to the International Labour Organisation (ILO), Dar es Salaam.

Padachi, K. (2006). Trends in working capital management and its impact on firms performance: An analysis of Mauritian small manufacturing firms. *International Review of Business Research Papers, 2*(2), 45−58.

Paul, S., Whittam, G., & Wyper, J. (2007). The pecking order hypothesis: Does it apply to start-up firms? *Journal of Small Business and Enterprise Development, 14*(1), 8−21.

Peterson, R., & Shulman, J. (1987). Capital structure of growing small firms: a twelve country study on becoming bankable. *International Small Business Journal*, *5*(4), 10−22.

Pettit, R., & Singer, R. (1985). Small business finance: A research agenda. *Financial Management, Autumn Issue,* 47−60.

Scherr, F. C., Sugure, T. F., & Ward, J. B. (1993). Financing the small firm start-up: determinants for debt use. *Journal of Small Business Finance*, *3*(1), 17−36.

Watson, R., & Wilson, N. (2002). Small and medium size enterprise financing: A note on some of the implications of a pecking order. *Journal of Business Finance and Accounting*, *29*(3/4), 557−578.

Wilson Committee (1979). *The financing of small firms*. Interim Report of the Committee to Review the Functioning of the Financial Institutions, Cmnd 7503, HMSO, London.

Winborg, J. (1997). Finance in small businesses: *A widened approach to small business managers handling of finance.* Licentiate thesis, Scandinavian Institute for Research in Entrepreneurship, Lund University, Sweden.

Winborg, J. (2000). *Financing small businesses − developing our understanding of financial bootstrapping behaviour*. Sweden: Halmstad.

Winborg, J. (2009). Use of financial bootstrapping in new businesses: a question of last resort? *Venture Capital: An International Journal of Entrepreneurial Finance, 11*(1), 71−83.

Winborg, J., & Landstrom, H. (2001). Financial bootstrapping in small businesses: Examining small business managers' resource acquisition behaviors. *Journal of Business Venturing*, *16*(3), 235−254.

Zoppa, A., & McMahon, R. (2002). Pecking order theory and the financial structure of manufacturing SMEs from Australia's business longitudinal survey. *Research paper series*: 02–1, The Flinders University of South Australia.

APPENDIX A

Profiles of interviewees

Case	Industry	Line of product	Size[a]	Turnover (Rs'000)	Involved in decision	Founded
1	Leather and Garments	T-shirts and off-print screen print	11	4,500	Son and wife	1973
2	Leather and Garments	Bed sheet and quilt	8[b]	2,500	Son as an accountant	1997
3	Leather and Garments	Ready-made garments	8	1,800	Sister	1999
4	Food and Beverages	Exotic pickles	8	3,000	Son as an accountant	2001
5	Food and Beverages	Frozen snacks	16	1,800	Son	2000
6	Food and Beverages	Catering and salted fish	9[c]	5,000	Wife	1992
7	Wood and Furniture	Kitchen set, bedroom furniture	20	20,000	Manager	1994
8	Wood and Furniture	Woodwork (25%) products	6	1,000	Father and brothers	1987
9	WF and Metal product	Window frame, partitioning and wooden furniture	30	15,000	Brothers as directors	1989
10	Paper product and Printing	Printing, cards and paper products	30	12,000	Brothers and nephew	1980
11	Chemical, Rubber & Plastics (CRP)	Prelart, bache, cover, tent	10*	10,000	Wife and children	1996
12	CRP and LG	School bags and luggage bags	6	1,500	Husband	1996

[a] Full time employees as a proxy for size
[*] Engage 20 relief expatriate
[b] Employed based on customer order
[c] Excluding employees engaged for catering services

APPENDIX B

Table A*:* Size of firm: VS, S, M & L * family members involved in business

Size of Firm: VS, S, M & L		Family members involved in business				Total
		No one else	Close Family	Other Family Member	Non Family Member	
Very Small (up to 5)	Count	15	16	4	1	36
	% within Size of Firm	41.7%	44.4%	11.1%	2.8%	100.0%
Small (6 to 20)	Count	14	33	13	8	68
	% within Size of Firm	20.6%	48.5%	19.1%	11.8%	100.0%
Medium (21 to 50)	Count	2	6	13	2	23
	% within Size of Firm	8.7%	26.1%	56.5%	8.7%	100.0%
Large (> 50)	Count	3	2	1	4	10
	% within Size of Firm	30.0%	20.0%	10.0%	40.0%	100.0%
Total	Count	34	57	31	15	137
	% within Size of Firm	24.8%	41.6%	22.6%	10.9%	100.0%

Chi-square value = 33.345; DF = 9 and Sig. (0.000)

Table B: Industry classification and industry grouping

Industry Classification	Frequency	Percent	**Industry Grouping**	Frequency	Percent
Chemical, Rubber and Plastic (CRP)	21	14.9	Heavy Industry	60	42.9
Food and Beverages (FB)	28	19.9	Food and Beverages	28	20.0
Jewellery (JW)	7	5.0	Light Industry	52	37.1
Leather and Garments (LG)	25	17.7			
Metal Products (MP)	18	12.8			
Printing and Paper Products (PPP)	21	14.9			
Pottery and Ceramics (PC)	2	1.4			
Wood and Furniture (WF)	18	12.8			
Other	1	0.7		140	100.0
Total (*n*)	141	100.0			

Table C: Have assets to pledge as collateral * size of firm

		Size of Firm: VS, S, M & L				Total
Have assets to pledge as collateral		Very Small (up to 5)	Small (6 to 20)	Medium (21 to 50)	Large (> 50)	
No	Count	15	12	0	0	27
	% within: Have assets to pledge as collateral	55.6%	44.4%	0%	0%	100.0%
	% within Size of Firm: VS, S, M & L	41.7%	17.6%	0%	0%	19.7%
Yes	Count	21	56	23	10	110
	% within: Have assets to pledge as collateral	19.1%	50.9%	20.9%	9.1%	100.0%
	% within Size of Firm: VS, S, M & L	58.3%	82.4%	100.0%	100.0%	80.3%
Total	Count	36	68	23	10	137
	% within: Have assets to pledge as collateral	26.3%	49.6%	16.8%	7.3%	100.0%
	% within Size of Firm: VS, S, M & L	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-square = 19.252; DF = 3 and Sig. (0.000)

Table D: *K-W - Sources of finance * education*

Other sources used to finance the current needs	Education Grouping	*N*	Mean Rank	Chi-square (Sig.)
Retained profits	Basic	54	67.31	
	Technical	34	77.75	
	Advanced	53	70.42	1.580
	Total	**141**		(0.454)
Bank overdrafts	Basic	51	63.50	
	Technical	31	56.34	
	Advanced	53	79.15	8.333
	Total	**135**		(0.016)
Bank loans	Basic	53	71.62	
	Technical	32	61.14	
	Advanced	53	72.42	2.078
	Total	**138**		(0.354)
Hire purchase/leasing	Basic	46	56.13	
	Technical	27	54.28	
	Advanced	51	72.60	7.202
	Total	**124**		(0.027)
Factoring	Basic	42	51.99	
	Technical	23	45.02	
	Advanced	41	59.80	4.319
	Total	**106**		(0.115)
Delay payments to creditors	Basic	53	71.62	
	Technical	29	59.19	
	Advanced	51	66.64	2.062
	Total	**133**		(0.357)
Shareholders/Director loan	Basic	48	55.44	
	Technical	27	59.52	
	Advanced	52	74.23	7.346
	Total	**127**		(0.025)
Family members	Basic	49	57.71	
	Technical	26	62.06	
	Advanced	44	61.33	0.400
	Total	119		(0.819)