Determinants of SMEs Financing Pattern in India-A Rotated Factor Analysis Approach

SHAILENDER SINGH[a]* AND HAWATI JANOR[a]

[a,b]*Universiti Kebangsaan Malaysia*

ABSTRACT

This study focuses on the organization-wise financing pattern of small and medium scale industries (SMEs). It attempts to assess the relationship between forms of business and sources of capital financing among SMEs in India, one of the developing markets in Asia. Employing factor analysis technique, the study finds that the capital needs of the entrepreneurs are met with the bank loans, money lenders, account payable and friends and relatives. These sources of capital are not easily accessible by different business organizations to fulfill their capital requirement. In addition, analysis of secondary data reveals that industrial credit carries certain banking restrictions, which needs to be identified to help in promoting the SME sector by providing some suggestions required for the new economic policy regime.

INTRODUCTION

The financing of small and medium enterprises (SMEs) has attracted much attention in recent years and has become an important topic for economists and policymakers working on financial and economic development. In recent times, Small and Medium Enterprises (SMEs) have come into the forefront of development agenda due to the recognition of their contribution in fostering growth, sustaining global economic recovery, generating employment and reducing poverty (Carbó-Valverde, S., F. Rodríguez-Fernández & G. F. Udell, 2008). Growth of SMEs can reduce poverty through acceleration of economic growth, removal of biases

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against labour-intensive production, creation of employment opportunities for the low-skilled workers and formation of linkages with small suppliers. However, in India SMEs' contribution to the economy has not reached a level on par with SME in developed countries. Various challenges and impediments prevent SME from developing to their full potential. One of which is the access to formal sector financing (Bartholdy, J., and C. Mateus, 2008).

Furthermore, most large companies usually start as small enterprises, so the ability of SMEs to develop and invest becomes crucial to any economy wishing to prosper (Beck and Demirgüç-Kunt, 2006).

There is also the perception among academics and policymakers that SMEs lack appropriate financing and need to receive special assistance, such as government programs that increase lending. Various studies support this perception. A number of papers find that SMEs are more financially constrained than large firms and, importantly, lack of access to external finance is a key obstacle to firm growth, especially for SMEs (Beck., Demirgüç-Kunt., Laeven and Maksimovic, 2006). On the policy side, there are a large number of initiatives across countries to foster SME financing including government subsidized lines of credit and public guarantee funds.

One of the major challenges for SMEs, especially in their early stages of development, is the access to finance. SMEs overall, and especially their subset of micro and small enterprises (MSEs) are in a disadvantaged position with respect to accessing the finance they need for their operation, as compared to large companies. Access to finance is a particular challenge in the very early stages of enterprise growth, such as the pre-seed, seed, and startup phases. It is generally accepted that the most common type of finance, that is, debt finance from banks, is practically non-available to businesses in their early growth stages (Bruneau, C., O. de Bandt and W. El Amri, 2008). Whereas bank loans are the most common type of financing for mature and stable SMEs, they are generally not an option for early-stage businesses. The existence of this finance gap has crystallized the need of measures to ensure alternative sources of finance for enterprises in any stages of development. The financial sector of most Asian economies is characterized by very low levels of financial intermediation and weak capital markets which cannot effectively supply the financial resources and other products needed by the private sector, in particular the SME sector, which generally lacks the scale, collateral and relationships for formal financing. (Columba, F., L. Gambacorta and P.E. Mistrulli, 2008).

The existing financial intermediaries in India typically focus on a handful of large companies and government bonds. Lending to SMEs is hampered by lack of knowledge of the sector, high transaction costs, limited staff capacity

in financial institutions, poor credit culture among some target SMEs as well as underdeveloped tools to identify and mitigate risks associated with lending to SMEs (Berry, A,2000). This results in a preference for large borrowers and the purchase of government bonds. SME markets are not only small and fragmented, they are severely complicated by lack of information.

Adequate financing is a critical component of SME development. Financing is needed for business start-up, expansion and growth. Yet, a lack of adequate financing inhibits small business sectors. Developing countries, like India, in particular, face added social, cultural, economic and political factors that add complications to the provision of small business finance, and the growth of the SME sector (D.Nagayya & B.Sobha Rani, 2007).

Providing SMEs with efficient financing will allow developing country SMEs to reach their potential and be sustainable contributors to local development (Deshpande, M.U, 1982). Efficient financing for SMEs also ensures that invested money will be effectively utilized. Since developing country conditions are unique, and the economic and social implications of small business development have an added urgency, studies are needed that look for the factors that make SME finance successful. Such studies are important to advance business strategy, development theory, and to guide policy makers and SME focused investors on how to develop and support private sectors in developing countries. It is important to note, however, that finance alone does not guarantee small firm's success. Combining these 'success factors' with SME finance can significantly increase the chances of firm growth (P. Mishra, 2006).-

In the light of fiercer global competition triggered by trade liberalisation, investment flows and technological advances, regional co-operation in support of the development and integration of SME is more urgent now than ever if the SME sector were to yield the much social and economic returns within and across Asia (Bhatia B.S. and Harvinder Singh, 1999). In several developed countries, SMEs contribute at least half of the gross domestic product. Taking SMEs as a benchmark to Indian economy, there is clearly significant potential for SMEs in India to increase their contribution to the economy (Bhattacharya, S.N., 1986). Our study will focus on to the financing pattern of the SME Sector in the north region of India.

LITERATURE REVIEW

An extensive review of the literature is done and found a literature gap and complete lack of any previous research work aiming to investigate the potential association between forms of organization and their financing patterns under SMEs. Thus, the value of this paper focuses on the fact that it makes the first attempt to examine

aforesaid issue empirically. A number of cross country study studies and country case studies presented at the conference show that SMEs indeed face considerable financing constraints, which hamper both their profit and turnover growth. The starting point for the analysis is that asymmetric information between the lender and the borrower of firms may hamper lenders' readiness to provide finance. This in turn would hamper the borrowers' growth performance.

Coluzzi *et al.*, (2008), study the indicator of financing constraints for five euro area countries (Germany, Spain, France, Italy and Portugal). They find that young and/or small firms in principle grow faster than larger and older firms. At the same time, they also face considerably more severe financing restrictions than other firms. Also, firms of the manufacturing and construction sectors are more likely to feel financing constraints, which may be attributable to the high capital intensity of these sectors. As could be expected, increased sales – which reflect better success of the chosen business model – lessen financing constraints. Regarding the impact of financing constraints on growth, the authors find that more cash flow fosters growth. The probability of financial obstacles (proxied by age, size and other firm features) is found to affect growth for all countries except for Germany. The effect of higher leverage is ambiguous: it fosters growth in some countries (Spain, France and Italy) while it hampers growth in Germany and Portugal.

Savignac and Sevestre (2008), investigate empirically for a sample of French firms whether small firms and innovative firms are financially constrained. Their study confirms that such firms indeed face a higher interest rate spread than other firms, which reduces their loan demand. Being innovative has a larger negative impact on loan demand for SMEs than for large firms. As expected, the availability of tangible assets which can be used as collateral facilitates SME's access to bank credit. By contrast, an existing high debt ratio acts as an obstacle to further credit.

These academic findings were contrasted with a practitioner's view, based on a survey among Dutch firms (von Dewall, (2007)). Broadly speaking, the study concluded that external financing constraints are not experienced by conservative, self-constrained firms, while truly expansionary entrepreneurs – which are the minority in the Netherlands – are likely to face financing constraints. While particularly for this minority of strongly expansionary firms lack of risk capital and the absence of well-functioning venture capital markets hamper growth, the bigger problem according to this author seems to be a lack of skills at various levels: entrepreneurial skills at the level of the firm, lack of skills of accountants, and lack of skills at banks in the context of their lending and financing decisions. Bank's moving towards automated expert credit information and evaluation systems might further exacerbate this problem, reinforcing the notion that banks are not the best suited institutions to provide risk capital.

Credit constraints may, among other factors, also contribute to a small firm's motivation to join a larger group. Using a large data set of French firms, Kremp and Phillippon (2008), identify a major shift in the structure of ownership of SMEs over the past decade. In 2006, more than half of French SMEs belonged to a group (i.e. at least half of their capital belonged to another firm), against 80% in 1997. Over the same period, the number of holding companies tripled. Holding companies now account for one third of non-financial enterprises' outstanding bank debt. Membership in a group can strongly affect a firm's financing behaviour, e.g. in the sense that the holding company borrows from banks for the group as a whole, while the group's member firms turn to the holding company for financing. The strong drive towards membership in firm groups is rooted in several motivations: Group membership alleviates credit constraints faced by individual small firms, facilitates access to foreign markets, or can also be the chosen exit strategy in the event of retirement of the current owner or manager. Joining a group is shown to improve SMEs' growth and survival rates, more so even if they join a foreign group.

Optimal growth conditions for enterprises are particularly important in developing countries. It is all the more worrisome that a cross-country study on firm's financing conditions in transition economies (Volz (2008)) finds that firms in transition economies continue to be seriously financially constrained – a large fraction of firms in these countries still have no bank loans, particularly small firms continue to have problems of access to financing. The-forced-strong dominance of internal financing for small firms hampers firm development. Surprisingly, banking system reform may even have worsened access to finance for SMEs. In principle, the entry and operations of foreign banks should bring a transfer of know-how and increase the efficiency of a transition economies financial sectors.

However, in practice foreign bank activity seems to benefit primarily larger firms, with smaller firms being more or less left out. Furthermore, higher concentration in the banking sector is found to improve financing conditions for SMEs. This is in line with the monopolistic-creditor hypothesis (see Petersen and Rajan (1995)), which states that a quasi-monopolistic situation in banking could help banks to establish a mutually beneficial relationship with firms.

Dietsch and Petey (2008), investigate a specific issue relating to capital requirements for bank's SME loan portfolios, namely the diversification potential within large portfolios of SMEs. Extending the standard one-factor credit default model to multiple factors, which takes into account size, sector and location, they compute economic capital allocations for large portfolios of French SME loans. They find that two opposing effects are at play when estimating aggregate credit risk for an SME loan portfolio: on the one hand, diversification decreases economic

capital; on the other hand, a more complete representation of default rate dynamics in such a framework increases economic capital.

As to be expected, portfolio risk diversification in large SME loan portfolios depends on the heterogeneity of the firms in the portfolio, in particular in terms of cyclicality or industry, and size. They conclude, first, that the standard one-factor model and its applications do not properly take into account potential diversification effects in an SME loan portfolio. Second, however, a model that takes into account diversification effects might still generate higher required capital levels, because it captures credit risk better.

Howorth and Westhead (2003) suggested that SMEs tend to focus on some areas of working capital management where they can expect to improve marginal returns. For small and growing businesses, an efficient working capital management is a vital component of success and survival; i.e. both profitability and liquidity (Peel and Wilson, 1996). They further assert that smaller firms should adopt formal working capital management routines in order to reduce the probability of business closure, as well as to enhance business performance. In their study Peel *et al*., (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.

Despite their important contribution to exports, employment and economic growth, there is a wide recognition in the literature about the challenges and barriers facing SMEs in Malaysia, preventing them from growing further and putting them in a critical position to face the new challenges that are arising from globalization, liberalization and extensive organizational, institutional and technological change. It has been documented that the barriers facing SMEs in Malaysia undermine their performance. Some of the existing literature, including Wan (2003); Stuti (2005); Moha (1999); Hall (2002); and SMIDEC (2000), highlight many challenges facing SMEs in a globalized environment, for example from a lack of financing, low productivity, lack of managerial capabilities, access to management and technology, heavy regulatory burden among many others.

Malaysian SMEs are not exceptional from facing various barriers and challenges which prevents them from further expanding their business. These challenges can come from extensive and liberalized organization, globalization, technological and institutional changes. According to Abdullah (2002), factors that are involved are low access in borrowing and small capital investment, low access of needed infrastructure, low level expert abilities and in raw material and low expertise in management and technical knowledge are the factors involved.

In 2003, findings of a Bank Negara survey, found that competition, inability to gain loan, inability to source skilled labor and lack of government support as

major problems that were facing by SMEs. This is further supported by a study conducted by Salleh (1991) who has identified that amongst the important problems faced by SMEs deterring them to expand are the shortage of skilled personnel, poor networking amongst the important players in the market, lack of market access, inadequate finance, unintended impact of policy instruments, competitions from foreign SMEs and technological constraints.

Based on SMIDP, 2001-2005 study report (SMIDEC, 2002), Malaysian SMEs are faced with various challenges globally and domestically. These challenges are competition from other producers, intensified global competition, limited capability to meet the challenges of market globalization and liberalization, low productivity and quality output, limited capacity for knowledge acquisition and technology management, limited access to capital and finance and the infancy of venture funds in initial or mezzanine financing, lack of skills for the new business environment, general shortage of information and knowledge and high cost of infrastructure. Ting (2004) identified 5 key challenges and they are; human resource constraints, shortage of information on customers and potential markets, lack of access to finance, global competition and limited or inability to adopt the technology. Wan (2003) discovered that globalized environment such as shortage in financing, lack of managerial capabilities, low productivity, heavy regulatory burdens, and access to technology and management are amongst many other challenges faced by SMEs.

The literature review indicated that SME sector is facing financing constraint and the factors that influence the financing choices are different depending on the structure of the firm. So there is a need for additional empirical testing to identify the corporate financing patterns for SMEs.

RESEARCH METHODOLOGY

The present study is part of a wider research on corporate financing patterns in SMEs' operating in Northen India. Given the fact that the SMEs include a vast number of sectors, it is almost impossible to investigate all the existing sectors. Within this context, it was felt appropriate to focus the current research on those sectors that may be considered as being significant for every national economy given their contribution to the country's gross domestic product and the number of employees that they employ. Consequently, the different sectors were investigated which covers the following SMEs operating in the five cities under different sectors. The city-wise percentage of product groups is as follows:

Table 1 No.of SMEs in each sector representing five cities

	Sector	Total No. of SMEs
1.	Hosiery and Textile	10,545 (9)
2.	Cycle and cycle parts	7,658 (6)
3.	Electronics	21,306(18)
4.	Agro	8,873(7)
5.	Engineering product	16,467(14)
6.	Surgical and scientific Instruments	13,701(11)
7.	Sports Goods	11,890 (10)
8.	Leather Goods	6,734(5)
9.	Chemical and chemical products	14,896(12)
10.	Cutting tool	9,193(8)
	Total	1,21,263

Source: Economic Survey of India

Table 1 indicates that total no. of SMEs under Hosiery and Textile sector is 10,545 (9%). Out of the total (1,21,263) units, 7,658 (6%) units belongs to Cycle and cycle parts sector. Total number of SMEs that belongs to electronics sector is 21,306 (18%), followed by agriculture products which represents 8,873(7%) and so on to cutting tool product group which comprises of 9,193(8%) units under study.

Sample frame and Descriptive Statistics

The sample size of the present study is 280 SMEs from North India. The study focused on five large metropolitan cities, New Delhi, Chandigarh, Dehradun, Ludhiana and Patiala as primary sampling units. Only those units have been considered to exist in each city which seems to disclose their financial data for the general research studies. The selection of these cities is based on the basis of concentration of SMEs to these cities. A personalized pre-notification letter was mailed to each of the 280 randomly selected companies explaining the objectives of the study and soliciting cooperation, while a week after; a telephone call was made to each company in order to examine the possibility of participating in the study. This approach has been found to increase response rates considerably. An appointment was made with these 280 companies and personal interviews were conducted. Our decision to use this method was based on its advantages comparing to phone or mail interviews. These advantages are related to the higher response rates associated with this method, the completion of every particular question and in the right order, the ability of the interviewer to explain unambiguous questions

to the respondents along with the ability to ensuring the respondents' eligibility to the survey.

Defining a Small & Medium Enterprise is itself a challenging task, as every country has its own definition for a SME. In India as per the Micro, Small and Medium Enterprises Development Act 2006, enterprises are broadly classified into micro units, small units, medium units & large units depending on the investment in plant and machinery. However, comparing that to the European countries where it is based on the parameters of employment, turnover and asset size, and OECD on employment and sales turnover has totally different criteria for establishment. The Indian perspective for SMEs is as follows:

● Small enterprise

A small enterprise is one where the investment in plant and is more than Rs.25 lakh but does not exceed Rs.5 crore.

● Medium enterprise

A medium enterprise is one where the investment in plant and is more than Rs.5 crore but does not exceed Rs.10 crore.

Research Instrument

The data were secured by means of a ten-page questionnaire. Following the suggestions of many management research academics, an effort was made to avoid leading and unambiguous questions, paying particular attention to the wording and the sequence of questions and ensuring a professional style and format. Information was collected by adopting various kinds of scales such as binary, ordinal and Likert type. Furthermore, before using the questionnaire for data collection, a detailed pretest based on personal interviews among two academics and ten practitioners was undertaken in order to increase its validity. Moreover, the questionnaire was designed in such a way so that data for financing pattern, which had been implemented recently, could be collected.

This study involves an analysis of both primary and secondary data. Primary data was collected on the basis of questionnaires administered to various SMEs in north region of India. The information was sought from the entrepreneur of SMEs regarding their demographic information such as size, ownership, sectors, age and also the financing information. Secondary data consists of financial reports of SMEs in India. The secondary data was collected from published and unpublished records and reports of the central Government of India. For this purpose, personal visits will be made to several organizations in the country. The survey was carried

out over a period of three years, from July 2006 to June 2009. The original time estimate of three years was extended to four years due to the slow response time for the pretest questionnaires, late responses, and most importantly the large number of responses to the questionnaires, so the period of study is from 2006 to 2010.

The data has been analyzed keeping the objective of the study in view. The analysis is finally based on data on several aspects tabulated according to the different product-groups. Besides making use of simple descriptive tools of statistics, chi-square test and factor analysis have been used to detect structure in the relationships between variables.

Table 2 City-wise distribution of sample units

City	Total no. of SMEs'	No. of units taken for study
New Delhi	27,797*	64
Chandigarh	28,515*	67
Dehradun	9,094*	20
Ludhiana	42,923*	98
Patiala	12,934*	31
Total	1,21,263	280

Source: As per the Statistical Abstract.
*No. of sample units which agreed to disclose the required financial information.

Table 2 indicates that total no. of SMEs located in New Delhi are 27,797.Out of this sample size (280 units), 64 units have been taken for the research work. Total no. of SMEs located in Chandigarh is 28,515, 67 units from these have been taken for carrying out the study. Total no. of SMEs in Dehradun are 9,094, out of these 20 units have been considered for the study. Total no. of SMEs in Ludhiana are 42,923, from these 98 units have been considered for the study. The total no. of SMEs located in Patiala are 12,934, from these 31 units have been taken for carrying out the research work.

RESULTS AND DISCUSSIONS

Hypothesis Testing for Independence Using Chi-Square

H_0: *Form of organisation and financing pattern of organisations are independent.*

H_1: *Form of organisation and financing pattern of organisations are related to each other.*

Table 3 Form of the organisation and financing pattern of products

Form of the organisation	Financing pattern					Total
	Own funds provided by the proprietor	Commercial banks	Money lenders	Account payable	Friends & relatives	
Sole - Proprietorship	14(30)	35(42)	6(11)	28(46)	15(41)	98(35)
Partnership	20(44)	40(48)	35(66)	27(44)	10(27)	132(47)
Private Ltd.Co.	12(26)	8(10)	12(23)	6(10)	12(32)	50(18)
Total	46	83	53	61	37	280

Source: Compiled on the basis of questionnaire administered to the entrepreneurs.

Table 3 reveals that out of total 280 respondents, 98 (35%) respondents are running their business as Sole - Proprietorship, 132 (47%) respondents are running their business as Partnership, and 50 (18%) respondents are running their business as Private limited company. Fourteen respondents of Sole-Proprietorship class draw capital from their own fund as sources for capital finances, 35 (42%) respondents of Sole – Proprietorship class borrows capital from commercial banks as sources for capital finances, 6 (11%) respondents of Sole - Proprietorship class borrows capital from money lenders as sources for capital finances, 28 (46%) respondents of Sole – Proprietorship class acquire the fund for capital requirement through account payable, 15 (41%) respondents of Sole – Proprietorship class acquire the fund for capital requirement from friends & relatives .Twenty respondents of Partnership class draw capital from their own fund as sources for capital finances, 40 (48%) respondents of Partnership class borrows capital from commercial banks as sources for capital finances,35 (66%) respondents of Partnership class borrows capital from money lenders as sources for capital finances ,27 (44%) respondents of Partnership class acquire the fund for capital requirement through account payable, 10 (27%) respondents of Partnership class acquire the fund for capital requirement from friends & relatives. 12 (26%) respondents of Private limited company draw capital from their own fund as sources for capital finances, 8 (10%) respondents of Private limited company class borrows capital from commercial banks as sources for capital finances,12 (23%) respondents of Private limited company class borrows capital from money lenders as sources for capital finances, 6 (10%) respondents of Private limited company class acquire the fund for capital requirement through account payable,12 (32%) respondents of Private limited company class acquire the fund for capital requirement from friends & relatives. Here X2cal for degree of freedom 8 at 5% significance level is 1.024 & X2 tab for degree of freedom 8 at 5% level of significance is 15.5 .Since X2cal is lesser than X2tab hence hypothesis is accepted or there is no significant difference between Form of the organisation and sources of capital for financing requirement.

A questionnaire was used to obtain the respondent's opinions, and the results were then descriptively and inferentially analysed. Descriptively, the means and standard deviation scores were computed in order to determine the variability of the spread of data as shown in Table 4. Inferential statistics were also computed in order to determine whether all the participants had been drawn from the same population.

Table 4 The descriptive statistics collected for all the factors

Variable	Observations	Obs. with missing data	Obs. without missing data	Minimum	Maximum	Mean	Std. deviation
Own funds provided by the proprietor	3	0	3	12.000	20.000	15.333	4.163
Commercial banks	3	0	3	8.000	40.000	27.667	17.214
Money lenders	3	0	3	6.000	35.000	17.667	15.308
Account payable	3	0	3	6.000	28.000	20.333	12.423
Friends & relatives	3	0	3	10.000	15.000	12.333	2.517

Table 5 Correlation matrix for predictor variables

Variables	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Own funds provided by the proprietor	1	0.791	0.905	0.664	-0.636
Commercial banks	0.791	1	0.455	0.983	-0.031
Money lenders	0.905	0.455	1	0.282	-0.904
Account payable	0.664	0.983	0.282	1	0.155
Friends & relatives	-0.636	-0.031	-0.904	0.155	1

The correlation matrix in Table 5 indicates correlation coefficients between the five independent variables which are measured by using multiple item scales. A correlation coefficient is considered significant if the p-value is less than 0.05. There is significant correlation between all the independent variables as listed in Table 5.Out of the 10 correlations, 3 correlation coefficient are negatively correlated with other factors. The highest correlation (.98) is between Account Payable and commercial banks. The Pearson's r between each pair of independent variables is exceeded than 0.80 two times in the correlation matrix, so the independent variable whose values exceeds than 0.80 may be suspected of exhibiting multicollinearity.

Table 6 Eigenvalues, variability and cumulative variability before varimax rotation

Factors	Eigenvalues	Variability (%)	Cumulative (%)
F1	3.296	65.925	65.925
F2	1.704	34.075	100.000

Note: The eigenvalues displayed above are those obtained with the principal factors extraction method.

After the lengthy steps of principal factor analysis, it was established that within a set of 5 variables, only 2 variables could be extracted for further consideration. The determination of number of factors to be retained for further consideration was based on the Kaiser criterion (Kaiser HF, 1960) supplemented by Cattell's scree test plot (Cattell R.B,1966) which suggest that only factors with eigenvalues equal to or greater than 1.00 are retained for further interpretation, and later suggesting to drop all factors immediately after the break or elbow as they are considered to contain debris information as shown in Table 6 and Figure 1.The Table 5 shows the eigenvalues resulting from the factor analysis. The Table 6 and the corresponding figure are related to a mathematical object, the eigenvalues, which reflect the quality of the projection from the N-dimensional initial table (N=5) to a lower number of dimensions. In this research, we can see that the first eigenvalue equals to 3.296 and represents 66% of the total variability and second eigenvalue of 1.704 represents 34% of the variability. Each eigenvalue corresponds to a factor, and each factor to a one dimension. A factor is a linear combination of the initial variables, and all the factors are un-correlated (r=0). The eigenvalues and the corresponding factors are sorted by descending order of how much of the initial variability they represent (converted to %).
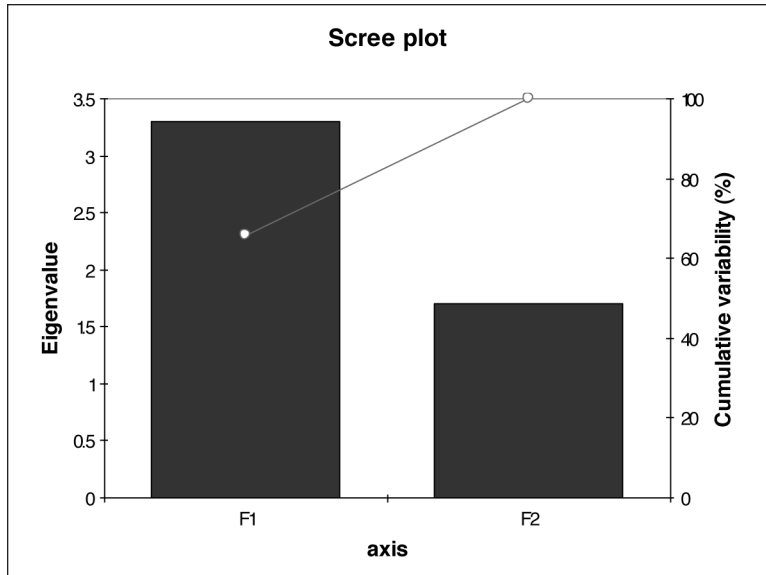
Figure 1

Ideally, in Figure 1 the first eigenvalue corresponds to a high % of the variance, ensuring us that the map based on the first factor is a good quality projection of the initial multi-dimensional table. In this study, the first factor allows us to represent 65.92% of the initial variability of the data and second factor represent 34.07% of variation.

Factor Rotation

Factor rotation is the process of holding the point constants and mainly rotating the axes. The purpose of this operation is to provide a more meaningful interpretation of the factor solution. In this study a Varimax rotation was employed, which is an orthogonal rotation which produces uncorrelated factors on the factor axis in order to maximize the variance of the squared loadings. After Varimax rotation, meaningful artificial factor loadings or variables that cross-loaded on more than one factor were scratched out because they were considered to be deceitful measures of any one construct.

Table 7 Summary of rotation matrix and variance percentage after
varimax rotation

Variables	Rotation matrix		Percentage of variance after varimax rotation	
	D1	D2	Variability (%)	Cumulative (%)
D1	0.719	0.696	50.519	50.519
D2	-0.696	0.719	49.481	100.000

In Table 7, we can see that the varimax rotation has changed the way each factor explains part of the variance. The varimax rotation makes the interpretation easier by maximizing the variance of the squared factors loadings by column. For a given factor, high loadings become higher, low loadings become lower, and intermediate loadings become either lower or higher.

Table 8 Factor pattern (loadings) obtained after varimax rotation that
cross-loaded on more than one factor

Variables	D1	D2
Own funds provided by the proprietor	0.671	**0.741**
Commercial banks	**0.985**	0.175
Money lenders	0.292	**0.956**
Account payable	**1.000**	-0.010
Friends & relatives	0.145	**-0.989**

Note: Values in bold correspond for each variable to the factor for which the squared cosine is the largest

Table 8 depicts that the first factor is highly positively related to Account Payable and Commercial Banks. The second factor is highly positively loaded on money lenders and proprietor's fund as well as negatively on accounts payable or friends and relatives.

Interpretation and naming of surviving variables

A 0.70 factor loading was used as a cut-off point (Stevens J, 1992), therefore the surviving variables with factor loadings of 0.70 or higher were considered further for interpretation and naming. The interpretation and naming of factors implied that the remaining or surviving variables with high factor loadings and common conceptual meanings were grouped together to form a genuine independent factor. Table 7 provides a summary of rotated factor patterns. After the grouping, naming and interpretation, 2 newly established factors were identified and are considered to be significant factors that influence the selection of financing patterns in SME sector.

Factor 1 (D1): Factor 1 (D1) accounts for 51% of the total variance and is derived from two variables, namely: commercial banks (0.985) and account payable (1.000). One variable is the highest loading of this factor relating to account payable. This factor D1 can be referred as external borrowings, which includes corporate financing through commercial banks and account payable.

Factor 2 (D2): The second factor D2 is highly positively loaded on money lenders (0.956) and own funds provided by the proprietor (0.741). This factor accounts for 49% of the total variance and is derived from two positive variables money lenders and own funds provided by the proprietor. This factor (D2) can be referred to as Mixed Financing.

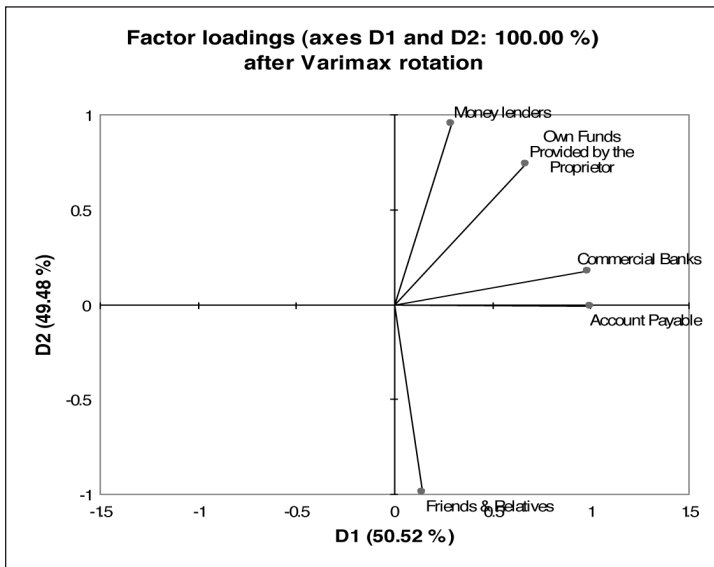The following Figure 2 gives the position of the variables on axes D1 and D2.

Figure 2

The above statistical analysis shows that the financing pattern adopted under SME sector is not similar across different types of firms. Among the various sources of finance available for the SME sector, only few are being acceptable by the firms. The most dominant constraint facing the SME sector has remained choosing an optimum mix of finance. Further, it is observed that relatively large share of resources was mobilized through external sources.

CONCLUSION

This paper analyzes the corporate financing patterns adopted by SME sector in the northen region of India. It is evident from this study that the SME sector is not adopting any particular finance mix. It depends on the need and internal factors of an enterprise to choose that finance mix which suits best to their objectives and provides lowest cost of capital. Based on the findings of the literature review and empirical survey findings, it was established after factor analysis that two factors significantly influence the financing pattern of SME sector. The two factors value scores are external borrowings and mixed financing. The study further reveales that self-raised finance appears to be most effective in promoting partnership firms to grow, and commercial bank loan also seems to be more supportive to partnership firms. The study analyses the diversified area of corporate financing patterns adopted by partnership firms, most of the times partnership firms have used the different source of finance to managed themselves with that optimum finance mix which deems fit to maintain consistency in low cost of capital on capital employed. To utilize the services of money lenders for the fulfillment of finance requirement is best suited to partnership firms. Partnership firms are the ones who utilized the services of commercial banks frequently as compared to the other forms of organizations.

The commercial banks are providing keen financial assistance to sole proprietorship and partnership firms. They should also liberalise the terms and conditions for granting the loans to Private limited company because Private limited companies are not able to get the appropriate source of finance from commercial banks due to the stringent policies of banks. Though, the industrial credit carries certain fiscal and banking restrictions, there is a need to cut short the undue procedural requirements so as to avoid all delay and problems of Private limited company in obtaining the bank finance. Organisations often asked their friends and relatives to finance their business during periods of poor sales. In our study partnership firms have relied on their friends and relatives very seldom followed by Private Ltd. Co. showing sound sales position maintained by them as compared to the sole-proprietorship units which have used the finance of their friends and relatives very frequently. Moreover, the fact that different business objectives were found to lead to different financing patterns reflects the need to have a coherent finance mix if effective cost control decisions are to be made. Thus, it seems that the selection of a particular source of finance should be guided by the business objectives and goals that the company has set a priori and endeavored to achieve these objectives.

Government should provide the provision of financial assistance in the form of subsidies, incentives and supply of machines on a hire-purchase basis, exclusively for the promotion of Private Ltd. Companies. A National Financial Corporation

should be established by the central Government with a view to providing equity loans to Private Ltd. Companies. The commercial bank should evolve from a need-based to security based financing policy to assist these companies. While granting the loans, emphasis should be given on economic viability of the unit and character of the entrepreneur instead of amount of security offered against the loans. Regulation by the state through measures of corporate governance is important in order to create conditions congenial for growth and pro-people development. This is especially important in order to ensure that investments made by minority shareholders are not appropriated by corporate interests and institutional investors. Corporate governance should also be designed to take care of creditors' rights as well since commercial banks in India play a significant role as providers of external finance and are expected to bail out the corporate houses in the event of any crisis. The Indian State also has the right as well as the responsibility to put reasonable limits on the moves by Indian corporate houses for external financing abroad.

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