### Accepted Manuscript

Financing preferences and practices of Indian SMEs

H. Kent Baker, Satish Kumar, Purnima Rao

PII:	S1044-0283(17)30183-7
DOI:	doi:10.1016/j.gfj.2017.10.003
Reference:	GLOFIN 388
To appear in:	
Received date:	27 May 2017
Revised date:	11 October 2017
Accepted date:	19 October 2017

Please cite this article as: H. Kent Baker, Satish Kumar, Purnima Rao, Financing preferences and practices of Indian SMEs. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Glofin(2017), doi:10.1016/j.gfj.2017.10.003

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

### **Financing Preferences and Practices of Indian SMEs**

### H. Kent Baker - Corresponding Author

University Professor of Finance American University Kogod School of Business Department of Finance and Real Estate 4400 Massachusetts Avenue, NW Washington, DC 20016 USA Telephone: (202) 885-1949 Email: kbaker@american.edu

### Satish Kumar

Assistant Professor - Finance and Accounting Area National Institute of Industrial Engineering (NITIE) Mumbai, Vihar Lake, Mumbai-400087 India Telephone: +91-9602199199 Email: satishkumar@nitie.ac.in

### Purnima Rao

Senior Research Fellow Department of Management Studies Malaviya National Institute of Technology Jaipur Jaipur, India – 302017 Telephone: 91- 141-2713212 Email: sunshineisrao@gmail.com

Keywords: SMEs, financing preferences, financing practices, India

JEL: G21, G32

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

### **Financing Preferences and Practices of Indian SMEs**

### Abstract

Using survey data from 309 small and medium sized enterprises (SMEs) from the northwest region of India, this study examines the financing preferences and practices of these SMEs. It also investigates the differences in the financing preferences across firm and owner/manager characteristics and documents the drivers of financing practices in India. Respondents prefer internal funds followed by bank financing mainly in the form of long-term loans and funds from government and financial institutions. Among informal sources, SMEs prefer trade credit followed by funds

from family friends, relatives, and money lenders. The least preferred source of financing is external equity. The study contributes to the extant literature on SME financing by comparing the financing preferences and practices of SMEs and identifying a financing gap. By providing a holistic view of financing sources to SME owners and managers, the study can assist policymakers in designing appropriate policies for these individuals and help identify underutilized financing sources for SMEs.

### Keywords

SMEs, financing preferences, financing practices, India

#### 1.1 Introduction

Firms need funds to operate. Yet, some firms have much greater difficulty obtaining funds than others. Despite contributing to wealth creation and employment generation (Newman et al., 2013; Van Caneghem and Van Campenhout, 2012), small and medium-sized enterprises (SMEs) face many obstacles in procuring necessary funds (Boocock and Wahab, 2001). These financing hurdles are due to lending bias, inconsistencies in financing framework, and underdeveloped capital markets for SME. For example, De (2010) discusses the problems that Indian SMEs encounter obtaining short-and long-term financing. Hussain et al. (2006) report that the majority of Chinese SMEs lack sufficient capital to meet their long-term requirements. In fact, Kraemer-Eis and Lang (2012) view this concern as a fundamental structural issue for SMEs.

The purpose of this study is to identify the financing preferences and practices of a sample of Indian SMEs, to determine how owner/manager characteristics affect preferences and practices, and to explain why Indian SMEs select certain types of funds. Because SMEs are not required to publish financial statements, survey research is the primary source of obtaining data. Specifically, the study examines six major research questions.

1. What are the preferred types of internal and external financing sources used by

Indian SMEs?

2. Do Indian SMEs prefer short-, medium-, or long-term financing sources?

- 3. How do Indian SMEs rank their preferred internal and external financing sources?
- 4. How consistent are stated financing preferences and practices among Indian SMEs?
- 5. What are the drivers of financing preferences among of Indian SME?
- 6. What are the drivers of financing practices among Indian SMEs?

Given the limited survey research on Indian SMEs, our study contributes to the literature by identifying the type of financial infrastructure preferred by SMEs, but not necessarily used by them. Our findings could assist policy makers in understanding the type of financing sources preferred by SMEs and the impediments associated with accessing these sources.

We focus on Indian SMEs for several reasons. First, although India is one of the fastest developing economies in the world, Indian SMEs are underserved. Indian SMEs constitute 90% of the industrial ecosystem, represent about 45% of the manufacturing sector, and constitute 40% of Indian exports. Given that 37% of India's gross domestic product (GDP) comes from SMEs, this sector is important to the Indian economy. Although the growing importance of SMEs in the industrial arena has attracted some research interest (Carpenter & Peterson, 2002), the academic literature is limited on the financing preferences and practices of Indian SMEs.

Second, SMEs face financing constraints. As Abe et al. (2015) report, the lack of accessible capital for SMEs threatens their continued existence. The access to appropriate and timely credit still remains elusive in India and a large credit gap also exists among Indian SMEs. This gap partly stems from the lack of creditworthiness among Indian SME, the absence of requisite skills needed by financial institutions to evaluate borrowers, and onerous and complicated procedures (Thampy, 2010). Poor communication of policies also obstructs SMEs from accessing funds from formal channels. According to a report of the IFC (2012), the potential demand for external finance is estimated to be 28 trillion INR. Such demand is likely to further intensify financing constraints faced by SMEs.

Understanding the current financing sources available to and preferred by Indian SMEs is an important issue. By analyzing the preferred and existing financing sources used by Indian SMEs, we identify a financing gap. Moreover, earlier studies on financing issues of SMEs have either tested capital structure theories applicable to SMEs or identified the sources of finance used by them for running their businesses. Existing research on SME financing has largely failed to study the preference for one financing source over another; whether SMEs prefer a financing source but do not use it; whether they use one financing source but do not prefer it; and whether they neither

prefer nor use a financing source. Studying these issues identifies areas of concern involving SME financing. Because our study addresses these concerns by comparing the financial preferences and practices of SMEs, it should help policy makers in understanding the financial needs of Indian SMEs in a more effective manner. Finally, the study examines both the drivers of financing practices of SMEs and the impact of financing preferences on financing practices of SMEs after controlling for firm- and owner-specific variables.

#### 1.2 Background on SME Financing

As Abe et al. (2015) note, SME financing involves a range of mechanisms to provide funds for the development of SMEs. The statistics compiled in the Fourth Census of the MSME Sector (September, 2009) show that 92.77% do not rely on external financing sources. Only 5.18% of the units (both registered and unregistered) use funds obtained from institutional sources and 2.05% from non-institutional sources. According to the IBEF (2013), the availability of funds at competitive rates is an important factor influencing the use of funds by SMEs. Banks are the main source of external finance for SMEs in India. Biswas (2014) reports that external finance both costly and limited for SMEs but necessary to finance long-term projects or asset creation. According to Allen et al. (2012), Indian SMEs largely depend on internal and informal channels because of the barriers they SMEs face accessing formal channels.

Situational factors affect both financing preferences and practices. For SMEs, these factors often depend on the owner's perspective because the owner is a central factor influencing a firm's financing decisions. Thus, identifying the differences between financing preferences and practices requires studying owner characteristics. Such an examination is important when regulated money and capital markets are not completely open for small firms (Berger et al., 2001). Within emerging and developing economies, government regulations and regulatory bodies often lack the flexibility to accommodate the financing requirements of small firms. In fact, regulations sometimes discourage lending from formal sources (Lucey et al., 2016). As a result, a gap exists between formal and informal financing sources. Furthermore, switching between these sources is often uneconomical for SMEs.

Indian SMEs must bridge the funding gap to realize their potential growth (IBEF, 2013). Filling this gap requires understanding the type of financing decisions that firm make. Prior studies document that capital structure theories based on developed countries and examined for large firms may not appropriately explain the financing behavior of SMEs in developing economies (Borgia and Newman, 2012). For example, several researchers show that trade-off theory does not provide sound justification for understanding SME financing in either developed or developing countries (Norton, 1991; Watson and Wilson, 2002; Klapper et al., 2006). Yet, according to Wu et al. (2008), pecking order theory only partially helps to explain SME financing. For instance, SMEs often do not use debt financing after exhausting

internal sources because they cannot access lower cost debt. Additionally, the dependency of SMEs on informal financing channels is inconsistent with the assumptions of pecking order theory. Therefore, some researchers contend that managerial theories do a better job of explaining the capital structure of SMEs compared to conventional financing theories (Hackbarth, 2008; Ang et al., 2010; Ruan et al., 2011) because no distinction exists between ownership and control in small firms resulting in the owner making most of the decisions. Thus, SME owners play a pivotal role in determining the requisite financing. According to Ang et al. (2010), an owner's individual demographic features help to explain the financial structure of small firms.

Because ownership concentration is typically high in SMEs compared to large firms, this fact leads SMEs to seek more risk-averse financing sources (Lappalainen and Niskanen, 2012). SMEs are more likely to focus on profit maximization rather than expansion because the majority of SMEs are proprietorships or partnerships. These firms are highly governed by the decisions of owners. Moreover, owners use their personal assets to finance their businesses, making profits more important than investments. Morck et al. (1988) and Anderson and Reeb (2003) find a positive relation between ownership concentration and profitability. Because owners do not want to lose control of their firms, maintaining control is an important criterion to determine the financial structure of SMEs.

An optimal financing mix depends on various country, industry, firm, and owner specific factors. The interplay of these factors determines the sources chosen for funding an SME's operations. Although determining which factors dominate is difficult, recent research suggests that both firm and owner-specific factors highly influence the financing decisions of SMEs (Psillaki and Daskalakis, 2009; Borgia and Newman, 2012). Financial structure decisions also affect firm performance.

Financial needs of SMEs concern both owners and policy makers because these firms help to enhance an economy's growth and development. Consequently, SME financing is evolving as an area of research interest around the globe. Survey research conducted in this area includes the following work: Michaelas et al. (1998) in the United Kingdom; Hussain et al.(2006) and He and Baker (2007) in the United States; Wu et al. (2008) in China; Haileselasie Gebru in Tigray (2009); Mac an Bhaird and Lucey (2011) in Ireland; Demirbas et al.(2011) in Turkey; Lappalainen and Niskanen (2012) in Finland; Klonowski (2012) in Poland; Borgia and Newman (2012) in China; Daskalakis et al. (2013) in Greece; and Mohamed Zabri (2013) in Malaysia. However, few studies using survey methodology focus on Indian SMEs (Dogra and Gupta, 2009; Singh et al., 2010). Thus, survey research is evolving in the field of SME financing. Survey research is the only method available to collect the data required for examining the research questions in this study.

#### 1.3 Research Design

Given the difficulty of surveying all Indian SMEs owing to their vast number, we focus on SMEs in the northwest region of India. This region is strategically important because it lies in the upcoming Delhi Mumbai Industrial Corridor (DMIC) and offers a wide range of manufacturing and service industries. To gather data, we used a structured questionnaire modelled after several previous surveys (He and Baker, 2007; Borgia and Newman, 2012; Mohamed Zabiri, 2013). Both subject matter and industry experts reviewed the survey. We administered the survey both by email and in person. We contacted the SMEs mainly through information provided by the regional MSME-Development Institute Offices of major clusters identified in the Northwest region of India, industrial directories of these clusters, exhibitions and seminars conducted by MSME-DIs and SME chamber of India. The final sample consists of 2,789 SMEs. After contacting the owners of these SMEs by either telephone or email, 309 agreed to participate in our survey resulting in an11.08% response rate. This response rate reflects a general unwillingness of SME owners to discuss their business affairs and represents a potential limitation of this study.

#### 1.3.1 Limitations

Survey research can suffer from non-response bias. Given that information of respondents vs. non-respondents is unavailable, we use an approach suggested by Wallace and Mellor (1988) to test for non-response bias that compares early to late respondents. Specifically, we compare the 183 companies that responded during the first five months of the survey (early respondents) to the 126 companies that responded during the last four months (late responses) on three firm characteristics: firm size (F1), business stage (F2), and legal status (F3). Table 1 shows no statistically significant differences at the 0.05 level on any of these characteristics. Although these results lessen our concern about generalizing the findings to other Indian SMEs, the findings of this exploratory study are suggestive rather than definitive.

#### (Insert Table 1 about here)

### **1.3.2 Questionnaire Design**

The research instrument has four sections. The first two sections describe the firm features and respondent demographics, respectively. The third section discusses the preferred financing sources. The questionnaire measures the preferences of respondents using a five-point scale where 1 = very low preference, 2 = low

preference, 3 = neither high nor low preference, 4 = high preference, and 5 = very high preference. The next question in this section measures preference about financing terms (i.e., whether they prefer short-, medium- or long-term financing) using the same five-point scale. This section also asks respondents to rank six financing sources: (1) internal funding (owner's fund and retained earnings), (2) bank financing, (3) funding through government schemes, (4) external equity, (5) money lenders, and (6) family friends and relatives. The final section describes the current state of financing. The questionnaire uses a five-point scale to measure the proportion of current financing sources where 1 = not at all used, 2 = somewhat used, 3 = moderately used, 4 = highly used, and 5 = extremely used. This section ends with a question on the proportion of funds procured through short-and long-term liabilities as well as owner's capital. The questionnaire is available from the authors on request.

#### 1.4 Analysis

We use both descriptive and inferential statistical techniques to analyse the data including independent t-tests, paired t-tests, one-way ANOVA, post hoc analysis, and Pearson correlation coefficients. Parametric tests assume that measurement of the data should be at least on an interval scale (Field, 2009). The survey measures financing preferences and practices of Indian SMEs on a five-point interval scale discussed previously. We examine the normality of the distribution and find that value of skewness and kurtosis of each variable measured on an interval scale falls in the acceptable range of  $\pm 2$  (George and Mallery, 2010).

We use the  $F_{max}$  test to examine the homogeneity of variances across firm size for all variables measured on an interval scale. We classify firms into two groups based on size: micro (135) and small and medium (174) firms. Because the variance ratio is less than the critical value for the F distribution (3.87) for all the variables, homogeneity of variance is met for the variables.

#### **1.4.1 Sample Description**

We describe the sample of 309 SMEs from northwest India based on firm and owner's demographics. The firm characteristics are its legal status, business stage, firm size, sector, and export activity. Table 2 presents the sample description in three panels. As Panel A shows, the majority of the firms are sole proprietorships (43%), operate at the maturity and expansion stage of the business life cycle (56%), and are

small enterprises (50%) according to the MSMED Act 2006.<sup>1</sup> Most of the responding firms (83%) are in the manufacturing sector with the remaining firms in the services sector (17%). The majority (67%) of firms do not engage in exports. Panel B shows owner/manager demographics revealing that most respondents are male (87%), are more than 35 years old (75%), and have a university degree (78%). Respondents typically own the business (97%), have a high level of experience in the current business (i.e., more than 10 years) (61%), and have a high level of total experience (i.e., more than 10 years) (71%). As Panel C shows, most owners (72%) started their firms and the main motive behind starting the business was their entrepreneurial ability (56%).

(Insert Table 2 about here)

#### **1.4.2 Financing Preferences of SMEs**

SMEs can obtain funds both internally and externally. Our first research question is: What are the preferred types of internal and external financing sources used by Indian SMEs? These sources are IEF = internal equity financing, STF = short-term financing, LTF = long-term financing, OFF = other forms of financing, and EEF = external equity financing.

Regarding internal sources, Table 3 shows that about 92% of respondents express a high/very high preference for using retained earnings closely followed by owner funds (88%), and funds from group companies (21%). The questionnaire classifies external financing sources as STF, LTF, OFF, and EEF.As Table 3 shows, respondents express the highest preference for bank overdrafts followed by short-term bank loans, cash credit, and export-import financing. The highest ranked long-term financing source is clearly long-term government financing schemes followed by long-term bank loans, and non-banking financial institutions. Regarding other financing sources, respondents show the strongest preference for trade credit. Funds from family, friends, and relatives are the second most popular source. Respondents express a low/very low preference for money lenders and funds from other companies possibly because they charge higher interest rates. Another form of financing is external equity, which includes venture capital, business angel, and initial public offerings (IPOs). The majority of respondents express a low/very low preference for all three sources, especially financing through an IPO, which results in a loss of control and more stringent regulation as a result of listing.

<sup>&</sup>lt;sup>1</sup>According to the Micro, Small and Medium Enterprise Act (MSME) of 2006, MSMEs are defined under the classification based on investment in plant and machinery and equipment in manufacturing and service industries, respectively.

	Manufacturing (Amount in Rs)	Service (Amount in Rs)
Micro	<2.5 millions	<1 million
Small	2.5 to <50 million	1 to <20million
Medium	50 to 100 million	20 to 50 million

#### (Insert Table 3 about here)

Our second research question is: Do Indian SMEs prefer short-, medium-, or long-term financing sources? As Table 4 shows, the majority of respondents (78%) express a high/very high preference for short-term financing with long- and mediumterm sources being distant second and third preferences. Respondents tend to be conservative and prefer paying lower interest rates, which are typically associated with short-term financing sources. However, they use long-term financing mainly for capital-intensive projects, when such funds are available.

#### (Insert Table 4 about here)

Our third research question is: How do Indian SMEs rank their preferred internal and external financing sources? As Table 5 shows, an overwhelming majority of responding SMEs select internal funding (83%) as their first choice for funding business operations followed by bank financing (13%). By contrast, 71% of respondents choose external equity as their last choice. The results involving preferences for internal versus external financing sources are consistent with evidence shown in Table 3. Of all internal and external financing sources, respondents express the strongest preference for retained earnings and owner funds as indicated by their means of 4.41 and 4.32, respectively.

(Insert Table 5 about here)

### **1.4.3 Financing Practices of SMEs**

Our fourth research question: How consistent are stated preferences and practices of Indian SMEs involving financing sources? Although similar to Table 3, Table 6 presents the percentage of respondents using different financing sources whereas Table 3 reports their preferences. Based on their mean responses, Table 6 shows a slightly higher use of retained earnings than owner funds for financing their operations. Table 3exhibits the same overall ranking but a lower percentage of respondents express a high/very high preference for using owner funds (88%) but an almost similar preference for using retained earnings (92%). The difference between preferences and practices for using owner funds may be due to the scarcity of funds from external sources or other obstacles that restrict firms in using alternate financing sources.

Regarding short-term financing, Table 6 shows that a majority of responding SMEs report high/extremely high usage of bank overdrafts and cash credit. However, only a small percentage report high/extremely high usage of different long-term financing sources. About 22% of respondents indicate using long-term bank loans but only 7% indicate using funds from non-banking financial institutions and government funding schemes. The usage of short-term liabilities is higher than long-term liabilities, which could be due to either the reluctance of financial institutions to

provide loans to small businesses or information asymmetry (Kumar and Rao, 2015). Holmes and Kent (1991) also find that SMEs are overburdened with debt and rely heavily on short-term debt. Among informal financing sources, respondents most commonly use trade credit followed by family friends and relatives and money lenders. According to De (2010), informal sources contribute 50% to the total funding of Indian SMEs. Respondents do not report using external equity financing. The results suggest that small firms use those financing sources that require minimum intrusion into their businesses (Scherr et al., 1990; Holmes and Kent, 1991, Hamilton and Fox, 1998). Alternatively, small firms may use informal sources because of the difficulty of obtaining funds from financial institutions and underdeveloped capital market for SMEs.

(Insert Table 6 about here)

### 1.4.4 Association between Financing Preferences and Practices

To determine the strength of association between the preferences and practices of the responding SMEs on financing sources, we use Pearson correlation coefficients. As Table 7 reports the strongest statistically significant positive correlation occurs between OFF\_PREF and OFF\_PRAC (0.672) followed closely by IEF\_PREF and IEF\_PRAC (0.654). Table 7 shows other statistically significant positive and negative correlations. Respondents expressing a high preference for IEF use IEF\_PRAC and OFF\_PRAC over STF\_PRAC and LTF\_PRAC for meeting their financing needs. Similarly, those having a preference for STF and LTF use more formal financing sources over internal funds. Further, owner/managers exhibiting a preference for OFF tend to use OFF\_PRAC, IEF\_PRAC, and STF\_PRAC. Yet, respondents expressing a preference for EEF exhibit a negative correlation with OFF\_PRAC.

#### (Insert Table 7 about here)

To determine whether differences exist between financing preferences and practices, we use paired t-tests to test the mean difference of financing preferences and practices reported by the responding SMEs. As Table 8 shows, a statistically significant difference at the 0.01 level exists between IEF\_PREF and IEF\_PRAC, STF\_PREF and STF\_PRAC, LTF\_PREF and LTF\_PRAC. This evidence suggests the deliberate use of informal financing sources. Although some SMEs prefer using formal sources, such sources are often unavailable. The statistically significant positive mean difference between preferred and actual short-term and long-term sources implies that SME owners face problems obtaining funds from formal sources. The inability to obtain such sources could result from improper maintenance of accounting records, poor financials, high interest rates, and a lack of knowledge about the availability of funds. Moreover, financial institutions may be reluctant to provide loans to SMEs above a specified limit. Complex collateral requirements and a higher moratorium period (i.e., the period between the loan approval and receipt of funds)

could also discourage SMEs from obtaining funds from formal institutions. Therefore, firms try to procure funds from other financing sources.

(Insert Table 8 about here)

#### **1.4.5 Drivers of Financing Preferences**

Our fifth research question is: What are the drivers of financing preferences across firm and owner/manager characteristics for Indian SMEs? Both types of characteristics could affect financing preferences (Abdulsaleh and Worthington, 2013). We study the difference in preferences across the following firm-specific characteristics: legal status, business stage, firm size, sector, and export activity. The financing preferences are: IEF, STF, LTF, OFF, and EEF. We measure the financing preferences on a five-point scale where 1 = very low preference, 2 = low preference, 3 = neither high nor low preference, 4 = high preference, and 5 = very high preference.

Based on analysis of the normality of the distributions (not reported), we use parametric tests. We examine these differences using an independent t-test and oneway ANOVA. Using ANOVA,  $H_0$ states that no significant difference exists among the means of each firm characteristic for each financing preference. $H_1$  states that at least one mean is different.

As Table 9 shows, the F-statistics indicate statistically significant differences among sole proprietorships, partnerships, and private limited firms for IEF, STF, LTF, and OFF. For each of these financing preferences, the means become increasingly higher when moving from a sole proprietorship to a partnership and then to a private limited firm. However, despite a firm's legal status, IEF is the highest preferred financing source among the responding Indian SMEs. Our results are consistent with Abor (2008) who finds that legal status is an important factor in deciding on the type of funds that firms use. Van Auken and Neelay (1996) also find that ownership structure and firm type affect financing. Their evidence confirms that respondent preferences vary across sole proprietorships, partnerships, and private limited firms.

Table 9 also shows that financing preferences differ across the business stage: (1) incubation, (2) growth, and (3) maturity and expansion. As firms grow older, their financing preference for IEF and OFF increases. As companies move out of the incubation stage, their preferences for both STF and LTF increase. A plausible explanation for this finding is that lending institutions are sceptical of younger firms because of information opacity and less creditworthiness (Berger and Udell, 1998). Therefore, firms in the incubation stage generally prefer personal savings and owner funds.

Financing preferences also vary across micro-, small-, and medium-size firms. Micro-and small-size firms require relatively less funds than their medium-size counterparts. The one-way ANOVA shows statistically significant size differences in

respondent preferences for IEF, STF, LTF, and OFF. As firm size increases, the preference for IEF, STF, and LTF also increases, as indicated by their means. Thus, increasing a firm's size requires greater levels of funding to finance the business.

The independent t-tests in Table 9 show that preferences for STF, LTF, and OFF differ significantly between manufacturing and service firms. Specifically, manufacturing firms prefer higher levels of these financing sources than do service firms. Such preferences could depend on the accessibility of such funds. Manufacturing SMEs with tangible assets are more likely to obtain financing from external sources than service firms with fewer tangible assets. Our findings are generally consistent with Kumar and Rao (2016) who find differing financing patterns between Indian SMEs in the manufacturing and service sectors.

Finally, export activity affects the financing preferences of Indian SMEs as shown by the statistically significant t-tests for STF, OFF, and EEF. Our results show that exporters prefer more STF, OFF, and EEF than do non-exporters.

(Insert Table 9 about here)

### **1.4.6 Financing Preferences across Owner/Manager Characteristics**

Financing preferences are not only governed by firm characteristics but also by management behavior toward the source of financing (Nguyen and Ramachandran, 2006). This section deals with the difference in financing preferences across respondent demographics including gender, age, education, experience, and ownership.

Male and female business owners have different views about business financing. Verheul and Thurik (2001) classify the impact of gender on SMEs' financing into direct and indirect effects. A direct effect involves how male and female entrepreneurs finance their firms whereas an indirect effect refers to differences in business type, management, and experience. According to Watson et al. (2009), females are more risk averse and hesitant to access external sources of funds. Harrison and Mason (2007) find differences in male and female entrepreneurs based on discrimination, abilities and preferences, and competition.

Our study highlights financing preferences across owner/manager characteristics. Table 10 reports statistically significant differences between male and female preferences for IEF, LTF, OFF, and EEF. Contrary to Watson et al. (2009), our results show that females prefer a higher level of EEF than their male counterparts. However, women prefer a lower level of IEF, LTF, and OFF than men.

The F-statistics reported in Table 10indicate that age significantly affects financing preferences for IEF, STF, OFF, and EEF. Of these preferences, the most consistent pattern involves age and IEF. Specifically, the financing preference for IEF

increases with each successively older age category. Respondents who are older than 65 years of age indicate the strongest preference among the age groups for EEF. According to Briozzo and Vigier (2009), obtaining external funds from formal institutions becomes less difficult with increasing age.

Table 10 also reveals a statistically significant difference between educational level and financing preference for IEF and OFF. However, the relation between education level and these financing preferences varies. Unlike Coleman (2007) and Borgia and Newman (2012), our results do not show a positive relation between the educational level of SME owners/managers and leverage.

As Table 10 shows, financing preferences of respondents with low, moderate, and high experience of running their current businesses differ significantly for IEF, STF, LTF, OFF, and EEF. Respondents with more experience in the present business exhibit a stronger preference for IEF but a lesser preference for EEF. The preferences for STF, LTF, and OFF increase with business experience.

The final owner/manager characteristic is ownership. Indian SMEs typically have highly concentrated ownership. Table 10 reports that financing preferences differ significantly for OFF and EEF. Owners exhibit a higher preference for OFF and a lower preference for EEF relative to non-owners.

(Insert Table10 about here)

### 1.4.7 Drivers of Financing Practices

Our sixth research question is: What are the drivers of financing practices among Indian SMEs? We use hierarchical regression to analyze the impact of financing preferences while controlling for firm and owner characteristics. We classify the predictor variables into four main panels: (1) financing preferences (IEF\_PREF; STF\_PREF; LTF\_PREF; OFF\_PREF and EEF\_PREF), (2) respondent features (education, age, experience, gender, and ownership), (3) modes of acquisition and motives behind business, and (4) firm features (legal status, business stage, sector, firm size, and export activity). Table 11 presents the coding of the independent variables.

#### (Insert Table 11 about here)

Our hierarchical regression model reveals the magnitude of association between the preferred and used financing sources. Hierarchical regression examines the impact of each group of variables added in the regression model and thereby explains the influence of added variables in the model. If the  $R^2$  of the additional set of variable is statistically significant, this result implies that these variables also assist in explaining the variance in a given model. This analysis documents that respondent and firm features have a statistically significant relation with the financing sources

that Indian SMEs use. Table 12 shows the regression results of four models designed on financing practices of SMEs.

(Insert Table 12 about here)

Below is the general equation for the regression models used in the study:

$$Y_j = c_j + \sum_{i=1}^{26} b_{ij} X_{ij}$$
(1)

where  $Y_j$  = dependent variable for the j<sup>th</sup> model used in the regression (j = 1 to 16); i = the number of independent variables used in the regression; j = the number of regression models applied in the study;  $c_j$  = the constant for j<sup>th</sup> regression model;  $b_{ij}$  = the regression coefficients for i<sup>th</sup> variable in j<sup>th</sup> model; and  $X_{ij}$  = the values corresponding to i<sup>th</sup> independent variable for j<sup>th</sup> model.

The terms  $X_{1j}$ ,  $X_{2j}$ ,  $X_{3j}$ ,  $X_{4j}$ , and  $X_{5j}$  represent respondents' financing preferences for internal equity, short-term finance, long-term finance, other sources of finance, and external equity, respectively for all values of j.

The terms  $X_{6j}$ ,  $X_{7j}$ ,  $X_{8j}$ ,  $X_{9j}$ ,  $X_{10j}$ ,  $X_{11j}$ ,  $X_{12j}$ , and  $X_{13j}$  represent owner-specific features: Education<sub>1</sub>, Education<sub>2</sub>, Age<sub>1</sub>, Age<sub>2</sub>, Experience<sub>1</sub> Experience<sub>2</sub>, Gender and Ownership for all values of j except 1, 5, 9, and 13. The terms  $X_{14j}$ ,  $X_{15j}$ ,  $X_{16j}$ ,  $X_{17j}$ , and  $X_{18j}$  represent modes of acquisition and motives behind a business, namely MA<sub>1</sub>, MA<sub>2</sub>, MB<sub>1</sub>, MB<sub>2</sub>, and MB<sub>3</sub> for all values of j except 1, 2, 5, 6, 9, 10, 11, and 13. The terms  $X_{19j}$ ,  $X_{20j}$ ,  $X_{21j}$ ,  $X_{22j}$ ,  $X_{23j}$ ,  $X_{24j}$ ,  $X_{25j}$ , and  $X_{26j}$  represent firm features: Legal Status<sub>1</sub>, Legal Status<sub>2</sub>, Business Stage<sub>1</sub>, Business Stage<sub>2</sub>, Sector, Firm Size<sub>1</sub>, Firm Size<sub>2</sub>, and Export Activity for the j models: 4, 8, 12, and 16.

Table 13 provides a summary of all the hierarchical regression models. The following section discusses the 16 regression models, which result from including the impact of four sets of predictor variables on the four criterion variables.

(Insert Table 13 about here)

### **Regression Results for IEF\_PRAC**

Model 1 shows that IEF\_PREF and OFF\_PREF exhibit a statistically significant positive relation with IEF\_PRAC. The findings imply that owners who have a high preference for internal equity and other forms of financing are more likely to use retained earnings and their own funds than to rely on external financing sources. Model 2 reveals that respondents with little experience (less than 4 years) use more internal equity than more experienced respondents.

Model 3 introduces MA and MB in the regression equation. The results show that EEF\_PREF exhibits a negative relation with IEF\_PRAC indicating a reluctance of SME owners or managers toward external equity. Model 3 predicts that male respondents use more internal financing than females. Those who want to expand the business and joined the business after college exhibit a negative relation with

IEF\_PRAC compared to those who started a business due to the unavailability of jobs after college ( $MB_3$  and  $MB_4$ ).

Model 4 contains all four set of predictor variables and also includes firmspecific features. The results show that younger respondents with moderate experience are positively associated with IEF\_PRAC as compared to older (> 55 years) respondents with high experience. Further, sole proprietors and small firms exhibit a negative relation with IEF\_PRAC as compared to private limited firms and mediumsized firms, respectively. A positive association exists between using internal funds by export-oriented firms compared to non-exporters.

#### **Regression Results for STF\_PRAC**

Models 5 to 12 depict the formal external sources of debt financing. The following discusses the key results for each model. Model 5 reveals a positive relation between STF\_PREF, OFF\_PREF, and STF\_PRAC and a negative association for EEF\_PREF and STF\_PRAC.

Model 6 indicates a statistically significant inverse relation of IEF\_PREF with STF\_PRAC and a positive association with LTF\_PREF. Respondents with less education exhibit a positive relation with STF\_PRAC compared to respondents with higher education. A negative association exists between STF \_PRAC and younger respondents relative to older respondents. Less experienced respondents exhibit a negative association with STF\_PRAC when compared to those with more experience. Owners exhibit a negative association with STF\_PRAC compared to non-owners or managers.

Model 7 documents a positive association between STF\_PRAC and those who bought firms compared to those who inherited them. Model 8 also incorporates firm features such as sole proprietorship, manufacturing sector, and export-orientation along with the other three sets of independent variables, namely financing preferences (FP), respondent features (RF), and modes of acquisition and motives behind doing business (MA&MB). The results reveal a negative association with STF\_PRAC compared to private limited firms, service sector, and non-exporters, respectively. Firms in the incubation stage show a positive relation with STF\_PRAC compared to established and mature firms.

### **Regression Results for LTF\_PRAC**

Models 9 to 12 help to explain the influence of predictor variables on LTF\_PRAC. Model 9 involves the influence of financing preferences only. It shows that LTF\_PREF and EEF\_PREF are positively and negatively associated with the LTF\_PRAC, respectively.

Model 10 includes owner-specific variables. It reveals that EEF\_PREF becomes statistically insignificant and younger respondents exhibit a negative association with LTF\_PRAC compared to older respondents.

Model 11 documents that respondents who bought firms show a positive association with LTF\_PRAC. Model 12 for LTF\_PRAC includes all the independent variables. It reveals a negative association of IEF\_PREF and OFF\_PREF with LTF\_PRAC. The findings also indicate a positive association between males and LTF\_PRAC compared to females. Further, firms in the incubation stage and operating in the manufacturing sector show a positive relation with LTF\_PRAC compared to mature and service sector SMEs. However, micro firms are negatively related with LTF\_PRAC compared to medium-sized firms.

### **Regression Results for OFF\_PRAC**

Models 13 to 16 incorporate the analysis of OFF\_PRAC. Model 13 reveals the statistically significant predictors of OFF\_PRAC are STF\_PREF (+), LTF\_PREF (-), OFF\_PREF (+), and EEF\_PREF (-). However, when including owner-specific features in model 14, IEF\_PREF shows a positive association with OFF\_PRAC and STF\_PREF; LTF\_PREF becomes insignificant unlike in model 13.

Model 14 explicitly depicts the effect of adding owner features in the model. It also shows that less educated respondents show a positive relation with OFF\_PRAC compared to highly educated respondents. By contrast, more experienced respondents and females exhibit a positive relation with OFF\_PRAC compared to less experienced and male respondents, respectively.

Model 15 adds variables including modes of acquisition and motives behind the business. The findings reveal that those who started their business are negatively related with OFF\_PRAC compared to those who inherited their business. Further, respondents whose main motive is to expand the business or those who started a business because of retrenchment or being lay off from a previous job exhibit a positive association with OFF\_PRAC compared to those who started a business due to job unavailability. MB<sub>2</sub> and MB<sub>3</sub> are positively related with OFF\_PRAC. This result implies that using OFF \_PRAC increases if a SME owner/manager wants to expand or if the owner started the business due to retrenchment or being laid off from a previous job.

Model 16 includes firm features and documents that sole proprietorships are inversely related with OFF\_PRAC compared to private limited firms. Manufacturing, small-size, and new firms show a positive association with OFF\_PRAC compared to service, medium-sized, and mature firms. Exporters exhibit an inverse relation with OFF\_PRAC as compared to non-exporters.

#### **1.5 Summary and Conclusions**

The following summarizes the key findings involving our six research questions involving Indian SME.

- *Preferred types of internal and external financing sources*. The results show that respondents prefer internally generated funds. Although they also prefer formal short- and long-term funds, they often do not use these sources. Instead, they rely on trade credit, funds from family, friends, and relatives as well as funds from money lenders. Thus, Indian SMEs use informal financing sources more often than formal ones. A statistically significant difference exists between financing preferences and practices of Indian SMEs, especially involving formal and informal lending.
- *Preference for short-, medium-, or long-term financing sources.* Respondents indicate a preference for short-term financing over medium- and long-term financing. Because Indian SMEs often lack liquidity and need funds for their daily operations, they rely on short-term sources. Liquidity constraints may also curtain focusing on long-term financing for expansion and growth.
- *Ranking of preferred internal and external financing sources.* Although the financing preferences of SMEs vary for different sources, respondents express a preference for internal funding followed by funding from commercial banks and the government. The majority of respondents rank external equity last.
- *Consistency of stated financing preferences and practices*. Statistically significant differences exist between the financing preferences and practices involving internal equity financing as well as short- and long-term financing.
- Drivers of financing preferences. Firm characteristics including legal status, business state, firm size, sector, and export activity affect financing preferences.
   Private limited firms exhibit a higher preference for all types of financing sources

than do sole proprietorships and partnerships. Business state also affects financing preferences. For example, the preference for IEF increases as a firm moves from the incubation and growth stages to the maturity and expansion stage but the preference for EEF decreases. Financing preferences for IEF, STF, and LTF increase with firm size. Respondents from export-oriented firms exhibit a greater preference for STF, OFF, and EEF than non-exporters.

Financing preferences also differ based on owner/manager characteristics. Females exhibit a high preference for EEF whereas males show a stronger preference for IEF, LTF, and OFF. The preference for IEF increases with each age group and the preference for using EEF generally increases with higher education levels. Greater business experience is associated with higher preferences for IEF, STF, LTF, and OFF but a lower preference for EEF. Compared to non-owners, owners show a lesser preference for using EEF but a greater preference for using OFF.

Drivers of financing practices. Among the significant variables that influence the financing practices of Indian SME are age, experience, and gender. Older owner/managers use more formal debt (STF and LTF) than their younger counterparts. Respondents with high work experience use more STF and OFF. Male owner-manages are more inclined toward using IEF and debt financing but female respondents use more OFF. Further, exporters mainly use IEF. Manufacturing SMEs use LTF and OFF while service SMEs use STF. These findings highlight the influence of firm features in predicting the financing sources used by Indian SMEs.

The study also reveals the inability of SME owners to use formal financing sources such as term loans and financing through government schemes and financial

18

institutions, despite their preference to use these sources. Although few owners prefer external equity for meeting their financing requirements, those who do cannot obtain it due to complicated listing procedures or their inability to meet compliance requirements. Further, owners rely on internal sources and generally refrain from using external funds. Therefore, a need exists to make owners aware of the possibility of using external financing and managing these sources effectively.

Our study contributes to a better understanding of financing preferences and practices of Indian SMEs. Identifying such differences could potentially influence policymakers in making the financial environment more conducive for SMEs. Future researchers could study SMEs beyond the northwest region of India. They could also examine behavioral aspects of SMEs' owners/managers and the influence of social capital and relationship lending in determining a firm's financial structure. Additionally, further studies could examine factors that motivate or hinder SMEs from obtaining funds within Indian capital markets.

#### References

- Abdulsaleh, A. M., & Worthington, A. C. (2013). Small and medium-sized enterprises financing: A review of literature. *International Journal of Business and Management*, 8(14), 36–55.
- Abe, M., Troilo, M., & Batsaikhan, O. (2015). Financing small and medium enterprises in Asia and the Pacific. *Journal of Entrepreneurship and Public Policy*, 4(1), 2–32.
- Abor, J. (2008). Determinants of the capital structure of Ghanaian firms, (RP\_176). Nairobi: African Economic Research Consortium.
- Allen, F., Chakrabarti, R., De, S., & Qian, M. (2012). Financing firms in India. Journal of Financial Intermediation, 21(3), 409–445.
- Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: Evidence from the S&P 500. *Journal of Finance*, 58(3), 1301–1328.

- Ang, J. S., Cole, R. A., & Lawson, D. (2010). The role of owner in capital structure decisions: An analysis of single-owner corporations. *Journal of Entrepreneurial Finance*, 14(3), 1–36.
- Berger, A. N., Klapper, L. F., & Udell, G. F. (2001). The ability of banks to lend to informationally opaque small businesses. *Journal of Banking & Finance*, 25(12), 2127–2167.
- Berger, A. N., & Udell, G. F. (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of Banking and Finance*, 22(6), 613–673.
- Biswas, A. (2014). Financing constraints for MSME sector. International Journal of Interdisciplinary and Multidisciplinary Studies, 1(5), 60–68
- Boocock, B., & Wahab, I. A. (2001). The financing of small firms: Different continents, the same problems? *New England Journal of Entrepreneurship*, 4(2), 13–31.
- Borgia, D., & Newman, A. (2012). The influence of managerial factors on the capital structure of small and medium-sized enterprises in emerging economies: Evidence from

China. Journal of Chinese Entrepreneurship, 4(3), 180–205.

- Briozzo, A., & Vigier, H. (2009). A demand-side approach to SMEs' capital structure:
  Evidence from Argentina. *Journal of Business and Entrepreneurship*, 21(1), 30–56.
- Carpenter, R. E., & Petersen, B. C. (2002). Is the growth of small firms constrained by internal finance? *Review of Economics and Statistics*, 84(2), 298–309.
- Coleman, S. (2007). The role of human and financial capital in the profitability and growth of women-owned small firms. *Journal of Small Business Management*, 45(3), 303–319.
- Daskalakis, N., Jarvis, R., & Schizas, E. (2013). Financing practices and preferences for

micro and small firms. Journal of Small Business and Enterprise Development, 20(1), 80–101.

- De, S. (2010). Financing Indian SMEs. http://isbinsight.isb.edu/financing-smesindia/accessed on 14.03/17.
- Demirbas, D., Hussain, J. G., & Matlay, H. (2011). Owner-managers' perceptions of barriers to innovation: Empirical evidence from Turkish SMEs. *Journal of Small Business and Enterprise Development*, 18(4), 764–780.
- Dogra, B., & Gupta, S. (2009). An empirical study on capital structure of SMEs in Punjab. *IUP Journal of Applied Finance*, 15(3), 60–80.
- Field, A. (2009). *Discovering statistics using SPSS* (3<sup>rd</sup> ed.). London: Sage Publications Ltd.
- George, D., & Mallery, M. (2010). SPSS for windows step by step: A simple guide and reference, 17.0 update (10<sup>th</sup> ed.). Boston: Pearson.
- Hackbarth, D. (2008). Managerial traits and capital structure decisions. *Journal of Financial and Quantitative Analysis*, 43(4), 843–881.
- Haileselasie Gebru, G. (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.

Hamilton, R. T., & Fox, M. A. (1998). The financing preferences of small firm

owners. International Journal of Entrepreneurial Behavior & Research, 4(3), 239-248

- Harrison, R. T., & Mason, C. M. (2007). Does gender matter? Women business angels and the supply of entrepreneurial finance. *Entrepreneurship Theory and Practice*, 31(3), 445–472.
- He, W., & Baker, H. K. (2007). Small business financing: Survey evidence in West Texas. *Journal of Entrepreneurial Finance*, 12(1), 27–54.

Holmes, S., & Kent, P. (1991). An empirical analysis of the financial structure of small and

large Australian manufacturing enterprises. *Journal of Entrepreneurial Finance*, 1(2), 141–154.

- Hussain, J., Millman, C., & Matlay, H. (2006). SME financing in the UK and in China: A comparative perspective. *Journal of Small Business and Enterprise Development*, 13(4), 5845–5899.
- IBEF (2013). MSME and the growing role of industrial clusters, http://www.ibef.org/download/MSME-040213.pdf.
- IFC (2012). A research study on needs gaps and need forward, http://www.intellegrow.com/images/download/publication/Publication%20-%20IFC%20MSME%20Report.pdf/ accessed on 12.02.15.
- Klapper, L. F., Sarria-Allende, V., & Zaidi, R. (2006). A firm-level analysis of small and medium size enterprise financing in Poland. World Bank Policy Research Working Paper No 3984. Washington, DC: The World Bank.
- Klonowski, D. (2012). Liquidity gaps in financing the SME sector in an emerging market:

Evidence from Poland. International Journal of Emerging Markets, 7(3), 335–355.

- Kraemer-Eis, H., & Lang, F. (2012). The importance of leasing for SME finance. *European Investment Fund (EIF) Research and Market Analysis*.http://www.eif.org/news\_centre/research/eif\_wp\_2012\_15\_The%20impo rtance%20of%20leasing%20for%20SME%20finance\_August\_2102.pdf.
- Kumar, S., & Rao, P. (2015). A conceptual framework for identifying financing preferences

of SMEs. Small Enterprise Research, 22 (1), 99–112.

Kumar, S., & Rao, P. (2016). Financing patterns of Indian SMEs during 2006 to 2013: An

empirical analysis. Journal of Small Business & Entrepreneurship, 28(2), 97-131.

- Lappalainen, J., & Niskanen, M. (2012). Financial performance of SMEs: Impact of ownership structure and board composition. *Management Research Review*, 35(11), 1088–1108.
- Lucey, B., Macan Bhaird, C., & Vidal, J. S. (2016). Discouraged borrowers: Evidence for Eurozone SMEs. Working Paper, Trinity Business School.
- Mac an Bhaird, C., & Lucey, B. (2011). An empirical investigation of the financial growth

lifecycle. Journal of Small Business and Enterprise Development, 18(4), 715–731.

- Michaelas, N., Chittenden, F., & Poutziouris, P. (1998). A model of capital structure decision making in small firms. *Journal of Small Business and Enterprise Development*, 5(3), 246–260.
- Mohamed Zabri, S. (2013). Financing preferences and capital structure among successful Malaysian SMEs. Working Paper, School of Management, Plymouth Business School.
- Morck, R., Shleifer, A., & Vishny, R. W. (1988). Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics*, 20(January-March), 293–315.
- Newman, A., Borgia, D., & Deng, Z. (2013). How do SMEs with single and multiple owners finance their operations differently? Empirical evidence from China. *Thunderbird International Business Review*, 55(5), 531–544.
- Nguyen, T. D. K., & Ramachandran, N. (2006). Capital structure in small and medium-sized enterprises: The case of Vietnam. ASEAN Economic Bulletin, 23(2), 192–211.
- Norton, E. (1991). Capital structure and small public firms. *Journal of Business Venturing*, 6(4), 287–303.
- Psillaki, M., & Daskalakis, N. (2009). Are the determinants of capital structure country or firm specific? *Small Business Economics*, 33(3), 319–333.

- Ruan, W., Tian, G., & Ma, S. (2011). Managerial ownership, capital structure and firm value: Evidence from China's civilian-run firms. *Australasian Accounting Business & Finance Journal*, 5(3), 73–92.
- Scherr, F.C., Sugrue, T. F. & Ward, J. B., 1990. Financing the small firm start-up: Determinants of debt use. *Journal of Small Business Finance*, 3(2), 17–36.
- Singh, R. K., Garg, S. K., & Deshmukh, S. G. (2009). The competitiveness of SMEs in a globalized economy: Observations from China and India. *Management Research Review*, 33(1), 54–65.
- Thampy, A. (2010). Financing of SME firms in India: Interview with Ranjana Kumar, Former CMD, Indian Bank; Vigilance Commissioner, Central Vigilance Commission. *IIMB Management Review*, 22(3), 93–101.
- Van Auken, H. E., & Neeley, L. (1996). Evidence of bootstrap financing among small start-up firms. *Journal of Entrepreneurial and Small Business Finance*, 5(3), 235– 249.
- Van Caneghem, T., & Van Campenhout, G. (2012). Quantity and quality of information and SME financial structure. *Small Business Economics*, 39(2), 341– 358.
- Verheul, I., & Thurik, R. (2001). Start-up capital: Does gender matter? *Small Business Economics*, 16(4), 329–346.
- Wallace, R. O., & Mellor, C. J. (1988). Non-response bias in mail accounting surveys: A pedagogical note. *British Accounting Review*, 20(2), 131–139.
- Watson, J., Newby, R., & Mahuka, A. (2009). Gender and the SME finance gap. *International Journal of Gender and Entrepreneurship*, 1(1), 42–56.
- Watson, R., & Wilson, N. (2002). Small and medium size enterprise financing: A note on some of the empirical implications of a pecking order. *Journal of Business Finance & Accounting*, 29(3–4), 557–578.
- Wu, J., Song, J., & Zeng, C. (2008). An empirical evidence of small business financing in China. *Management Research News*, 31(12), 959–975.

CORTED MANUSCRICK

### Table 1. Test for Non-Response Bias

This table represents the results of non-response bias based of three firm characteristics: firm size, business stage, and legal status. It compares information from the 183 respondents during the first five months of the survey (early responses) to the 126 respondents during the last four months (late responses).

Statement	Firm Characteristics	$\chi^2$ Value	Degrees of Freedom	<i>p</i> -value
F1	Firm size	6.325	2	0.055
F2	Business stage	5.918	2	0.052
F3	Legal Status	7.635	2	0.059

### Table 2. Sample Profile of Indian SMEs

						~		
Panel A. Firm (	Characteristics					$\mathbf{Q}$		
	Sole proprietorship	132 (43%)		Incubation	33(11%)		Micro	135 (44%)
A1. Legal	Partnership	72 (23%)	A2.Stage of	Growth	102 (33%)		Small	156 (50%)
Status			Business	Maturity and	0	A3. Firm Size		
	Private limited	105 (34%)		expansion	174 (56%)		Medium	18(6%)
	Manufacturing	256(83%)	A5.Export	Exporters	103 (33%)			
A4. Sector	Service	53(17%)	Activity	Non-exporters	206(67%)			
Panel B. Owner	Manager Characteris	stics						
P1 Condon	Male	270 (87%)	B2 Age	Young (<35 years)	76(25%)	<b>B3</b> Education	School certificate	69 (22%)
Difference	Female	39(13%)	Danige	Old ( $\geq$ 35 years)	233(75%)	D3.Education	University degree	240(78%)
	Yes	299(97%)	<b>D5</b> Exposionee	Low	50 (16%)		Low	16(5%)
B4.Ownership	No	10(3%)	with Current	Moderate	71 (23%)	B6.Total Experience	Moderate	73 (24%)
			Dusiness	High	188 (61%)		High	220 (71%)
Panel C. Mode	of Acquisition and Mo	tive Behind S	starting the Busin	ess				
			C2. Motive	Entrepreneurial			After	
C1. Mode of Acquisition	Inherited	74(24%)	Behind Starting the	ability	174(56%)		College	34(11%)
Acquisition	Purchased	12(4%)	Business	Z/ Retrenchment	54(17%)		No job after	6(2%)

					College
	Started from scratch	223(72%)	Expansion	41(13%)	
This table descri characteristics; a	bes the sample of re and Panel C represen	esponding Indian SMEs. nts the mode of acquisiti	Panel A describes the firm on and motive behind the b	characteristics; Panel B business.	specifies owner/manager
		ott	DWAM		
	A	SCEF			

### **Table 3. Financing Preferences of Indian SMEs for Different Sources**

This table presents the percentage of responding Indian SMEs expressing preferences for different financing sources where 1 = very low preference, 2 = low preference, 3 = neither low nor high preference, <math>4 = high preference, and 5 = very high preference. The sources are IEF = internal equity financing, STF = short-term financing, LTF = long-term financing, OFF = other forms of financing, and EEF = external equity financing.

SCR. MANUSCRICK

			Prefe	erence	Scale				
		1	2	3	4	5	Mean	Std.	Rank
Sources	Financing Preferences	%	%	%	%	%		Dev.	
	Owner funds	1.3	4.2	6.8	36.2	51.5	4.32	0.87	2
IEF	Retained earnings	0.0	1.9	5.8	41.7	50.5	4.41	0.69	1
	Funds from group companies	60.8	11.0	7.1	18.4	2.6	1.91	1.28	3
	Short-term bank loans	11	21.4	20.4	46.6	0.6	3.05	1.07	2
OTE	Bank overdrafts	6.1	18.4	17.2	54.4	3.9	3.31	1.02	1
515	Cash credit	7.4	28.2	17.8	46.0	0.6	3.04	1.03	3
	Export-import finance	60.8	6.5	2.3	18.8	11.7	2.14	1.55	4
	Long-term bank loans	14.2	24.9	17.8	33.7	9.4	2.99	1.24	2
LTF	Non-banking financial institutions	7.8	8.7	6.2	43.0	14.2	2.94	1.26	3
	Long-term government financing schemes	14.2	31.1	10.7	35.0	9.1	3.47	1.09	1
	Trade credit	14.2	24.9	17.8	33.7	9.4	3.80	1.11	1
	Money lenders	38.2	21.0	18.4	19.7	2.6	2.28	1.23	3
OFF	Family friends and relatives	17.5	12.9	31.7	35.0	2.9	2.93	1.14	2
	Funds from other companies	87.7	7.1	0.6	4.5	0.0	1.22	0.67	4
	Venture capital	42.1	21,9	13.3	17.8	5.8	2.24	1.32	1
EEF	Business angels	43.0	22.3	10.7	16.8	7.1	2.23	1.34	2
	Funds through an IPO	89.9	5.5	2.9	2.6	0.0	1.19	0.61	3

### Table 4. Terms of Financing for Indian SMEs

This table presents the percentage of responding Indian SMEs expressing a preference for short-, medium-, and long-term financing where 1 = very low preference, 2 = low preference, 3 = neither low nor high preference, 4 = high preference and 5 = very high preference.

Preference Scale								
	1	2	3	4	5	Mean	Std.	Rank
Term of Financing	%	%	%	%	%		Dev.	
Short-term financing	4.5	8.7	8.7	56.6	21.4	3.82	1.014	1
Medium-term financing	3.9	28.2	48.5	14.9	4.5	2.88	0.869	2
Long-term financing	17.8	20.4	35.9	19.1	6.8	2.77	1.153	3

### **Table 5. Ranking of Financing Preferences by Indian SMEs**

This table presents the percentage of responding Indian SMEs assigning a rank to their preferred financing sources.

	<b>Ranking of Financing Sources</b>							
Financing Sources	First Choice	Second Choice	Third Choice	Fourth Choice	Fifth Choice	Last Choice		
	%	%	%	%	%	%		
Internal funding	83.2	11.3	3.2	1.6	0.0	0.6		
Bank financing	12.9	57.3	17.2	10.4	1.0	1.3		
Government funding schemes	2.9	7.4	30.7	28.8	25.6	4.5		
Family friends and relatives	0.6	22.0	27.8	24.9	13.6	11.0		
Money lenders	0.6	0.6	13.3	24.9	37.2	23.3		
External equity	0.6	1.6	4.5	4.9	17.2	71.2		

### **Table 6. Financing Practices of Indian SMEs for Different Financing Sources**

This table presents the percentage responding Indian SMEs using various financing sources where 1 =not at all used, 2 = somewhat used, 3 = moderately used, 4 = highly used, and 5 = extremely used. The financing sources are IEF = internal equity financing, STF = short-term financing, LTF = long-term financing, and OFF = other forms of financing.

	Use Scale								
Financing Sources	Financing Practices	1 %	2 %	3 %	4 %	5 %	Mean	Std. Dev.	Rank
	Owner funds	0.0	1.9	7.1	46.0	45.0	4.34	0.70	2
IEF	Retained earnings	1.9	0.6	6.5	39.5	51.5	4.38	0.80	1
	Funds from group companies	69.6	10.7	3.2	14.6	1.9	1.69	1.18	3
	Short-term bank loans	0.0	33.0	27.2	19.7	20.1	2.27	1.12	3
CTE	Bank overdrafts	25.9	9.1	12.3	49.2	3.6	2.95	1.33	1
517	Cash credit	20.4	17.5	17.2	41.1	3.9	2.91	1.25	2
	Export-import finance	70.9	7.8	13.6	7.1	0.6	1.59	1.01	4
	Long-term bank loans	32.7	20.7	24.3	19.7	2.6	2.39	1.20	1
	Non-banking financial institutions	62.1	11.7	19.1	6.5	0.6	1.72	1.03	2
LTF	Long-term government financing schemes	75.4	10.7	6.5	7.4	0.0	1.46	0.91	3
	Funds through fixed deposit	56.6	20.4	16.8	6.1	0.0	1.72	0.95	2
	Trade credit	9.7	7.1	14.6	45.3	23.3	3.65	1.19	1
	Money lenders	36.9	11.7	26.9	23.3	1.3	2.40	1.24	3
OFF	Family friends and relatives	16.8	7.8	29.8	39.2	6.5	3.11	1.18	2
	Funds from other companies	83.5	12.0	13.0	2.6	0.0			

1.24 0.61 4

South Marines

### Table 7. Correlation between Financing Preferences and Practices of Indian SMEs

This table reports the correlation between financing preferences (PREF) and practices (PRAC) of responding Indian SMEs. The financing sources are IEF = internal equity financing, STF = short-term financing, LTF = long-term financing, OFF = other forms of financing, and EEF = external equity financing.

	IEF_PREF	STF_PREF	LTF_PREF	OFF_PREF	EEF_PREF
IEF_PRAC	$0.654^{**}$	0.036	0.111	0.241**	-0.049
STF_PRAC	0.077	$0.620^{**}$	0.373**	0.237**	-0.035
LTF_PRAC	0.002	0.251**	0.383**	0.039	-0.037
OFF_PRAC	$0.179^{**}$	0.151**	0.014	0.672**	$-0.217^{**}$

\*\* indicates statistical significance at the 0.05 level.

#### Table 8. Mean Differences between Financing Preferences and Practices of Indian SMEs

This table reports the results of paired t-tests based on the mean difference between comparable financing sources. The financing sources are IEF = internal equity financing, STF = short-term financing, LTF = long-term financing, and OFF = other forms of financing. Note that PREF = Preferences and PRAC = Practices

Pairs	Pairs Mean Differences		t-statistic
IEF_PREF - IEF_PRAC	0.079	0.458	3.022***
STF_PREF – STF_PRAC	0.456	0.697	11.485***
LTF_PREF - LTF_PRAC	1.310	0.904	25.457***
OFF_PREF – OFF_PRAC	-0.045	0.524	-1.521

\*\*\*\*indicates statistical significance at 0.01 level.

36

### Table 9. Financing Preferences across Firm-Specific Factors

This table examines the difference in financing preferences across firm-specific factors: legal status, business stage, firm size, sector, and export activity.

			Financing Preferences							
			IEF	STF	LTF	OFF	EEF			
	Sole proprietorship		3.472	2.629	2.927	2.420	1.760			
	Partnership	Mean	3.509	2.924	3.111	2.517	1.935			
sn	Private limited firm		3.667	3.181	3.406	2.750	2.013			
Legal Sta	Levene's test for equality of variance	Levene's statistic	4.594**	5.960***	13.637***	2.333	2.204			
	One-way ANOVA	F-statistic	3.807**	16.989***	8.220***	8.270***	2.395			
	Incubation		3.333	2.485	2.939	2.220	2.101			
	Growth	Mean	3.510	2.956	3.216	2.527	2.069			
usiness Stage	Maturity and expansion		3.609	2.920	3.121	2.635	1.739			
	Levene's test for equality of variance	Levene's statistic	2.623	5.393***	0.488	3.252**	1.603			
	One-way ANOVA	F-statistic	3.767**	5.286***	1.142	6.176***	5.351***			
	Micro		3.484	2.524	2.805	2.381	1.758			
	Small	Mean	3.528	3.162	3.410	2.728	1.989			
	Medium		4.185	3.194	3.512	2.361	1.963			
Firm Size	Levene's test for equality of variance	Levene's statistic	3.508**	4.584**	4.649**	7.399***	4.583**			
	One-way ANOVA	F-statistic	13.679***	32.208***	17.074***	12.269***	2.414			
	Manufacturing	Maria	3.549	3.020	3.258	2.609	1.906			
	Service	Mean	3.535	2.236	2.528	2.292	1.792			
Sector	Levene's test for equality of variance	F-statistic	4.926**	2.823	10.551***	0.232	2.637			
	Independent t-test	t-statistic	0.149	6.896***	4.547***	3.331***	0.826			

	Exporters	Moon	3.505	3.476	3.217	2.828	2.052
x	Non-exporters	Weall	3.568	2.590	3.091	2.419	1.804
ort Activit	Levene's test for equality of variance	F-statistic	17.153***	0.190	16.499***	8.720***	0.403
Expo	Independent t-test	t-statistic	-0.934	11.464***	1.284	5.093***	2.264**

\*\*, \*\*\* indicates statistical significance at the 0.05 and 0.01 level, respectively.

### Table 10. Financing Preferences across Owner/Manager Characteristics

This table shows the difference in financing preferences across the Indian SMEs on the following owner/manager characteristics: gender, age, education, experience with the present business, and ownership.

				Finan	cing Prefe	erences	
			IEF	STF	LTF	OFF	EEF
	Male	Maar	3.575	2.874	3.170	2.585	1.811
Gender	Female	Wiean	3.350	2.961	2.871	2.346	2.410
	Levene's test for equality of variance	Levene's statistic	19.723***	0.000	5.101**	1.518	0.042
	Independent t-test	t-statistic	3.883***	-0.668	2.595**	2.191**	-3.922***
	Less than 25 years		3.048	2.500	3.191	2.214	1.667
	26 to 35 years		3.406	2.779	3.034	2.243	2.237
	36 to45 years	Maar	3.470	2.763	3.074	2.479	1.863
	46 to 55 years	Wieall	3.655	3.025	3.196	2.840	1.700
	56 to 65 years		3.872	2.904	3.487	2.596	1.564
Age	More than 65 years		4.111	3.667	3.111	2.000	2.889
	Levene's test for equality of variance	Levene's statistic	2.515**	0.516	3.881***	4.499***	6.552***
	One-way ANOVA	F–statistic	5.745***	3.281***	0.728	11.150***	5.228***
	School certificate		3.473	3.005	3.147	2.670	1.793
	Diploma	Maar	3.333	2.803	3.035	2.776	1.526
uo	Bachelor's degree	Wiean	3.672	2.809	3.151	2.773	1.849
ucati	Master's degree		3.473	2.933	3.122	2.216	2.033
Edu	Levene's test for equality of variance	Levene's statistic	1.465	2.158	6.731***	1.742	9.864***

		F-statistic	4.101***	1.060	0.095	19.709***	2.218
	One-way ANOVA						
	Low		3.271	2.437	2.583	2.094	2.312
	Moderate	Mean	3.379	2.747	3.142	2.260	2.173
esent	High		3.623	2.964	3.170	2.686	1.761
with Pre iness	Levene's test for equality of variance	Levene's statistic	0.257	0.192	0.358	7.510***	1.675
Experience Bus	One-way ANOVA	F-statistic	7.552***	5.249***	3.028**	18.351***	7.779***
	Yes	Moon	3.552	2.880	3.146	2.579	1.858
	No	Ivicali	3.400	3.050	2.733	1.850	2.733
nership	Levene's test for equality of variance		2.022	0.127	0.032	1.497	5.454**
Õ	Independent t-test	t-statistic	0.843	-0.693	1.387	3.606***	-4.413***

\*\*, \*\*\*indicates statistical significance at the 0.05 and 0.01 level, respectively.

### Table 11. Coding of Variables Used in the Regression

This table presents the coding of the variables used in regression

S. No.	Variables	Symbol	<b>Reference Category</b>	Coding of Variables
1	Gender (Nominal)	Gen	Female	Male = 1 Female $= 0$
2	Age (Ordinal)	Age	Above 56 years	$Age_1 = < 25-35years$
				$Age_2 = 36-55$ years
3	Education	Edu	Post Graduate	$Edu_1 = School Certificate$
	(Ordinal)			$Edu_2 = Bachelor's Degree$
4	Experience	Exp	High Experience	$Exp_1 = Low$ (Less than 3 years)
	(Ordinal)		(> 10 years)	$Exp_2 = Moderate (4-10 years)$
5	Ownership	Own	Manager/Employee	Owner=1
	(Nominal)			Manager/Employee =
6	Legal Status	LS	Private Limited	$LS_1 = Sole Proprietorship$
	-			$LS_2 = Partnership$
7	Sector	Sec	Service	Manufacturing $= 1$
				Service $= 0$
8	Business Stage	BS	Incubation	$BS_1 = Growth$
				$BS_2 = Maturity$ and Expansion

		FC	N <i>C</i> . 11	
9	Firm Size	FS	Medium	$FS_1 = M1cro$
				$FS_2 = Small$
10	Export Activity	ΕA	Non Exporters	$EA_1 = Exporters$
10	Enpoir richtity		Tion Exporters	EA = Non Exportance
		2.6.4	<b>T</b> 1 1 1	$EA_2 - INOIL EXPORTERS$
11	Mode of	MA	Inherited	$MA_1 = Started from Scratch$
	Acquisition			$MA_2 = Purchased$
12	Motives behind	MB	No Job after College	$MB_1 = Entrepreneurial ability$
	Business		6	1 1 1 1 1 1 1 1 1
	Dusiness			$MB_2 = Laid off or retrenchment$
				from job
				nomjob
				MD = Crowth
				$MD_3 = Growth$
				$MB_4 = After college joined the$
				business
			$\Theta$	
		<b>K</b>		
			-	
		$\mathbf{\nabla}$		
		V		
	( )			
	X			

~

### Table 12. Results of the Regression Analysis

This table shows the results of hierarchical regression models used in the study.

			IEF_PRAC STF_PRAC LTF_PRAC						PRAC		1	OFF_	PRAC				
	Variables						n		•				T				1
		$M_1$	$M_2$	$M_3$	$M_4$	$M_5$	$M_6$	$M_7$	$M_8$	M9	M <sub>10</sub>	M <sub>11</sub>	M <sub>12</sub>	M <sub>13</sub>	M <sub>14</sub>	M <sub>15</sub>	M <sub>16</sub>
	(Constant)	1.168***	0.818***	0.879***	1.080***	0.495**	1.501***	1.818***	1.990***	1.241***	1.911***	2.327***	2.306***	0.815***	1.176***	1.608***	1.489***
	IEF_PREF	0.617***	0.638***	0.656***	0.651***	-0.044	-0.118**	-0.154***	-0.190***	-0.072	-0.112	-0.187***	-0.179***	0.080	0.092**	0.075	0.070
	STF_PREF	-0.069*	-0.028	-0.009	-0.146***	0.674***	0.605	0.601***	0.698***	0.087	0.076	0.054	0.030	0.086**	0.060	0.079**	0.118**
FP	LTF_PREF	0.029	0.018	0.011	0.057*	0.056	0.077*	0.047	-0.040	0.245***	0.243***	0.255***	0.186***	$-0.065^{*}$	-0.037	-0.063**	-0.106***
	AFF_PREF	0.106***	0.106**	0.076*	-0.012	0.111*	0.037	-0.007	-0.008	-0.018	-0.010	-0.082	-0.123**	0.637***	0.551***	0.519***	0.535***
	EEF_PREF	-0.028	-0.036	-0.071**	-0.068**	-0.166***	-0.086**	-0.050	$-0.070^{**}$	-0.072*	-0.061	-0.037	-0.056	-0.091***	-0.085***	-0.088***	-0.079***
	Edu <sub>1</sub>		0.037	0.039	0.114		0.176*	0.115	0.204**		0.133	0.088	0.163		0.279****	0.164**	0.240***
	Edu <sub>2</sub>		0.033	0.072	0.183**	0	0.104	0.098	0.132		-0.003	-0.007	0.044		0.233****	0.186***	0.162**
	Age1		0.007	0.100	0.393**	X	-0.591***	-0.565***	-0.560***		-0.726***	-0.771***	-0.675***		-0.149	-0.157	-0.194
RF	Age <sub>2</sub>		0.074	0.088	0.281**		-0.209	-0.278**	-0.344**		-0.575***	-0.702***	-0.676***		-0.011	-0.024	-0.114
	Exp <sub>1</sub>		0.313***	0.183*	0.074		-0.124	-0.299**	-0.313***		0.147	0.082	0.171		-0.028	-0.177*	-0.259**
	Exp <sub>2</sub>		0.055	0.036	-0.013		-0.326***	-0.535***	-0.373***		0.056	-0.027	0.015		-0.188***	-0.255***	-0.345***
	Gen		0.127*	0.180**	0.311***		0.177*	0.233**	0.320***		0.057	0.149	0.295***		-0.433***	-0.535***	-0.404***
	Own		-0.040	-0.031	-0.043		-0.437**	-0.429**	-0.515***		-0.075	-0.004	0.106		0.109	0.148	-0.064
	MA <sub>1</sub>			-0.059	-0.050			-0.047	-0.009			0.009	-0.016			-0.235****	-0.235***
MA&M B	MA <sub>2</sub>			0.123	0.200			1.048***	1.116***			0.619***	0.558***			-0.180	-0.062
	MB <sub>2</sub>			0.068	0.096			-0.167	-0.165			-0.417***	-0.378***			0.491****	0.533***

	MB <sub>3</sub>			-0.237**	-0.191**			0.092	-0.004			0.272**	0.209*			0.170**	0.168*
	MB <sub>4</sub>			$-0.308^{**}$	-0.310***			0.129	0.067			$-0.280^{**}$	-0.369***			-0.008	0.020
	LS <sub>1</sub>				-0.168***				-0.336***				-0.043				-0.230***
	LS <sub>2</sub>				0.023				-0.052				0.007				-0.065
	BS <sub>1</sub>				0.105				0.255***				0.440***				0.247***
FF	Sec				0.029				-0.214***				0.139*				0.109*
	FS <sub>1</sub>				-0.132				0.098		CX		-0.330**				0.331****
	FS <sub>2</sub>				-0.309***				0.103	, C	Z		-0.181				0.121
	EA				0.329***				-0.360***				-0.129				-0.182**
	F Stats	50.120***	21.544***	18.145***	16.880***	46.201***	28.307***	27.947***	24.937***	11.838***	6.573***	7.888***	7.618***	54.591***	32.063***	29.428***	25.545****
	R Square	0.453***	0.487***	0.530***	0.599***	0.433***	0.555****	0.634***	0.688***	0.163***	0.225****	0.329***	0.402***	0.474***	0.586***	0.646***	0.693***
	Adjusted R Square	0.444***	0.464***	0.500***	0.563***	0.423***	0.535***	0.612***	0.660***	0.150***	0.190***	0.287***	0.349***	0.465***	0.567***	0.624***	0.666***
	Durbin Watson		1.	892			2.012				1.7	785		1.923			
	VIF	less th	an 10 for all v	variables in all	Models	less th	an 10 for all v	ariables in all	Models	less than 10 for all variables in all Models			less than 10 for all variables in all Models				

<sup>\*, \*\*, \*\*\*</sup> indicates statistical significance at the 0.10, 0.05 and 0.01 level, respectively. FP = Financing Preferences; RF = Respondent Features; MA and MB = modes of acquisition and motives behind doing business; and FF = Firm Features. M<sub>1</sub> to M<sub>16</sub> represent regression models. Table 11 defines all variables.

### **Table 13. Summary of Regression Models**

Y=IEF_PRAC	Y=STF_PRAC	Y=LTF_PRAC	Y=OFF_PRAC			
$Y_{i1} = c_1 + \sum_{i=1}^5 b_{ij} X_{ij}$	$Y_{i5} = c_5 + \sum_{i=1}^5 b_{ij} X_{ij}$	$Y_{i9} = c_9 + \sum_{i=1}^5 b_{ij} X_{ij}$	$Y_{i13} = c_{j13} + \sum_{i=1}^{5} b_{ij} X_{ij}$			
$Y_{i2} = c_2 + \sum_{i=1}^{13} b_{ij} X_{ij}$	$Y_{i6} = c_6 + \sum_{i=1}^{13} b_{ij} X_{ij}$	$Y_{i10} = c_{10} + \sum_{i=1}^{13} b_{ij} X_{ij}$	$Y_{i14} = c_{j14} + \sum_{i=1}^{13} b_{ij} X_{ij}$			
$Y_{i3} = c_3 + \sum_{i=1}^{18} b_{ij} X_{ij}$	$Y_{i7} = c_7 + \sum_{i=1}^{18} b_{ij} X_{ij}$	$Y_{i11} = c_{11} + \sum_{i=1}^{18} b_{ij} X_{ij}$	$Y_{i15} = c_{15} + \sum_{i=1}^{18} b_{ij} X_{ij}$			
$Y_{i4} = c_4 + \sum_{i=1}^{26} b_{ij} X_{ij}$	$Y_{i8} = c_8 + \sum_{i=1}^{26} b_{ij} X_{ij}$	$Y_{i12} = c_{12} + \sum_{i=1}^{26} b_{ij} X_{ij}$	$Y_{i16} = c_{j16} + \sum_{i=1}^{26} b_{ij} X_{ij}$			

This table summarizes the regression models used in the study.

Stranger of the second se