

## **A study of demographic factors influencing SME credit in Mumbai, India.**

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**Abstract:** *One of the greatest challenges that SMEs worldwide facing today is “Lack of financing”. This study attempted to gain knowledge about SME credit and its influencing factors through demographic characteristics of the respondents in terms of their approach to SME loans from banks. Data were collected from SME owners by dividing the region into various clusters. Chi-Square and two sample independent t –tests were used to analyze the data. Results indicated that Form of the ownership, Number of employees, Type of activity, Age of the owner, Age of the firm, Amount of turnover proved to be dependent on loan approvals and Gender of the owner proved to be independent of loan approvals. T-test results indicated that when it comes to credit factors like Collateral, Reputation of owner, Personal contacts in Bank and Financial capacity of business variances among male and female respondents’ variances are not same.*

**KeyWords:** *Credit factors, Demographic factors, Lack of finance, Loans, SME credit,*

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### **I. Introduction**

SMEs considered being growth engine of any economy, contribute nearly 45% of the total manufacturing output in the country and 40% of national merchandise exports in India. In terms of socioeconomic importance, the total number of SMEs at 48.8 million units (during 2012-13), constitute nearly 95% of industrial units in the country and providing employment to 81.2 million people. The process of economic liberalization and market reforms, while exposing the India SMEs to increasing levels of domestic and global competition, has also opened up attractive possibilities of access to larger markets, and of stronger and deeper linkages to larger enterprises.

Praveen Bhadada, Director- Market Expansion, Zinnov stated, “the SME sector in India is growing at an exceptional rate and has the potential to be one of the primary drivers of the Indian economy.

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Today 1.5 million SMBs export their products or services outside India which is a sign of the sector’s rapid evolution.”Bhadada further stated, “the sector is growing to be the largest employment generator in the country and today represents the true entrepreneurial spirit of the Indian business community.”The report further highlighted that the Indian SME sector has increased at a compound annual growth rate (CAGR) of 5.29 per cent. Currently, the SME sector in India is largely dominated by micro scale businesses, which is accountable for 95 percent of the SME landscape. It is followed by the small scale businesses which contribute 4.8 per cent and the rest 0.2 percent of medium scale businesses. In addition, the report noted that of the 4.88 crore SMEs around 55 per cent are located in urban areas while the rest 45 per cent constitutes to the rural regions.

### **Role of Banking Sector in Development of SMEs:**

The most important parameter to ensure that the SME sector grows in India is to provide adequate finance to the sector and equip them to employ better risk management practices. SMEs primarily depend on their own capital (including family & friends) as well as bank finance for purchase of land, building, plant and machinery as also for working capital, etc. Since their fund requirements are not big enough to enter the equity market or to raise the same through bond issues etc., this sector is largely dependent on debt financing from banks. While bank lending has been able to fulfill the demands of this sector to a certain extent, there is a significant gap between demand and supply of SME finance. Dr KC Chakrabarty, DG-RBI, has said that only 4-5% of MSMEs are covered by institutional funding, given that approximately 95% of villages are not covered by banks.

**Research problem:**

The SME sector faces a lot of challenges irrespective of fostering impressive growth in the recent years. Limited funds availability, lack of knowledge, infrastructure, and technology pose threat to the development of the sector. The sector needs high quality research and more penetration in rural areas. “SMEs present Rs 500 billion opportunity for banks” -CRISIL

CRISIL conducted a study on the funding patterns of 2000 Small and Medium Enterprises revealed that there is an opportunity for banks to increase their funding to SMEs to Rs 500 billion. Strengthening of infrastructure in rural India will help SME sector to record sustainable growth. On 5<sup>th</sup> November 2012 Tata Steel unveiled a new brand of its hot rolled products called “Tata Austrum” to meet demands in small and medium enterprises (SMEs). In 2013-14 Tata Steel targets nearly Rs 4000 crore revenue from the segment.

**Fact-Sheet Indian SME:**

|  |
|--|
| 30 Million MSME Units--Employ 60 Million People                      |
| Create 1.3 Million jobs per annum--Contribute 40% of Export          |
| Contribute 45% of Industrial Output--Produce more than 8000 products |
| Major role in industrial growth--Source for innovative product       |

Despite this, SMEs still lack adequate resources to utilize their true potential and create utmost value from their competitiveness. They still face several challenges that hinder their growth and development. With the current challenging domestic and international business situations where complexities of doing businesses have grown abundantly, dedicated efforts are required from all the stakeholders to enhance their capabilities and enable these enterprises become globally competitive.

| Sector          | 21 Sep<br>(₹ trillion) | % change<br>from 23<br>Sep 2011 | % change<br>from 23<br>Mar 2012 |
|-----------------|------------------------|---------------------------------|---------------------------------|
| <b>Industry</b> | <b>20.134</b>          | <b>15.6%</b>                    | <b>24</b>                       |
| Micro and small | 2.600                  | 7%                              | 0.3                             |
| Medium          | 1.968                  | 0.6%                            | -4.3                            |
| Large           | 15.566                 | 19.4%                           | 3.6                             |

Source: RBI

SIDBI & other entities has been able to satisfy the demands of this sector to a certain extent, still there is significant gap between demand and supply of SME Finance. We can see from the above table that supply of credit in this sector is real challenge at this moment for Indian banks. Financial sector will need to devise innovative methods of risk appraisal and credit delivery to save SMEs from the crisis of their development.

**Statement of the problem:**

Need to create innovative models of funding and improve the existing credit model followed by Indian banks

**II. Challenges of SME lending:**

Credit is one of the key inputs to SME sector. Facilitating timely and adequate credit to SME sector is important to the Banking policy. Nationalization of major banks in 1969 indicated the need for redefining credit priorities and it was made a policy that 40% of loan should be for what priority sector which includes agriculture, SME, Individual service and Business sectors.

SMEs are more complex areas of lending than personal customers. There are two key challenges when lending to SMEs one is the operational cost of the loan decision and the second is perceived difficulty of avoiding and forecasting of bad debt. Unlike corporate the majority of SMEs are not required to file annual accounts, hence conventional data for lending, such as ratios, asset liability position, profitability and solvency

are not readily available for SMEs. Banker has to rely on subjective parameters more often and in addition to this different entity types like sole trader, partnership and limited company type create confusion in tax financial accounting treatment. The lack of reliable data and perceived high risk associated with SMEs when compared to corporate or consumer loans. This means mostly banker approaches SME lending with qualitative data for subjective decision by skilled loan officers, relying on personal knowledge from investigation which often includes site visits and interviews with the owners. A loan decision for a relatively small amount can take several days to complete. It is understandable that many financial institutions do not show much interest in lower valued SME loans because the time and effort is mismatch with the revenues generated when compared to consumer and corporate loans for similar loan amounts.

There is thus a need to re-look at the present credit granting criteria to SMEs by banks in India to bring certain changes and enable more SME owners in accessing credit. Author is an academician working in area of finance with over a decade of experience, decided to take this as a topic of research for Ph.D. course. Though the research is restricted to Mumbai city, it is considered as the financial capital of India with huge no. of financial institutions and business entities presence. The outcome of this research could be applied across other cities in India.

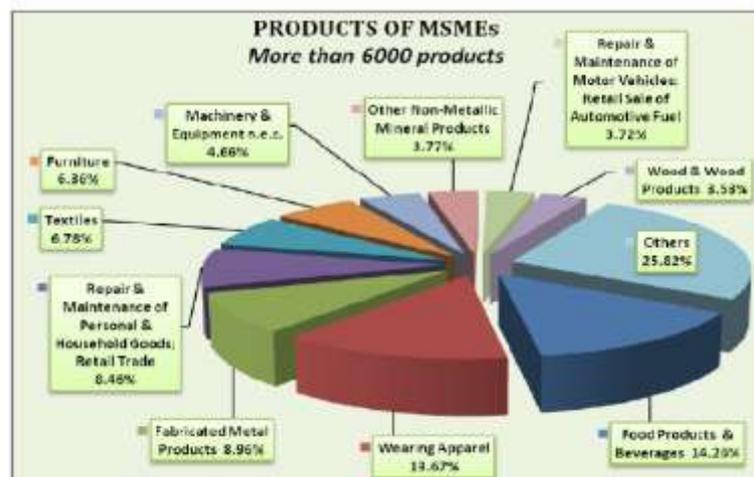
**2.Literature Review:**Definition of SME in India:

MSME Classification as per MSMED Act, 2006

| Classifi -cation | Investment Ceiling for Plant, Machinery or Equipments            |   |
|------------------|--|---|
|                  | Manufacturing Enterprises  | Service Enterprises   |
| <b>Micro</b>     | Upto Rs.25 lakh (\$50 thousand)                                  | Upto Rs.10 lakh (\$20 thousand)                                     |
| <b>Small</b>     | Above Rs.25 lakh (\$50 thousand) & upto Rs.5 crore (\$1 million) | Above Rs.10 lakh (\$20 thousand) & upto Rs.2 crore (\$0.40 million) |
| <b>Medium</b>    | Above Rs.5 crore (\$1 million) & upto Rs.10 crore (\$2 million)  | Above Rs.2 crore (\$0.40 million) & upto Rs.5 crore (\$1 million)   |

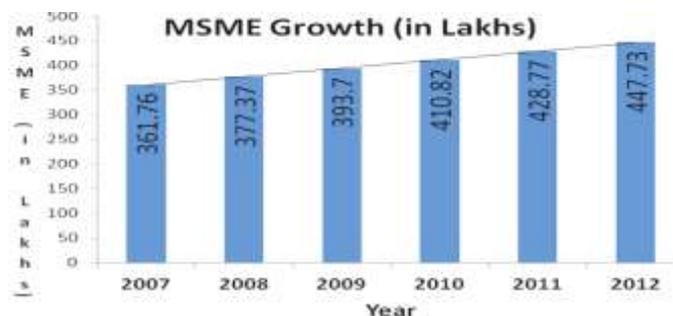
\* Bank's lending to medium enterprises will not be included for the purpose of reckoning under priority sector.

SMEs are defined worldwide based on no.of employees, turnover, assets..etcThe degree of variety and conflict among official SME definitions is currently so wide that it merges upon, or surpasses, irresponsibility not to reconsider how they are derived and applied. Tom Gibson Principal, *SME* think research done in (September 2008) concluded that Multi-country definitions of SMEs cannot legitimately be said to be consistent among countries if they do not take into consideration the differing levels of poverty among such countries and the differing levels of relative competition among private enterprises. Official national definitions vary too greatly in proportion to national economies for responsible use by international organizations. In order to avoid further distortions in the generation of SME policy and the resulting misapplication of funds, the major multilateral development institutions should take steps, as a group, to introduce some coherence of 29 rationale among their SME definitions and encourage the same for individual national governments. Microenterprises and SMEs are distinctly different, do not naturally elide in an unbroken continuum, and cannot be usefully discussed together.



Source: Final Report of the Fourth All India Census of Micro, Small & Medium Enterprises 2006-07: Registered Sector.

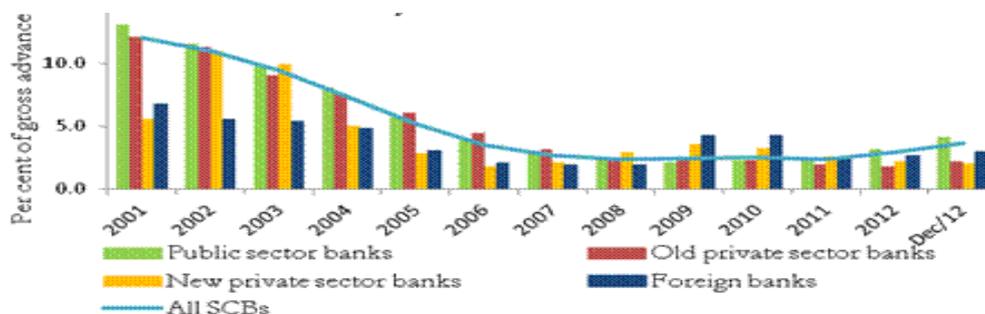
Growth of SME sector in India:



Source: Annual Report Ministry of MSME 2011, India

SMEs have been established in all major sectors such as Food products, Metals, Textile and Readymade Garments, chemicals, Equipments, Paper and jute products. One of the most noticeable things in this sector is now service sector is improving with lot of growth in the areas of outsourcing, Advertisement agencies, Nursing homes and Beauty salons spreading across country.

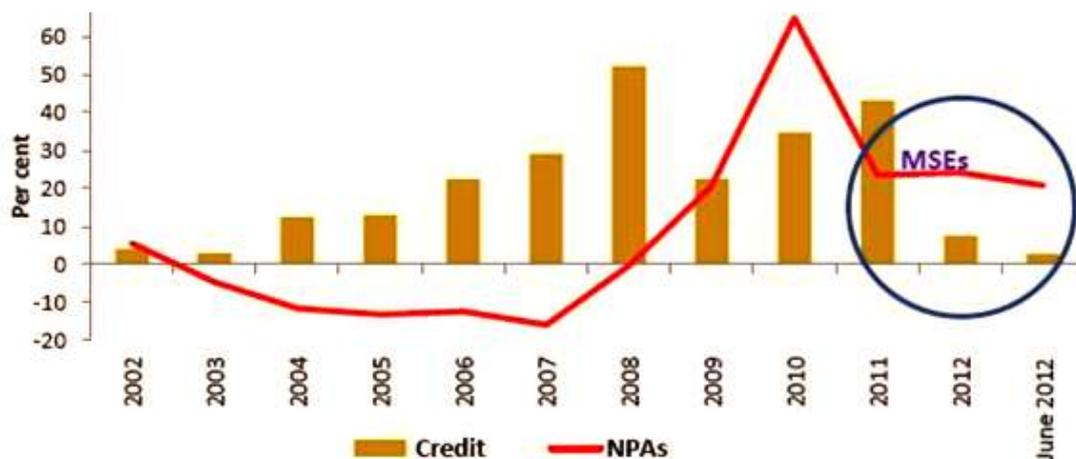
**Steady Decline in Gross Advances to MSME:**



Source: Perspectives on Banking in India, RBI

From bank’s perspective SME lending is profitable in two ways one is it broadens their credit portfolio and beneficial because of high rate of interest and other benefit is it diversifies the credit risk as it divides the NPAs into other areas of loan. According to industry experts a severe fund crisis in this sector and lack of demand for the products internally as well for exports could force at least six million SMEs to shut their operations in the next few months.

**NON PERFORMING ASSETS OF BANKS**



Source: rbi.org.in publication 7<sup>th</sup> Feb,14

From the study of Kalra, Rosy( Feb , 2012) in india, the systematic risk of high non performing loans is limited by the bank’s provisions and the large share of govt. debts in bank’s portfolio which together reduce reported net NPAs. The study also indicated that NPAs of top five industries (metallurgy/mini steel mills, chemicals, engineering, textiles, and fertilizers) alone comprise 55-65% of the total NPA portfolio of banks. According to RBI Governor “SMEs are in deep trouble since banks have practically stopped funding these units. The govt. has reduced the procurement from SMEs; experts are severely hit; and large corporations are delaying payments to small vendors by many months.” This indicates an immediate action from both supply and demand side of credit to initiate certain action to improve the credit flow and create a win win situation to both the sides.

#### **Demographic factors research done so far:**

The study done by (Bexley and Neminger, 2012) indicated that loan officers can now easily obtain early indicators of increasing risk by taking a more comprehensive view of the customer’s demographic characteristics. According to (cooper , Gardener and Mills, 200) demographic profile include items such as age, gender, level of income, level of education, home ownership, employment status and even location. From the study of Berger and Udell(2006) it is concluded that there is relationship between borrower demographics category and assessing loan repayment performance, Hence borrower’s demographic factors are important aspects that banks can consider when advancing loans to them. According to the study of (Giesecke, 2004) demographic factors of borrowers are associated with the creditworthiness of borrowers and these factors are also interrelated. Nguyen(2007) study concluded that demographic profiling as a key factor influencing loan advances and the subsequent performance of the loan as it indicates important clues to loan officers with regard to sanctioning of the loan. when it comes to age the study conducted by Berger and Udell(2006) found that banks are likely to consider comparatively more mature clients for loans relative to young clients. When it comes to gender overall it is observed that male customers tend to receive favourable responses from bank compared to female customers. Blanchflower et al., (2003) concluded that women owned businesses were about twice as likely to be rejected loans even after fulfilling well in all the required parameters. When it comes to income level Lawrence(1995) study suggested a model which indicates that borrowers with low incomes have higher rate of default due to enhanced risk levels of unemployment and poor earnings. When it comes to marital status of parents (Kantowitz, 2010) study found that the parents education level , having dependents, the marital status of borrower , the borrower’s income have significant relationship with loan performance in banks.

#### **Research Objectives:**

- To examine the influence of demographic factors on SME loan approvals
- To establish the effects of age and gender on SME loan approvals

### **III. Research Methodology**

#### **3.1 Sample and Data Collection**

The units of analysis in this study were the SME owners selected from four clusters of Industrial areas of Mumbai. Based on the inputs received during the in-depth interviews and the literature review carried out, the author developed a questionnaire which was administered to the SME owners .The mode of data collection was

direct meeting as well online using qualtrics.com. A total of 289 surveys were usable out of 317 responses for the purpose of this research. The study was exploratory in nature and the sampling technique used for data collection was convenience sampling.

### 3.2 Measurement Development

The author developed the questionnaire to find out the various factors that influence the SMEs in getting credit from banks and each item was measured based on a five-point Likert scale. The questionnaire was divided into four sections as follows:

Section I: capturing demographics

Section II: opinion and experience of SME owners in getting credit. According to them what factors are important in getting credit are captured here

Section III: According to them initiatives from Bank and Govt. that will help SME credit approvals are captured here.

## IV. Data Analysis

### 4.1 Validity and Reliability of Measurement Instrument

#### 4.2 Content Validity

Content validity defines how representative and comprehensive the items were in presenting the hypothesis. It is assessed by examining the process that was used in generating scale items (Straub, 1989). The items measuring various constructs were selected based on current literature regarding branding of higher educational institutes.

#### 4.3 Construct Validity and Reliability

According to Malhotra and Dash (2010), convergent validity is the extent to which the scale correlates positively with other measures of the same construct. For testing convergent validity, we evaluated the variable-to-total correlation, i.e., the correlation of each item to the sum of the remaining items. Items whose variable to variable correlation scores were lower than 0.4 were dropped from further analysis.

Discriminant validity is the degree to which measures of different concepts are distinct. The discriminant validity of each construct was assessed by principal component factor analysis with VARIMAX rotation. According to Field (2009), significance of factor loading depends on the sample size. For a sample size of more than 200, a loading more than 0.364 is considered significant. According to Stevens (1992), factor loadings with an absolute value greater than 0.4 are recommended. Factor loadings for all the variables were greater than 0.4 with no cross loadings, indicating good discriminant validity. Also, to validate the appropriateness of factor analysis, other measures such as the Kaiser Mayer Olkin measure of sampling adequacy ( $>0.70$ ) showed acceptable sampling adequacy, and Bartlett's test of sphericity ( $p=0.000$ ) indicated the statistical probability that the correlation matrix has significant correlations among at least some of the variables (Hair, Anderson, Tatham, & Black, 1998, p. 99).

Internal consistency reliability is a statement about the stability of individual measurement variables across replications from the same source of information. The Cronbach's alpha coefficient was used to assess reliability of the measures (Straub, 1989). As shown in in the following table the alpha coefficient for the 45 items is .616, suggesting that the items have relatively good internal consistency

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .616             | 45         |

In addition to computing the alpha coefficient of reliability, researcher had investigated the dimensionality of the scale

#### 4.4. Data Analysis:

We use chi square test to study the relationship of loan approval with demographic variables like age, gender, income, ownership...etc.

We use inferential statistics for testing hypotheses. We use two tailed test with a significant coefficient of 0.05

**Relationship between ‘form of ownership’ and ‘loan approval status’**

**Chi-Square Tests**

|                              | Value               | df | Asymp. Sig. (2-sided) |
|------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square           | 28.499 <sup>a</sup> | 6  | .000                  |
| Likelihood Ratio             | 28.275              | 6  | .000                  |
| Linear-by-Linear Association | .218                | 1  | .641                  |
| N of Valid Cases             | 289                 |    |                       |

Table: 1

H0: Form of ownership is independent of loan approvals  
 H1: Form of ownership is dependent of loan approvals  
 P value 0.000 < 0.05 hence null hypothesis is rejected  
 We can conclude that Form of ownership is dependent of loan approvals

**Symmetric Measures**

|                        | Value | Approx. Sig. |
|------------------------|-------|--------------|
| Nominal by Nominal Phi | .314  | .000         |
| Cramer's V             | .222  | .000         |
| N of Valid Cases       | 289   |              |

Table: 2

Cramer’s V value is 0.222 which means 22.2% association is there between “form of ownership” and “loan approvals”

**Relationship between “No.of employees: and “Loan approval status”**

**Chi-Square Tests**

|                              | Value               | df | Asymp. Sig. (2-sided) |
|------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square           | 63.499 <sup>a</sup> | 15 | .000                  |
| Likelihood Ratio             | 73.098              | 15 | .000                  |
| Linear-by-Linear Association | .800                | 1  | .371                  |
| N of Valid Cases             | 289                 |    |                       |

Table: 3

H0: No.of employees is independent of loan approvals  
 H1: No.of employees is dependent of loan approvals  
 P value 0.000 < 0.05 hence null hypothesis is rejected  
 We can conclude that No.of Employees is dependent of loan approvals

**Symmetric Measures**

|                        | Value | Approx. Sig. |
|------------------------|-------|--------------|
| Nominal by Nominal Phi | .469  | .000         |
| Cramer's V             | .271  | .000         |
| N of Valid Cases       | 289   |              |

Table: 4

Cramer’s V value is 0.271 which means 27.1% association is there between “No.of Employees” and “loan approvals”

**Relationship between “Type of activity” and “Loan approval”**

**Chi-Square Tests**

|                              | Value               | df | Asymp. Sig. (2-sided) |
|------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square           | 45.630 <sup>a</sup> | 9  | .000                  |
| Likelihood Ratio             | 49.138              | 9  | .000                  |
| Linear-by-Linear Association | 35.635              | 1  | .000                  |
| N of Valid Cases             | 289                 |    |                       |

Table: 5

H0: Type of activity is independent of loan approvals  
 H1: Type of activity is dependent of loan approvals  
 P value  $0.000 < 0.05$  hence null hypothesis is rejected  
 We can conclude that Type of activity is dependent of loan approvals

**Symmetric Measures**

|                    |            | Value | Approx. Sig. |
|--------------------|------------|-------|--------------|
| Nominal by Nominal | Phi        | .397  | .000         |
|                    | Cramer's V | .229  | .000         |
| N of Valid Cases   |            | 289   |              |

Table: 6

Cramer’s V value is 0.229 which means 22.9% association is there between “Type of activity” and “loan approvals”

**Relationship between “age of the firm” and “loan approval”**

**Chi-Square Tests**

|                              | Value               | df | Asymp. Sig. (2-sided) |
|------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square           | 67.695 <sup>a</sup> | 12 | .000                  |
| Likelihood Ratio             | 45.757              | 12 | .000                  |
| Linear-by-Linear Association | .671                | 1  | .413                  |
| N of Valid Cases             | 289                 |    |                       |

Table: 7

H0: Age of the firm is independent of loan approvals  
 H1: Age of the firm is dependent of loan approvals  
 P value  $0.000 < 0.05$  hence null hypothesis is rejected  
 We can conclude that Age of the firm is dependent of loan approvals

**Symmetric Measures**

|                    |            | Value | Approx. Sig. |
|--------------------|------------|-------|--------------|
| Nominal by Nominal | Phi        | .484  | .000         |
|                    | Cramer's V | .279  | .000         |
| N of Valid Cases   |            | 289   |              |

Table: 8

Cramer’s V value is 0.279 which means 27.9% association is there between “Age of the firm” and “loan approvals”

**Relationship between “age of the owner” and “loan approval”**

| Chi-Square Tests             |                     |    |                       |
|------------------------------|---------------------|----|-----------------------|
|                              | Value               | df | Asymp. Sig. (2-sided) |
| Pearson Chi-Square           | 73.359 <sup>a</sup> | 12 | .000                  |
| Likelihood Ratio             | 47.112              | 12 | .000                  |
| Linear-by-Linear Association | .836                | 1  | .360                  |
| N of Valid Cases             | 289                 |    |                       |

Table: 9

H0: Age of the owner is independent of loan approvals

H1: Age of the owner is dependent of loan approvals

P value 0.000 < 0.05 hence null hypotheses is rejected

We can conclude that Age of the owner is dependent of loan approvals

| Symmetric Measures |            |       |              |
|--------------------|------------|-------|--------------|
|                    |            | Value | Approx. Sig. |
| Nominal by Nominal | Phi        | .504  | .000         |
|                    | Cramer's V | .291  | .000         |
| N of Valid Cases   |            | 289   |              |

Table: 10

Cramer's V value is 0.291 which means 29.1% association is there between “Age of the owner” and “loan approvals”

**Relationship between “Gender of the owner” and “Loan approval”**

| Chi-Square Tests             |                   |    |                       |
|------------------------------|-------------------|----|-----------------------|
|                              | Value             | df | Asymp. Sig. (2-sided) |
| Pearson Chi-Square           | .493 <sup>a</sup> | 3  | .920                  |
| Likelihood Ratio             | .935              | 3  | .817                  |
| Linear-by-Linear Association | .226              | 1  | .634                  |
| N of Valid Cases             | 289               |    |                       |

Table: 11

H0: Gender of the owner is independent of loan approvals

H1: Gender of the owner is dependent of loan approvals

P value 0.920 > 0.05 hence null hypotheses is accepted

We can conclude that Gender of the owner is independent of loan approvals

| Symmetric Measures |            |       |              |
|--------------------|------------|-------|--------------|
|                    |            | Value | Approx. Sig. |
| Nominal by Nominal | Phi        | .041  | .920         |
|                    | Cramer's V | .041  | .920         |
| N of Valid Cases   |            | 289   |              |

Table: 12

Cramer's V value is 0.289 which means 28.9% association is there between “Gender of the owner” and “loan approvals”

**Relationship between “Amount of turnover” and “Loan approval”**

**Chi-Square Tests**

|                              | Value               | df | Asymp. Sig. (2-sided) |
|------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square           | 71.101 <sup>a</sup> | 14 | .000                  |
| Likelihood Ratio             | 74.589              | 14 | .000                  |
| Linear-by-Linear Association | 15.187              | 1  | .000                  |
| N of Valid Cases             | 286                 |    |                       |

Table:13

H0: Amount of turnover is independent of loan approvals  
H1: Amount of turnover is dependent of loan approvals  
P value 0.000 < 0.05 hence null hypotheses is rejected  
We can conclude that amount of turnover is dependent of loan approvals

**symmetric Measures**

|                        | Value | Approx. Sig. |
|------------------------|-------|--------------|
| Nominal by Nominal Phi | .499  | .000         |
| Cramer's V             | .353  | .000         |
| N of Valid Cases       | 286   |              |

Table: 14

Cramer’s V value is 0.353 which means 35.3% association is there between “amount of turnover” and “loan approvals”

**Independent sample t test: For Gender**

This test is used to compare the means of two populations here in this study we had compared the perceptions of male and female SME owners towards credit impacting factors

**Group Statistics**

|                           | Gender | N   | Mean | Std. Deviation | Std. Error Mean |
|---------------------------|--------|-----|------|----------------|-----------------|
| Collateral                | Male   | 273 | 1.99 | .788           | .048            |
|                           | Female | 16  | 2.31 | 1.250          | .313            |
| Documentation             | Male   | 273 | 1.71 | .587           | .036            |
|                           | Female | 16  | 2.38 | .500           | .125            |
| Reputation of owner       | Male   | 273 | 1.73 | .691           | .042            |
|                           | Female | 16  | 2.00 | .000           | .000            |
| Credit record             | Male   | 273 | 2.07 | .882           | .053            |
|                           | Female | 16  | 2.50 | 1.095          | .274            |
| Personal contacts in bank | Male   | 273 | 2.65 | .892           | .054            |
|                           | Female | 16  | 2.56 | 1.209          | .302            |
| Own contribution          | Male   | 273 | 2.93 | .994           | .060            |
|                           | Female | 16  | 2.69 | 1.078          | .270            |
| Reputation of referee     | Male   | 273 | 2.77 | .920           | .056            |
|                           | Female | 16  | 3.19 | .750           | .188            |
| Business size             | Male   | 273 | 3.33 | .840           | .051            |
|                           | Female | 16  | 2.75 | .775           | .194            |
| Capacity of Business      | Male   | 273 | 2.45 | .771           | .047            |

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|                           | Female | 16  | 2.75 | .775           | .194            |
| Capacity of Business      | Male   | 273 | 2.45 | .771           | .047            |
|                           | Female | 16  | 2.81 | .403           | .101            |

Table: 15

| Parameter                      | Equality of Variance Hypothesis               | P-Value | Decision  | Interpretation  |
|--------------------------------|---|---------|-----------|---|
| Sufficient collateral          | H0: variance same, H1: Variances are not same | 0       | Reject H0 | Variances are assumed to be not same for both the genders |
| Proper Documentation           | H0: variance same, H1: Variances are not same | 0.599   | Accept H0 | Variances are assumed to be same for both the genders     |
| Reputation of owner            | H0: variance same, H1: Variances are not same | 0       | Reject H0 | Variances are assumed to be not same for both the genders |
| Previous credit record         | H0: variance same, H1: Variances are not same | 0.066   | Accept H0 | Variances are assumed to be same for both the genders     |
| Personal contacts in Bank      | H0: variance same, H1: Variances are not same | 0.008   | Reject H0 | Variances are assumed to be not same for both the genders |
| Own contribution               | H0: variance same, H1: Variances are not same | 0.982   | Accept H0 | Variances are assumed to be same for both the genders     |
| Reputation of person referred  | H0: variance same, H1: Variances are not same | 0.265   | Accept H0 | Variances are assumed to be same for both the genders     |
| Business size                  | H0: variance same, H1: Variances are not same | 0.294   | Accept H0 | Variances are assumed to be same for both the genders     |
| Financial capacity of Business | H0: variance same, H1: Variances are not same | 0       | Reject H0 | Variances are assumed to be not same for both the genders |

Table: 16

**Independent sample t test for age group:**

Independent sample t test is used to compare the means of two different populations in this study like young and old SME owner perceptions towards credit impacting factors

Group Statistics

|            | age_new | N  | Mean | Std. Deviation | Std. Error Mean |
|------------|---------|----|------|----------------|-----------------|
| Collateral | young   | 42 | 1.90 | .656           | .101            |

|                           |       |     |      |       |      |
|---------------------------|-------|-----|------|-------|------|
|                           | old   | 247 | 2.02 | .845  | .054 |
| Documentation             | young | 42  | 1.79 | .717  | .111 |
|                           | old   | 247 | 1.74 | .581  | .037 |
| Reputation of owner       | young | 42  | 1.79 | .565  | .087 |
|                           | old   | 247 | 1.74 | .692  | .044 |
| Credit record             | young | 42  | 1.95 | .661  | .102 |
|                           | old   | 247 | 2.12 | .932  | .059 |
| Personal contacts in bank | young | 42  | 2.74 | 1.014 | .156 |
|                           | old   | 247 | 2.63 | .892  | .057 |
| Own contribution          | young | 42  | 3.36 | .759  | .117 |
|                           | old   | 247 | 2.84 | 1.015 | .065 |
| Reputation of referee     | young | 42  | 3.00 | .826  | .128 |
|                           | old   | 247 | 2.76 | .927  | .059 |
| Business size             | young | 42  | 2.60 | .665  | .103 |
|                           | old   | 247 | 3.41 | .816  | .052 |
| Capacity of Business      | young | 42  | 2.88 | .633  | .098 |
|                           | old   | 247 | 2.40 | .758  | .048 |

Table: 17

| Equality of Variance           |   |         |           |   |
|--------------------------------|---|---------|-----------|---|
| Parameter                      | Hypothesis                                    | P-Value | Decision  | Interpretation  |
| Sufficient collateral          | H0: variance same, H1: Variances are not same | 0.209   | Accept H0 | Variances are assumed to be same for both the genders     |
| Proper Documentation           | H0: variance same, H1: Variances are not same | 0.042   | Accept H0 | Variances are assumed to be same for both the genders     |
| Reputation of owner            | H0: variance same, H1: Variances are not same | 0.052   | Accept H0 | Variances are assumed to be same for both the genders     |
| Previous credit record         | H0: variance same, H1: Variances are not same | 0.004   | Reject H0 | Variances are assumed to be not same for both the genders |
| Personal contacts in Bank      | H0: variance same, H1: Variances are not same | 0.469   | Accept H0 | Variances are assumed to be same for both the genders     |
| Own contribution               | H0: variance same, H1: Variances are not same | 0.019   | Reject H0 | Variances are assumed to be not same for both the genders |
| Reputation of person referred  | H0: variance same, H1: Variances are not same | 0.284   | Accept H0 | Variances are assumed to be same for both the genders     |
| Business size                  | H0: variance same, H1: Variances are not same | 0.029   | Accept H0 | Variances are assumed to be same for both the genders     |
| Financial capacity of Business | H0: variance same, H1: Variances are not same | 0.001   | Reject H0 | Variances are assumed to be not same for both the genders |

Table: 18

### V. Limitations of study:

- 1) The research was conducted using direct appointments and on-line questionnaire, thus limiting the universe of the sample size, as the link for the questionnaire was put up on the Google groups of SME bodies and on personal email IDs on the authors' social media.
- 2) The sample is mostly from Business clusters in Mumbai city.
- 3) There could be other influencing factors, such as industry perception of the SME loans, political and external factors etc.

## **VI. Conclusion**

The study describes the relationship between demographic characteristics and loan approvals with respect to SME sector in Mumbai region. Though the usual norm in the industry is demographic factors influence loan approvals and especially gender this study concludes that gender has relationship with loan approvals. The study also indicates that there are other factors which are influencing SME loan approvals which indicate that in further studies it needs focus on these factors to improve the credit flow from SME perspective.

## **Bibliography**

- [1]. Amitesh Kapoor(2012)'Financing Strategies for SME's in India - A Way Out' , International Journal of Research in Commerce and Management, Volume No. 3,Issue no. 11 (November)
- [2]. Banerjee A.,et all.( 2007). Are Monitors Over-Monitored? Evidence from Corruption and Lending in Indian Banks.April MIT-RBI
- [3]. Bexley J. B and Nenninger S (2012), Financial Institutions and the Economy. Journal of Accounting and Finance, 12(1).
- [4]. Borbora, S. and Dutta, G. (2002), Impact of Reform: Shifting Role of IDBI. Finance India, 16(3), pp. 1035-1044.
- [5]. Dasgupta, S. (2000), How ICICI Wants to Reinvent Itself. Asiamoney, 11(6), pp. 39-41
- [6]. Bisman, Jayne, Goela, Neelam (2010): "The Small Industries Development Bank of India: a retrospective on SME financing" Indian journal of Economics and Business, Vol. 9, Issue 4
- [7]. HongboDuan, Xiaojie Han &Hongbo Yang(2009) 'An Analysis of Causes for SMEs Financing Difficulty, International Journal of Business and Management Vol 4, No. 6 June
- [8]. Kantrowitz, M. (2010). Calculating the Contribution of Demographic Differences toDefault Rates Student Aid Policy Analysis, Washington DC, FinAid and FastWeb
- [9]. Nguyen, C.H. (2007). "Access to credit and borrowing behaviour of rural households in a transition", paper presented at International Conference on RuralFinance Research Moving Results into Policies and Practices.
- [10]. Salvatore Zecchini and Marco Ventura (2006) 'Public Credit Guarantee and SME finance', working paper
- [11]. Shashidhar M. Lokare (2014) "Re-emerging Stress in the Asset Quality of Indian Banks: Macro-Financial Linkages"-, RBI.
- [12]. Annual report of Ministry of Micro, Small and Medium Enterprise-[MSME] of India, (2010-Government of India retrieved from[http://msme.gov.in/MSME Annual-Report-2010-11-English.pdf](http://msme.gov.in/MSME%20Annual-Report-2010-11-English.pdf)
- [13]. Report of Prime Minister's Task Force., (2010), Micro Small and Medium enterprises, GOI retrieved from: [http://msme.gov.in/PM\\_MSME\\_Task\\_Force\\_Jan2010.pdf](http://msme.gov.in/PM_MSME_Task_Force_Jan2010.pdf), Little, I. M.D., Mazumdar,
- [14]. Ipsos Mori Accenture-july-2009, SME access to finance research report"Laghu Udyog Bharti, The Indian Small Scale Sector: An Overview"retrieved from <http://www.lubindia.org/ssi/what-is-ssi.php>