

DETERMINANTS OF FIXED CAPITAL REQUIREMENTS OF MICRO AND SMALL ENTERPRISES IN BARAK VALLEY, ASSAM

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ABSTRACT

Micro and Small Enterprises play important role for the development of our economy. Fixed capital is required to run the enterprises efficiently. The enterprises have to determine the required level of fixed capital on the basis of factors determining fixed capital requirements of the enterprises and they have to prefer the factors on the basis of their relative importance. Therefore, the present study has assessed the relative importance of factors determining fixed capital requirements of micro and small enterprises in the Barak Valley of Assam. The study has also assessed the relative importance of factors determining fixed capital requirements of manufacturing enterprises and service enterprises in the Valley. The enterprises which are registered with District Industries and Commerce Centers of the three districts of the Valley namely Cachar, Karimganj and Hailakandi districts as on 31-3-2012 and which are functioning have been studied in the present study. 'Nature of business' is found to be the most important factor determining fixed capital requirements of micro and small enterprises in Barak Valley while 'product diversification' is found to be the least important factor determining fixed capital requirements of the enterprises in the Valley.

KEYWORDS: *Fixed Capital, Nature of Business, Product Diversification, Types of Product.*

Introduction

In the present world, finance is defined as the provision of money for future requirement. Every enterprise whether micro, small or medium needs finance to carry on its operations and to achieve its goals and so finance is rightly said to be the life blood of an enterprise. Without adequate finance, no enterprise can fulfill its objectives and no growth and expansion of enterprise can take place. Finance has been called "The Science of Money" (Basu, 1939). The financial requirements will be large if size of the enterprise is large and vice versa. The financial requirements of an enterprise can be broadly classified in the form of fixed and working capital. Fixed capital is required to finance the cost of acquisition of both permanent assets and intangible assets (Gupta and Gupta, 2011). The enterprise can estimate the required amount of fixed capital on the basis of factors determining fixed capital requirements of the enterprise. While determining fixed capital, the enterprises have to assess the relative importance of the factors determining fixed capital requirements of the enterprises. The present study has been made by taking Barak Valley of Assam as a base. On the industrial scene, the Barak Valley is late entrant. Most of the enterprises of the valley are micro and small enterprises and least of

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them are medium and large enterprises. Therefore, the thrust of development has been more in the direction of micro and small enterprises. Despite a lapse of more than a decade it is really unfortunate that no study has been undertaken by any agency or any researcher on the determinants of fixed capital requirements of micro and small enterprises in the Valley. The present study has endeavored in its modest way to examine the position in detail.

Review of Literature

Bhattacharjee (1987) observed shortage of institutional credit (Finance). It was found that these small scale industries in general had to remain content with low capital base, depends more on non - institutional agencies like money lenders, friend and relatives and work under stringent credit condition. Beck, Kunt and Maksimovic (2002) studied a firm-level survey database covering 48 countries. The study indicates that legal and financial institutions affect different types of external finance in different ways and firm size is an important determinant of accessing different types of external finance. Dabo (2006) deals with the financing of the firms at start- up and post start-up. The study revealed that 28.3% of the respondents used only personal savings and finances to commence their business ventures and more than 71% of the respondents had used a mix of other sources of finance at start-up in some cases together with the personal savings. Bagchi (2008) assessed the financial requirements of small and medium enterprises. Small and medium enterprises need finance towards cost of fixed assets like land and building, machinery, equipment, including computers by way of loan to be repaid over a period of time generally three to five years. Ciara'n, Bhaird and Brian (2010) indicate that use of long-term debt financing is positively related with the size of the firm and negatively related with firm age. They also indicate that firms increasingly employ retained profits for investment projects as debt is retired over time. William , Gartner, Casey, Frid , John and Alexander (2012) found that 83.8 % nascent entrepreneurs contributed personal funds to their start-up effort and about one-third i.e., 31.8 % of respondents used external sources. Beena (2012) observed that the share of internal financing has increased sharply during 2001-2005 and it accounted for 58 % but it has declined during 2006 -2009 to the level of 38 % which is still higher than the level of 26 % during 1991-94. Christian, Dietmar, Andre and Gyax (2013) reveal that 34 % of family firms intend to use debt financing for succession expenditures. They suggest that to complement the work, future research should continue to take a multi-dimensional perspective on succession and incorporate personal relationship issues into the analysis of succession financing.

Objectives of the Study

The broad objective of the study is to assess the relative importance of the determinants of fixed capital requirements of micro and small enterprises in Barak Valley, Assam. However the sub-objectives of the study are as follows:

- To assess the relative importance of the determinants of fixed capital requirements of micro and small enterprises in Barak Valley, Assam.
- To assess the relative importance of the determinants of fixed capital requirements of manufacturing and service enterprises in Barak Valley, Assam.

Hypotheses of the Study

The hypotheses of the study are as follows:

- The responses of the owners / managers of micro enterprises and small enterprises do not significantly vary about the degree of importance of select factors capable of determining fixed capital requirements of the enterprises in Barak Valley.
- The responses of the owners / managers of manufacturing and service enterprises do not significantly vary about the degree of importance of select factors capable of determining fixed capital requirements of the enterprises in Barak Valley.

Research Methodology

The study is basically based on primary data. To test the above hypotheses, the researcher collected the data from primary sources. The sampling technique of the study is 'convenience sampling'. Population has been identified particularly for micro and small enterprises on consultation with District Industries and Commerce Centre (DICC) officials and permanent registers of DICCs of the three districts viz., Cachar, Karimganj and Hailakandi district. Total number of registered micro and enterprises which is the population of the study is 3161. Sample size of the study is 246 which is calculated through sample size calculator macorr with 95 percent confidence level and 6 percent sampling error.

Table 1: District-wise Distribution of Population and Sample Size

Districts	Population (No. of registered enterprises as on 31-3-2012)	Sample size
Cachar	1862	145
Karimganj	766	60
Hailakandi	533	41
Total	3161	246

Source: General Managers, DICC, Cachar, Karimganj and Hailakandi district.

Of the 246 sample enterprises, 145, 60 and 41 enterprises have been selected from Cachar district, Karimganj district and Hailakandi district respectively through 'proportionate stratification method'. The primary data has been collected by field survey of the existing micro and small enterprises of Barak valley by personal interview method.

Table 2: Distribution of Sample Enterprises

Type of Enterprises	Number of Enterprises	Per cent
Micro	201	81.71
Small	45	18.29
Total	246	100
Nature of Enterprises	Number of Enterprises	Per cent
Manufacturing	194	78.86
Service	52	21.14
Total	246	100

Source: Field Survey

Of the 246 sample micro and small enterprises 81.71 % are micro enterprises and 18.29 % are small enterprises. The manufacturing sector plays a dominant role in the economy of the Barak valley and thus accounted for 78.86 % of the total sample enterprises. Similarly, the service sector accounted for 21.14 % of the 246 sample micro and small enterprises (table 2).

Arithmetic mean and standard deviation have been used for data analysis. The hypotheses are tested with the help of the statistical technique 'Mann-Whitney U test'. The conclusion is drawn on the basis of data analysis. The statistical computations have been done by Microsoft Excel, 2007 and SPSS 16.0.

Based on the perception of the respondents, the importance of the factors determining fixed capital requirements of the enterprises in Barak Valley has been identified. For those five points likert scale has been used. Likert items are Extremely Important (EI), Largely Important (LI), Moderately Important (MI), Slightly Important (SI) and Not Important (NI). The value has been assigned to the likert items as EI=5, LI =4, MI=3, SI=2 and NI=1. Total score of each factor has been calculated by multiplying the frequency of each degree of importance of the factors with their value and then by adding the total value of each degree of importance of the factors. The mean score of the factors has been identified by dividing the total score by the total sample enterprises.

Scope of the Study

The study area is the entire three districts of Barak Valley viz., Cachar, Karimganj and Hailakandi of Assam. The enterprises which are registered with DICC of the three districts as on 31-3-2012 have been selected for the population size. Only the registered enterprises which are functioning have been studied in the present study. The enterprises which have at least one year of experience have been studied.

Limitations of the Study

In the present study unregistered micro and small enterprises are not studied. The registered micro and small enterprises which are not functioning are not studied. These are left for further research.

Result and Discussion

Table 3 delineates the weightage of importance of the factors determining fixed capital requirements of micro and small enterprises in Barak Valley. It also shows the factor-wise distribution of mean score of the weightage on the basis of which ranks are provided to the factors.

Table 3: Relative Importance of Factors Determining Fixed Capital Requirements of Sample Enterprises

Factors	Mean Score	Standard Deviation
Nature of Business	4.07	0.943
Size of the Business	2.87	1.153
Choice of Technique	3.95	1.003
Method of acquiring Fixed Assets	3.18	1.224
Growth Prospect	3.15	1.262
Types of Product	2.82	1.062
Product Diversification	2.54	1.314
Technology Up gradation	3.23	1.235

Source: Field Survey

Based on the mean score as reflected in table 3, it has been found that the factor 'nature of business' (4.07) is the most important factor determining fixed capital requirements of micro and small enterprises in Barak Valley while 'product diversification' (2.54) is the least important factor determining fixed capital requirements of the enterprises in the Valley.

The value of standard deviation of the factor 'nature of business' (0.943) is the lowest among all the factors determining fixed capital requirements of sample enterprises in Barak Valley which imply that the opinion of the respondents with regard to this factor is more concentrated. On the other hand, the value of standard deviation of the factor 'product diversification' (1.314) is the highest among all the factors determining fixed capital requirements of micro and small enterprises which indicates that the opinion of the respondents with regard to this factor is less concentrated.

Table 4: Relative Importance of Factors Determining Fixed Capital Requirements of Micro Enterprises and Small Enterprises

Factors	Micro Enterprises		Small Enterprises		U-value	p-value
	Mean Score	Standard Deviation	Mean Score	Standard Deviation		
Nature of Business	3.96	0.956	4.58	0.690	2865.000	0.000
Size of the Business	2.77	1.165	3.31	0.996	3333.500	0.004
Choice of Technique	3.85	0.999	4.38	0.912	3122.500	0.001
Method of acquiring Fixed Assets	3.10	1.251	3.53	1.036	3663.000	0.041
Growth Prospect	3.04	1.254	3.64	1.190	3284.000	0.003
Types of Product	2.70	1.055	3.38	0.912	2858.000	0.000
Product Diversification	2.48	1.261	2.84	1.507	3894.000	0.134
Technology Up gradation	3.12	1.259	3.73	0.986	3214.500	0.002

Source: Field Survey

On the basis of the mean score as reflected in table 4, it is observed that the factor 'nature of business' (3.96) is found to be the most important factor determining fixed capital requirements of micro enterprises and 'product diversification' (2.48) is found to be the least important factor determining fixed capital requirements of micro enterprises in Barak Valley. On the contrary, the factor 'nature of business' (4.58) is also found to be the most important factor determining fixed capital requirements of small enterprises while 'product diversification' (2.84) is found to be the least important factor determining fixed capital requirements of small enterprises in Barak Valley.

The value of standard deviation of the factor 'nature of business' (0.956) is the lowest among all the factors determining fixed capital requirements of micro enterprises in Barak Valley which imply that the opinion of the respondents with regard to this factor is more concentrated and the value of standard deviation of the factor 'product diversification' (1.261) is the highest among all the factors determining fixed capital requirements of micro enterprises which indicates that the opinion of the respondents with regard to this factor is less concentrated. On the other hand, the value of standard deviation of the factor 'nature of business' (0.690) is the lowest among all the factors determining fixed capital requirements of small enterprises in Barak Valley which imply that the opinion of the respondents with regard to this factor is more concentrated and the value of standard deviation of the factor 'product diversification' (1.507) is the highest among all the factors determining fixed capital requirements of small enterprises which indicates that the opinion of the respondents with regard to this factor is less concentrated.

The result of two independent samples Mann-Whitney U test reveals that there is statistically significant difference between the responses of the owners / managers of micro enterprises and small enterprises about the degree of importance of the factors namely 'nature of business', 'size of the business', 'choice of technique', 'method of acquiring fixed assets', 'growth prospect', 'types of product' and 'technology up gradation' in determining fixed capital requirements of the enterprises in Barak Valley at 5% level of significance.

Table 5: Relative Importance of Factors Determining Fixed Capital Requirements of Manufacturing and Service Enterprises

Factors	Manufacturing Enterprises		Service Enterprises		U-value	p-value
	Mean Score	Standard Deviation	Mean Score	Standard Deviation		
Nature of Business	4.16	0.901	3.71	1.016	3792.000	0.003
Size of the Business	2.95	1.126	2.56	1.211	4168.500	0.046
Choice of Technique	4.07	0.928	3.50	1.146	3632.000	0.001
Method of acquiring Fixed Assets	3.23	1.188	3.00	1.343	4503.000	0.222
Growth Prospect	3.16	1.312	3.13	1.067	4932.500	0.802
Types of Product	3.01	0.938	2.12	1.199	2852.500	0.000
Product Diversification	2.51	1.370	2.67	1.080	4592.500	0.308
Technology Up gradation	3.21	1.268	3.31	1.112	4867.000	0.688

Source: Field Survey

Table 5 reveals that the factor 'nature of business' (4.16) is the most important factor determining fixed capital requirements of manufacturing enterprises but 'product diversification' (2.51) is the least important factor determining fixed capital requirements of manufacturing enterprises in the Barak Valley. On the contrary, the factor 'nature of business' (3.71) is found to be the most important factor determining fixed capital requirements of service enterprises while the factor 'types of product' (2.12) is the least important factor determining fixed capital requirements of these enterprises in the Barak Valley.

The value of standard deviation of the factor 'nature of business' (0.901) is the lowest among all the factors determining fixed capital requirements of manufacturing enterprises in Barak Valley which imply that the opinion of the respondents with regard to this factor is more concentrated while the value of standard deviation of the factor 'product diversification' (1.370) is the highest among all the factors determining fixed capital requirements of manufacturing enterprises which indicates that the opinion of the respondents with regard to this factor is less concentrated. On the other hand, the value of standard deviation of the factor 'nature of business' (1.016) is the lowest among all the factors determining fixed capital requirements of service enterprises in Barak Valley which imply that the opinion of the respondents with regard to this factor is more concentrated while the value of standard deviation of the factor 'method of acquiring fixed assets' (1.343) is the highest among all the factors determining fixed capital requirements of service enterprises which indicates that the opinion of the respondents with regard to this factor is less concentrated. The result of two independent samples Mann-Whitney U test reveals that there is statistically significant difference between the responses of the owners / managers of manufacturing enterprises and service enterprises about the degree of importance of the factors namely 'nature of business', 'size of the business', 'choice of technique' and 'types of product' in determining fixed capital requirements of the enterprises in Barak Valley at 5% level of significance.

Conclusion

The study finally let us to conclude that the relative importance of the factors determining fixed capital requirements of the enterprises in Barak Valley is not same. 'Nature of business' is found to be the most important factor determining fixed capital requirements of micro and small enterprises in Barak Valley while 'product diversification' is found to be the least important factor determining fixed capital requirements of the enterprises in the Valley. The study also conclude that there is statistically significant difference between the responses of the owners / managers of micro enterprises and small enterprises about the degree of importance of the factors namely 'nature of business', 'size of the business', 'choice of technique', 'method of acquiring fixed assets', 'growth prospect', 'types of product' and 'technology up gradation' in determining fixed capital requirements of the enterprises in Barak Valley. The factor 'nature of business' is also found to be the most important factor determining fixed capital requirements of manufacturing enterprises as well as service enterprises in the Valley while 'product diversification' is the

least important factor determining fixed capital requirements of manufacturing enterprises and 'types of product' is the least important factor determining fixed capital requirements of the service enterprises in the Barak Valley. The study found that there is statistically significant difference between the responses of the owners / managers of manufacturing enterprises and service enterprises about the degree of importance of the factors namely 'nature of business', 'size of the business', 'choice of technique' and 'types of product' in determining fixed capital requirements of the enterprises in Barak Valley.

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