### Chapter-III

## Determinants of Financial Requirements of Micro and Small Enterprises

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### **Chapter-III**

### Determinants of Financial Requirements of Micro and Small Enterprises

This chapter entails in it two sections. Section one deals with the identification of determinants of fixed capital requirements and their relative importance in micro and small enterprises. Further the relative importance of the determinants of fixed capital requirements of manufacturing enterprises and service enterprises has also been studied. Section two of this chapter deals with the identification of determinants of working capital requirements and their relative importance in micro and small enterprises. Further the relative importance of the determinants of working capital requirements and their relative importance in micro and small enterprises. Further the relative importance of the determinants of working capital requirements of manufacturing enterprises and service enterprises has also been studied.

#### 3.1 Identification of Determinants of Fixed Capital Requirements

The financial requirements of an enterprise may be classified into two categories namely fixed capital requirements and working capital requirements. Fixed capital is required to finance the cost of acquisition of both permanent assets and intangible assets. Generally fixed capital requirements are estimated at the time of promotion of a new enterprise but the existing enterprises may also need it at the time of expansion, growth, replacement and improvement of the existing facilities. The requirements of fixed capital of the enterprises may be assessed on the basis of the factors determining fixed capital requirements of the enterprises (Gupta & Sharma, 2013).

From the review of literatures (Sushan, 2009, Gupta, & Gupta, 2011, Gupta, & Sharma, 2013) following fourteen important determinants / factors determining fixed capital requirements of micro and small enterprises have been identified-

- Nature of Business
- Types of Product
- Method of acquiring fixed assets
- Size of the Business
- Growth Prospects

- Choice of Technique
- Product Diversification
- Scope of Business
- Technology Up Gradation
- International environment and economic conditions
- Changes in consumer preference
- Competition
- Government rules and regulations
- Estimation of intangible assets requirements

Moreover, the researcher has conducted a pilot survey on 45 micro enterprises and 5 small enterprises in Barak Valley to identify the factors that actually determine the fixed capital requirements of micro and small enterprises in the Valley and accordingly following eight factors have been identified for fixed capital requirements on the basis of importance of the factors as indicated by the review of literatures and pilot survey-

- Nature of Business,
- Size of the Business,
- Choice of Techniques,
- Method of Acquiring Fixed Assets,
- ➢ Growth Prospects,
- > Types of Product,
- Product Diversification and
- Technology Upgradation.

After converging the above factors which are identified on the basis of review of literatures and pilot survey, the following eight factors have been selected for the purpose of identifying the factors determining fixed capital requirements of micro and small enterprises in Barak Valley-

- ➢ Nature of Business,
- Size of the Business,
- Choice of Techniques,
- Method of Acquiring Fixed Assets,
- Growth Prospects,
- ➢ Types of Product,

- Product Diversification and
- Technology Upgradation.

Based on the perception of the respondents, the importance of these factors determining fixed capital requirements of the enterprises in Barak Valley has been identified. For that five point 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.

Table 3.1 delineates the relative importance of factors determining fixed capital requirements of sample 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.

Factors	Mean Score	Rank	Standard Deviation			
Nature of Business	4.07	$1^{st}$	0.943			
Size of the Business	2.87	$6^{th}$	1.153			
Choice of Technique	3.95	$2^{nd}$	1.003			
Method of acquiring Fixed Assets	3.18	$4^{th}$	1.224			
Growth Prospect	3.15	$5^{th}$	1.262			
Types of Product	2.82	$7^{\rm th}$	1.062			
Product Diversification	2.54	$8^{th}$	1.314			
Technology Up gradation	3.23	3 <sup>rd</sup>	1.235			

 Table 3.1: Relative Importance of Factors Determining Fixed Capital

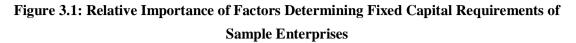
 Requirements of Sample Enterprises

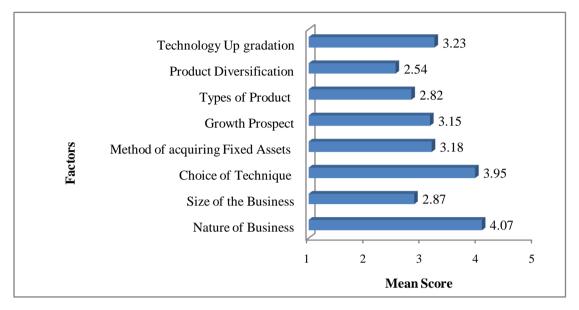
Source: Field Survey

On the basis of the mean score as is reflected in table3.1, it is observed that the most important factor determining fixed capital requirements of sample enterprises is the 'nature of business' because the mean score (4.07) is the highest among all the factors in the study. It is observed that the enterprises in the Valley require larger amount of land, building, machineries etc., due to which these enterprises need large amount of fixed capital. It is due to these reasons 'nature of business' works as the most crucial factor determining fixed capital requirements of sample enterprises in the Valley.

Based on the mean score, it is found that the factor 'choice of technique' (3.95) is the second most important factor determining fixed capital requirements of micro and small enterprises in Barak Valley which is followed by the factors 'technology up gradation' (3.23), 'method of acquiring fixed assets' (3.18), 'growth prospect' (3.15), 'size of the business' (2.87), 'types of product' (2.82) and 'product diversification' (2.54). 'Product diversification' is found to be the least important factor determining fixed capital requirements because the mean score (2.54) of this factor is the lowest among all the factors in the study. It is observed that micro and small enterprises in the Valley do not want to diversify their products and those which have diversified their business from one product line to another line mostly based on their existing fixed assets with little extension and renovation. It is due to this reason 'product diversification' works as the least influential factor determining fixed capital requirements of micro and small enterprises in Barak 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 micro and small 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.





### **3.2 Relative Importance of Factors Determining Fixed Capital Requirements of** Micro Enterprises

Based on the perception of the respondents, the importance of the factors determining fixed capital requirements of micro enterprises in Barak Valley has been identified. Following table exhibits the relative importance of the factors determining fixed capital requirements of micro enterprises in Barak Valley.

Factors	Mean Score	Rank	Standard Deviation
Nature of Business	3.96	$1^{st}$	0.956
Size of the Business	2.77	6 <sup>th</sup>	1.165
Choice of Technique	3.85	$2^{nd}$	0.999
Method of acquiring Fixed Assets	3.10	4 <sup>th</sup>	1.251
Growth Prospect	3.04	5 <sup>th</sup>	1.254
Types of Product	2.70	7 <sup>th</sup>	1.055
Product Diversification	2.48	8 <sup>th</sup>	1.261
Technology Up gradation	3.12	3 <sup>rd</sup>	1.259

 Table 3.2: Relative Importance of Factors Determining Fixed Capital

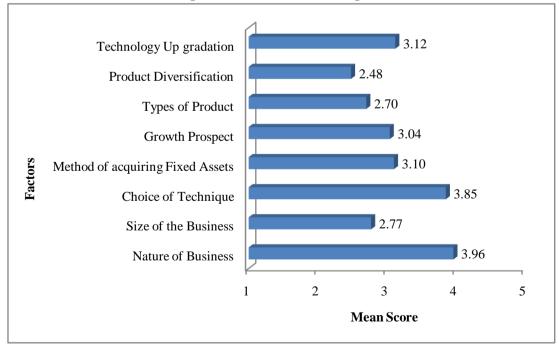
 Requirements of Micro Enterprises

Source: Field Survey

On the basis of the mean score as is reflected in table 3.2, it is observed that the most important factor determining fixed capital requirements of micro enterprises is the 'nature of business' because the mean score (3.96) is the highest among all the factors in the study. Based on the mean score, it is found that the factor 'choice of technique' (3.85) is the second most important factor determining fixed capital requirements of micro enterprises in Barak Valley which is followed by the factors 'technology up gradation' (3.12), 'method of acquiring fixed assets' (3.10), 'growth prospect' (3.04), 'size of the business' (2.77), 'types of product' (2.70) and 'product diversification' (2.48).

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. On the other hand, 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.

Figure 3.2: Relative Importance of Factors Determining Fixed Capital Requirements of Micro Enterprises



## **3.3 Relative Importance of Factors Determining Fixed Capital Requirements of Small Enterprises**

Based on the perception of the respondents, the importance of the factors determining fixed capital requirements of small enterprises in Barak Valley has been identified. Following table exhibits the relative importance of the factors determining fixed capital requirements of small enterprises in Barak Valley.

Factors	Mean Score	Rank	Standard Deviation
Nature of Business	4.58	1 <sup>st</sup>	0.690
Size of the Business	3.31	7 <sup>th</sup>	0.996
Choice of Technique	4.38	2 <sup>nd</sup>	0.912
Method of acquiring Fixed Assets	3.53	5 <sup>th</sup>	1.036
Growth Prospect	3.64	4 <sup>th</sup>	1.190
Types of Product	3.38	6 <sup>th</sup>	0.912
Product Diversification	2.84	8 <sup>th</sup>	1.507
Technology Up gradation	3.73	3 <sup>rd</sup>	0.986

Table 3.3: Relative Importance of Factors Determining Fixed CapitalRequirements of Small Enterprises

Source: Field Survey

Table 3.3 reveals that the most important factor determining fixed capital requirements of small enterprises is the 'nature of business' because the mean score (4.58) is the highest among all the factors in the study. Based on the mean score, it is found that the factor 'choice of technique' (4.38) is the second most important factor determining fixed capital requirements of small enterprises in Barak Valley which is followed by the factors 'technology up gradation' (3.73), 'growth prospect' (3.64), 'method of acquiring fixed assets' (3.53), 'types of product' (3.38), 'size of the business' (3.31) and 'product diversification' (2.84).

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. On the other hand, 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.

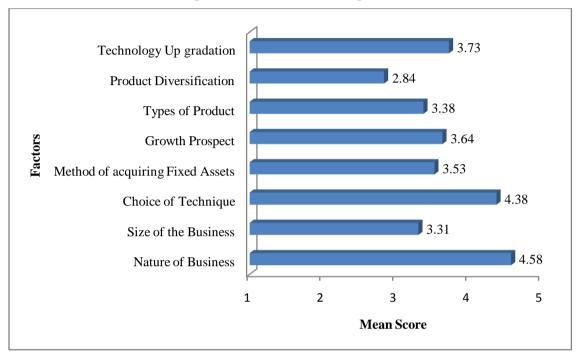


Figure 3.3: Relative Importance of Factors Determining Fixed Capital Requirements of Small Enterprises

### **3.4 Statistical Analysis of Relative Importance of Factors Determining Fixed Capital Requirements of Micro Enterprises and Small Enterprises**

In order to assess the difference in the degree of importance of select factors capable of determining fixed capital requirements of micro enterprises and small enterprises in Barak Valley, the following hypotheses is formulated:

 $H_01$ : 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.

	Mean	Score				
Factors	Micro Enterprises	Small Enterprises	U-value	p-value	Decision	
Nature of Business	3.96	4.58	2865.000	0.000	Rejected	
Size of the Business	2.77	3.31	3333.500	0.004	Rejected	
Choice of Technique	3.85	4.38	3122.500	0.001	Rejected	
Method of acquiring Fixed Assets	3.10	3.53	3663.000	0.041	Rejected	
Growth Prospect	3.04	3.64	3284.000	0.003	Rejected	
Types of Product	2.70	3.38	2858.000	0.000	Rejected	
Product Diversification	2.48	2.84	3894.000	0.134	Accepted	
Technology Up gradation	3.12	3.73	3214.500	0.002	Rejected	

 Table 3.4: Relative Importance of Factors Determining Fixed Capital Requirements of Micro Enterprises and Small enterprises

Source: Field Survey

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' capable of determining fixed capital requirements of the enterprises in Barak Valley at 5% level of significance.

# **3.5 Relative Importance of Factors Determining Fixed Capital Requirements of Manufacturing Enterprises**

Based on the perception of the respondents, the importance of the factors determining fixed capital requirements of manufacturing enterprises in Barak Valley has been identified. Following table exhibits the relative importance of the factors determining fixed capital requirements of manufacturing enterprises in Barak Valley.

Factors	Mean Score	Rank	Standard Deviation
Nature of Business	4.16	$1^{st}$	0.901
Size of the Business	2.95	$7^{\text{th}}$	1.126
Choice of Technique	4.07	$2^{nd}$	0.928
Method of acquiring Fixed Assets	3.23	3 <sup>rd</sup>	1.188
Growth Prospect	3.16	$5^{\text{th}}$	1.312
Types of Product	3.01	6 <sup>th</sup>	0.938
Product Diversification	2.51	8 <sup>th</sup>	1.370
Technology Up gradation	3.21	$4^{th}$	1.268

 Table 3.5: Relative Importance of Factors Determining Fixed Capital Requirements of Manufacturing Enterprises

Source: Field Survey

On the basis of the mean score as is reflected in table 3.5, it is observed that the most important factor determining fixed capital requirements of manufacturing enterprises is the 'nature of business' because the mean score (4.16) is the highest among all the factors in the study. Based on the mean score, it is found that the factor 'choice of technique' (4.07) is the second most important factor determining fixed capital requirements of manufacturing enterprises in Barak Valley which is followed by the factors 'method of acquiring fixed assets' (3.23), 'technology up gradation' (3.21), 'growth prospect' (3.16), 'types of product' (3.01), 'size of the business' (2.95) and 'product diversification' (2.51).

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. On the other hand, 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.

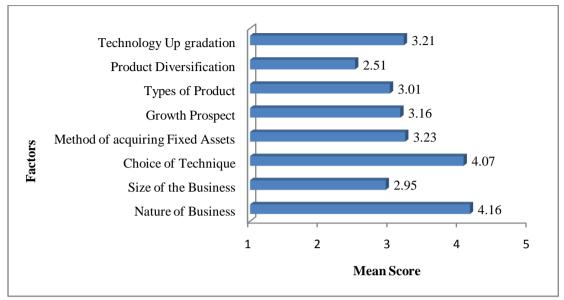


Figure 3.4: Relative Importance of Factors Determining Fixed Capital Requirements of Manufacturing Enterprises

# **3.6 Relative Importance of Factors Determining Fixed Capital Requirements of Service Enterprises**

Based on the perception of the respondents, the importance of the factors determining fixed capital requirements of service enterprises in Barak Valley has been identified. Following table exhibits the relative importance of the factors determining fixed capital requirements of service enterprises in Barak Valley.

Factors	Mean Score	Rank	Standard Deviation
Nature of Business	3.71	$1^{st}$	1.016
Size of the Business	2.56	$7^{\text{th}}$	1.211
Choice of Technique	3.50	$2^{nd}$	1.146
Method of acquiring Fixed Assets	3.00	$5^{th}$	1.343
Growth Prospect	3.13	$4^{th}$	1.067
Types of Product	2.12	$8^{th}$	1.199
Product Diversification	2.67	$6^{th}$	1.080
Technology Up gradation	3.31	3 <sup>rd</sup>	1.112

Table 3.6: Relative Importance of Factors DeterminingFixed Capital Requirements of Service Enterprises

Source: Field Survey

Table 3.6depicts that the most important factor determining fixed capital requirements of service enterprises is the 'nature of business' because the mean score (3.71) is the

highest among all the factors in the study. Based on the mean score, it is found that the factor 'choice of technique' (3.50) is the second most important factor determining fixed capital requirements of service enterprises in Barak Valley which is followed by the factors 'technology up gradation' (3.31), 'growth prospect' (3.13), 'method of acquiring fixed assets' (3.00), 'product diversification' (2.67), 'size of the business' (2.56) and 'types of product' (2.12). It is observed that service enterprises in the Valley provide services of the products whether capital goods or consumer goods produced by the manufacturing enterprises. It is due to this reason 'types of product' is the least important factor determining fixed capital requirements of service enterprises in Barak Valley.

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. On the other hand, 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.

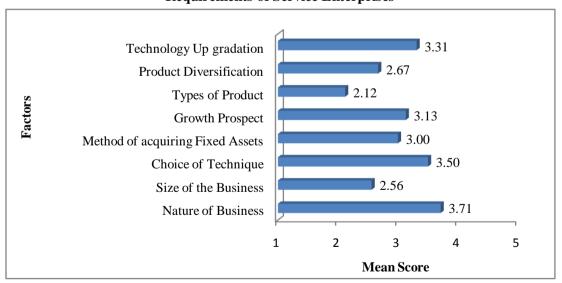


Figure 3.5: Relative Importance of Factors Determining Fixed Capital Requirements of Service Enterprises

### **3.7** Statistical Analysis of Relative Importance of Factors Determining Fixed Capital Requirements of Manufacturing Enterprises and Service Enterprises

In order to assess the difference in the degree of importance of select factors capable of determining fixed capital requirements of manufacturing enterprises and service enterprises in Barak Valley, the following hypotheses is formulated:

 $H_02$ : The responses of the owners / managers of manufacturing enterprises 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.

	Mean Sc	core			
Factors	Manufacturing Enterprises	Service Enterprises	U-value	p-value	Decision
Nature of Business	4.16	3.71	3792.000	0.003	Rejected
Size of the Business	2.95	2.56	4168.500	0.046	Rejected
Choice of Technique	4.07	3.50	3632.000	0.001	Rejected
Method of acquiring Fixed Assets	3.23	3.00	4503.000	0.222	Accepted
Growth Prospect	3.16	3.13	4932.500	0.802	Accepted
Types of Product	3.01	2.12	2852.500	0.000	Rejected
Product Diversification	2.51	2.67	4592.500	0.308	Accepted
Technology Up gradation	3.21	3.31	4867.000	0.688	Accepted

 Table 3.7: Relative Importance of Factors Determining Fixed Capital

 Requirements of Manufacturing Enterprises and Service enterprises

Source: Field Survey

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' capable of determining fixed capital requirements of the enterprises in Barak Valley at 5% level of significance.

#### 3.8 Identification of Determinants of Working Capital Requirements

There are no specific rules to estimate the level of working capital of an enterprise (Pathak & Kalwar, 2011). The factors that influence the requirements of working capital vary from time to time (kantilal, 2011). Each factor has different importance. However, from the review of literatures (Palanichamy, 1992, Jani, 2007, Nazir, & Afza, 2009, Vora, 2009, Mathur, 2010,Rao, 2010, Popat, 2011, Kantilal, 2011, Saarani, & Shahadan, 2012, Abbadi, & Abbadi, 2013)following twenty five important factors that generally influence the working capital requirements of the enterprises have been identified-

- Nature of Business
- Size of the Business
- Credit Availability
- Seasonal Variations
- Manufacturing cycle
- ➤ Leverage
- Return on Assets
- Tangibility of Assets
- Growth Opportunities
- Level of Economic Activity
- Working Capital Cycle
- Rate of Stock Turnover
- Profit Planning and Control
- Credit Policy
- Rate of Growth of Business
- Earning Capacity
- Dividend Policy
- Production Policy
- Operating Efficiency and Performance
- Management's Ability
- Business Cycles
- Profit Appropriation
- Price Level Changes
- External Environment
- Demand Conditions

Moreover, the researcher has conducted a pilot survey on 45 micro enterprises and 5 small enterprises in Barak Valley to identify the factors that actually determine the working capital requirements of micro and small enterprises in the Valley and accordingly following twelve factors have been identified for working capital requirements on the basis of importance of the factors as indicated by the review of literatures and pilot survey-

- ➢ Nature of Business
- Size of Business
- Seasonal Variations
- Manufacturing Process
- Working Capital Cycles
- Rate of Stock Turnover
- > Credit Policy
- Business Cycles
- Rate of Growth of the Business
- ➢ Earning Capacity
- Credit Availability and
- Competition Level.

After converging the above factors which are identified on the basis of review of literatures and pilot survey, the following twelve factors have been selected for the purpose of identifying the factors determining working capital requirements of micro and small enterprises in Barak Valley-

- Nature of Business
- Size of Business
- Seasonal Variations
- Manufacturing Process
- Working Capital Cycles
- Rate of Stock Turnover
- Credit Policy
- Business Cycles
- Rate of Growth of the Business
- Earning Capacity
- Credit Availability and
- Competition Level.

Based on the perception of the respondents, the importance of these factors for identifying the working capital requirements of the enterprises in Barak Valley has been studied. For that five point 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 with their value and then by adding the total value of each degree of the factors. The mean score of the factors has been identified by dividing the total score by the total sample enterprises.

Factors	Mean Score	Rank	Standard Deviation
Nature of Business	3.37	4 <sup>th</sup>	1.168
Size of the Business	2.50	12 <sup>th</sup>	1.283
Seasonal Variations	2.81	10 <sup>th</sup>	1.443
Manufacturing Process	3.40	3 <sup>rd</sup>	1.335
Working Capital Cycle	3.50	$2^{nd}$	1.428
Rate of Stock Turnover	3.06	8 <sup>th</sup>	1.370
Credit Policy	2.77	11 <sup>th</sup>	1.037
Business Cycles	3.05	9 <sup>th</sup>	1.054
Rate of Growth	3.12	7 <sup>th</sup>	0.995
Earning Capacity	3.26	6 <sup>th</sup>	0.967
Credit Availability	3.35	5 <sup>th</sup>	1.188
Competition Level	3.55	1 <sup>ST</sup>	1.338

 Table 3.8: Relative Importance of Factors Determining Working Capital

 Requirements of Sample Enterprises

Source: Field Survey

Table 3.8 delineates the weightage of importance of the factors determining working capital requirements of sample 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.

On the basis of the mean score as is reflected in table 3.8, it is observed that the most important factor determining working capital requirements of micro and small enterprises is the 'competition level' because the mean score (3.55) is the highest among all the factors in the study. It is observed that micro and small enterprises in

the Valley face stiff competition in selling their products to the customers and so they require large amount of working capital. It is due to this reason 'competition level' works as the most crucial factor determining working capital requirements of micro and small enterprises in Barak Valley.

Based on the mean score, it is found that the factor 'working capital cycle' (3.50) is the second most important factor determining working capital requirements of micro and small enterprises in Barak Valley which is followed by the factors 'manufacturing process' (3.40), 'nature of business' (3.37), 'credit availability' (3.35), 'earning capacity' (3.26), 'rate of growth' (3.12), 'rate of stock turnover' (3.06), 'business cycles' (3.05), 'seasonal variations' (2.81), 'credit policy' (2.77) and 'size of the business' (2.50).

'Size of the business' is found to be the least important factor determining working capital requirements of micro and small enterprises in the Valley because the mean score (2.50) of this factor is lowest among all the factors in the study. In the field survey it is observed that the scale of operations of micro and small enterprises in the Valley is small. It is due to this reason 'size of the business' works as the least influential factor determining working capital requirements of micro and small enterprises in Barak Valley.

The value of standard deviation of the factor 'earning capacity'(0.967) is the lowest among all the factors determining working capital requirements of micro and small 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 'seasonal variations' (1.443) is the highest among all the factors determining working capital requirements of micro and small enterprises which indicates that the opinion of the respondents with regard to this factor is less concentrated.

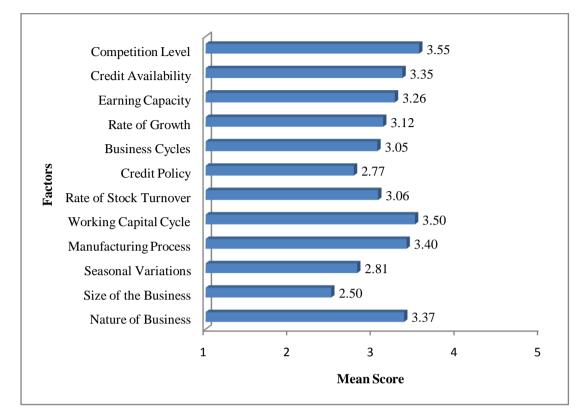


Figure 3.6: Relative Importance of Factors Determining Working Capital Requirements of Sample Enterprises

# **3.9 Relative Importance of Factors Determining Working Capital Requirements of Micro Enterprises**

Based on the perception of the respondents, the importance of the factors determining working capital requirements of micro enterprises in Barak Valley has been identified. Following table exhibits the relative importance of the factors determining working capital requirements of micro enterprises in Barak Valley.

On the basis of the mean score as is reflected in table 3.9, it is observed that the most important factor determining working capital requirements of micro enterprises is the 'competition level' because the mean score (3.47) is the highest among all the factors in the study. Based on the mean score, it is found that the factor 'credit availability' (3.39) is the second most important factor determining working capital requirements of micro enterprises in Barak Valley which is followed by the factors 'nature of business' (3.37), 'working capital cycle' (3.35), 'manufacturing process' (3.21),' earning capacity' (3.18), 'rate of growth' (3.02), 'rate of stock turnover' (2.96),

'business cycles' (2.94), 'seasonal variations' (2.78), 'credit policy' (2.64) and 'size of the business' (2.49).

Factors	Mean Score	Rank	Standard Deviation
Nature of Business	3.37	3 <sup>rd</sup>	1.170
Size of the Business	2.49	$12^{\text{th}}$	1.308
Seasonal Variations	2.78	$10^{\text{th}}$	1.411
Manufacturing Process	3.21	$5^{\text{th}}$	1.329
Working Capital Cycle	3.35	$4^{th}$	1.432
Rate of Stock Turnover	2.96	8 <sup>th</sup>	1.396
Credit Policy	2.64	$11^{\text{th}}$	0.981
Business Cycles	2.94	9 <sup>th</sup>	1.044
Rate of Growth	3.02	7 <sup>th</sup>	0.992
Earning Capacity	3.18	6 <sup>th</sup>	0.965
Credit Availability	3.39	$2^{nd}$	1.225
Competition Level	3.47	$1^{st}$	1.342

 Table 3.9: Relative Importance of Factors Determining

 Working Capital Requirements of Micro Enterprises

Source: Field Survey

The value of standard deviation of the factor 'earning capacity' (0.965) is the lowest among all the factors determining working capital requirements of micro 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 'working capital cycle' (1.432) is the highest among all the factors determining working capital requirements of micro enterprises which indicates that the opinion of the respondents with regard to this factor is less concentrated.

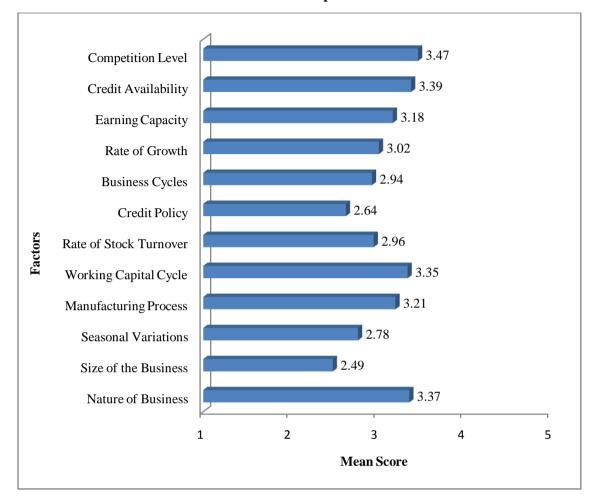


Figure 3.7: Relative Importance of Factors Determining Working Capital Requirements of Micro Enterprises

### 3.10 Relative Importance of Factors Determining Working Capital Requirements of Small Enterprises

Based on the perception of the respondents, the importance of the factors determining working capital requirements of small enterprises in Barak Valley has been identified. Table 3.10 exhibits the relative importance of the factors determining working capital requirements of small enterprises in Barak Valley.

Table 3.10 displays that the most important factor determining working capital requirements of small enterprises is the 'manufacturing process' because the mean score (4.24) is the highest among all the factors in the study. It is observed that the period of manufacturing process of small enterprises in the Valley is longer and hence these enterprises require large amount of working capital. It is due to this reason the

factor 'manufacturing process' works to be the most influential factor determining working capital requirements of small enterprises in Barak Valley.

Factors	Mean Score	Rank	Standard Deviation
Nature of Business	3.20	9 <sup>th</sup>	1.160
Size of the Business	2.56	$12^{\text{th}}$	1.179
Seasonal Variations	2.93	$11^{\text{th}}$	1.587
Manufacturing Process	4.24	$1^{st}$	1.004
Working Capital Cycle	4.18	2 <sup>nd</sup>	1.211
Rate of Stock Turnover	3.51	6 <sup>th</sup>	1.160
Credit Policy	3.38	8 <sup>th</sup>	1.072
Business Cycles	3.47	7 <sup>th</sup>	0.941
Rate of Growth	3.56	5 <sup>th</sup>	0.893
Earning Capacity	3.58	4 <sup>th</sup>	0.917
Credit Availability	3.16	10 <sup>th</sup>	0.999
Competition Level	3.89	3 <sup>rd</sup>	1.283

 Table 3.10: Relative Importance of Factors Determining Working Capital

 Requirements of Small Enterprises

Source: Field Survey

Based on the mean score, it is found that the factor 'working capital cycle' (4.18) is the second most important factor determining working capital requirements of small enterprises in Barak Valley which is followed by the factors 'competition level' (3.89), 'earning capacity' (3.58), 'rate of growth' (3.56),' rate of stock turnover' (3.51), 'business cycles' (3.47), 'credit policy' (3.38), 'nature of business' (3.20), 'credit availability' (3.16), 'seasonal variations' (2.93) and 'size of the business' (2.56).

The value of standard deviation of the factor 'rate of growth' (0.893) is the lowest among all the factors determining working capital requirements of small 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 'seasonal variations' (1.587) is the highest among all the factors determining working capital requirements of small enterprises in the Valley which indicates that the opinion of the respondents with regard to this factor is less concentrated.

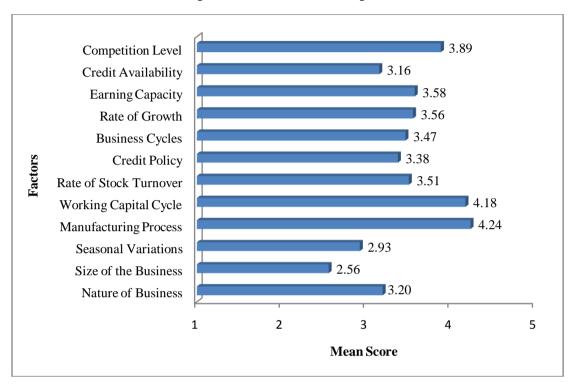


Figure 3.8: Relative Importance of Factors Determining Working Capital Requirements of Small Enterprises

### **3.11 Statistical Analysis of Relative Importance of Factors Determining Working Capital Requirements of Micro Enterprises and Small Enterprises**

In order to assess the difference in the degree of importance of select factors capable of determining working capital requirements of micro enterprises and small enterprises in Barak Valley, the following hypotheses is formulated:

 $H_03$ : 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 working capital requirements of the enterprises in Barak Valley.

Factors	Micro Enterprises Mean Score	Small Enterprises Mean Score	U-value	p-value	Decision
Nature of Business	3.37	3.20	4140.500	0.360	Accepted
Size of the Business	2.49	2.56	4315.000	0.620	Accepted
Seasonal Variations	2.78	2.93	4284.000	0.571	Accepted
Manufacturing Process	3.21	4.24	2476.500	0.000	Rejected
Working Capital Cycle	3.35	4.18	3015.500	0.000	Rejected
Rate of Stock Turnover	2.96	3.51	3522.500	0.018	Rejected
Credit Policy	2.64	3.38	2834.000	0.000	Rejected
Business Cycles	2.94	3.47	3022.500	0.000	Rejected
Rate of Growth	3.02	3.56	3221.500	0.002	Rejected
Earning Capacity	3.18	3.58	3539.500	0.016	Rejected
Credit Availability	3.39	3.16	3895.500	0.134	Accepted
Competition Level	3.47	3.89	3666.000	0.041	Rejected

 Table 3.11: Relative Importance of Factors Determining Working Capital

 Requirements of Micro Enterprises and Small Enterprises

Source: Field Survey

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 'manufacturing process', 'working capital cycle', 'rate of stock turnover', 'credit policy', 'business cycles', 'rate of growth', 'earning capacity' and 'competition level' capable of determining working capital requirements of the enterprises in Barak Valley at 5% level of significance.

### 3.12 Relative Importance of Factors Determining Working Capital Requirements of Manufacturing Enterprises

Based on the perception of the respondents, the importance of the factors determining working capital requirements of manufacturing enterprises in Barak Valley has been identified. Following table exhibits the relative importance of the factors determining working capital requirements of manufacturing enterprises in Barak Valley.

Factors	Mean Score	Rank	Standard Deviation
Nature of Business	3.30	5 <sup>th</sup>	1.135
Size of the Business	2.44	12 <sup>th</sup>	1.271
Seasonal Variations	2.88	10 <sup>th</sup>	1.447
Manufacturing Process	3.73	$2^{nd}$	1.196
Working Capital Cycle	3.85	$1^{st}$	1.252
Rate of Stock Turnover	3.37	$4^{th}$	1.282
Credit Policy	2.86	$11^{\text{th}}$	1.031
Business Cycles	3.05	9 <sup>th</sup>	1.062
Rate of Growth	3.14	8 <sup>th</sup>	1.006
Earning Capacity	3.27	7 <sup>th</sup>	0.998
Credit Availability	3.28	6 <sup>th</sup>	1.198
Competition Level	3.49	3 <sup>rd</sup>	1.411

 Table 3.12: Relative Importance of Factors Determining Working Capital

 Requirements of Manufacturing Enterprises

Source: Field Survey

On the basis of the mean score as is reflected in table 3.12, it is observed that the most important factor determining working capital requirements of manufacturing enterprises is the 'working capital cycle' because the mean score (3.85) is the highest among all the factors in the study. It is observed that the period of working capital cycle of manufacturing enterprises in the Valley is longer and so the factor 'working capital cycle' has been considered to be the most crucial factor determining working capital requirements of manufacturing enterprises in Barak Valley. Based on the mean score, it is found that the factor 'manufacturing process' (3.73) is the second most important factor determining working capital requirements of manufacturing enterprises in Barak Valley. (3.49), 'rate of stock turnover' (3.37), 'nature of business' (3.30), 'credit availability' (3.28), 'earning capacity' (3.27), 'rate of growth' (3.14), 'business cycles' (3.05), 'seasonal variations' (2.88), 'credit policy' (2.86)and 'size of the business' (2.44).

The value of standard deviation of the factor 'earning capacity' (0.998) is the lowest among all the factors determining working capital requirements of manufacturing 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 'seasonal variations' (1.447) is the highest among all the factors determining working capital requirements of manufacturing enterprises in the Valley which indicates that the opinion of the respondents with regard to this factor is less concentrated.

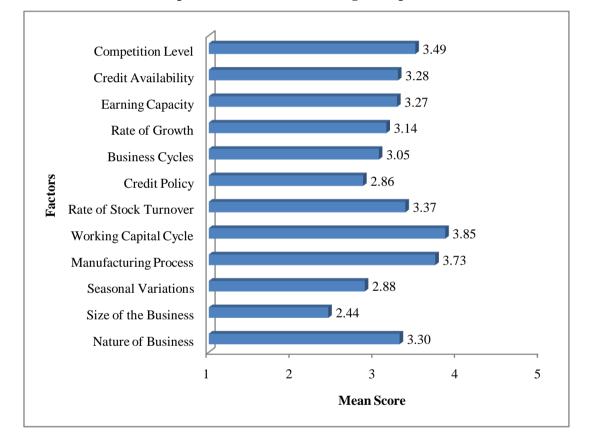


Figure 3.9: Relative Importance of Factors Determining Working Capital Requirements of Manufacturing Enterprises

### 3.13 Relative Importance of Factors Determining Working Capital Requirements of Service Enterprises

Based on the perception of the respondents, the importance of the factors determining working capital requirements of service enterprises in Barak Valley has been identified. Following table exhibits the relative importance of the factors determining working capital requirements of service enterprises in Barak Valley.

Factors	Mean Score	Rank	Standard Deviation	
Nature of Business	3.56	3 <sup>rd</sup>	1.274	
Size of the Business	2.73	7 <sup>th</sup>	1.315	
Seasonal Variations	2.54	8 <sup>th</sup>	1.407	
Manufacturing Process	2.15	11 <sup>th</sup>	1.073	
Working Capital Cycle	2.21	$10^{\text{th}}$	1.304	
Rate of Stock Turnover	1.92	$12^{th}$	1.064	
Credit Policy	2.44	9 <sup>th</sup>	0.998	
Business Cycles	2.98	6 <sup>th</sup>	1.037	
Rate of Growth	3.06	5 <sup>th</sup>	0.958	
Earning Capacity	3.21	$4^{th}$	0.848	
Credit Availability	3.62	$2^{nd}$	1.123	
Competition Level	3.75	1 <sup>st</sup>	1.007	

Table 3.13: Relative Importance of Factors Determining Working CapitalRequirements of Service Enterprises

Source: Field Survey

On the basis of the mean score as is reflected in table 3.13, it is observed that the most important factor determining working capital requirements of service enterprises is the 'competition level' because the mean score (3.75) is the highest among all the factors in the study. Based on the mean score, it is found that the factor 'credit availability' (3.62) is the second most important factor determining working capital requirements of service enterprises in Barak Valley which is followed by the factors 'nature of business' (3.56), 'earning capacity' (3.21), 'rate of growth' (3.06), 'business cycles' (2.98), 'size of the business' (2.73), 'seasonal variations' (2.54), 'credit policy' (2.44), 'working capital cycle' (2.21), 'manufacturing process' (2.15) and 'rate of stock turnover' (1.92).

The value of standard deviation of the factor 'earning capacity' (0.848) is the lowest among all the factors determining working capital requirements of service 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 'seasonal variations' (1.407) is the highest among all the factors determining working capital requirements of service enterprises in the Valley which indicates that the opinion of the respondents with regard to this factor is less concentrated.

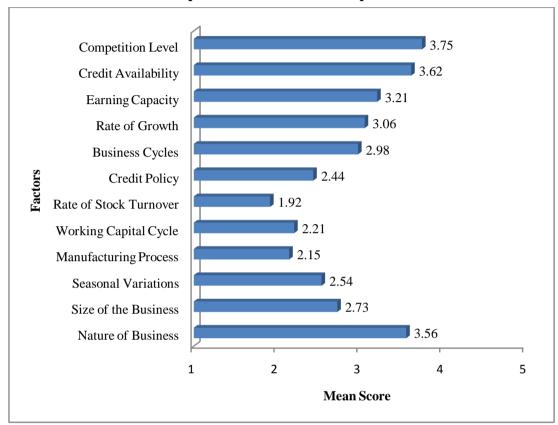


Figure 3.10: Relative Importance of Factors Determining Working Capital Requirements of Service Enterprises

#### **3.14 Statistical Analysis of Relative Importance of Factors Determining Working Capital Requirements of Manufacturing Enterprises and Service Enterprises**

In order to assess the difference in the degree of importance of select factors capable of determining working capital requirements of manufacturing enterprises and service enterprises in Barak Valley, the following hypotheses is formulated:

 $H_04$ : The responses of the owners / managers of manufacturing enterprises and service enterprises do not significantly vary about the degree of importance of select factors capable of determining working capital requirements of the enterprises in Barak Valley.

Factors	Mean Score				
	Manufacturing Enterprises	Service Enterprises	U-value	p- value	Decision
Nature of Business	3.30	3.56	4322.500	0.102	Accepted
Size of the Business	2.44	2.73	4393.500	0.142	Accepted
Seasonal Variations	2.88	2.54	4377.000	0.133	Accepted
Manufacturing Process	3.73	2.15	1780.000	0.000	Rejected
Working Capital Cycle	3.85	2.21	1958.000	0.000	Rejected
Rate of Stock Turnover	3.37	1.92	2086.500	0.000	Rejected
Credit Policy	2.86	2.44	3889.000	0.007	Rejected
Business Cycles	3.05	2.98	4937.000	0.805	Accepted
Rate of Growth	3.14	3.06	4751.000	0.501	Accepted
Earning Capacity	3.27	3.21	4868.000	0.684	Accepted
Credit Availability	3.28	3.62	4310.500	0.097	Accepted
Competition Level	3.49	3.75	4753.000	0.510	Accepted

 Table 3.14: Relative Importance of Factors Determining Working Capital Requirements of Manufacturing Enterprises and Service Enterprises

Source: Field Survey

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 'manufacturing process', 'working capital cycle', 'rate of stock turnover' and 'credit policy' capable of determining working capital requirements of the enterprises in Barak Valley at 5% level of significance.

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