Performance Analysis of Select Textile Mills in Coimbatore District

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Introduction

The textile industry occupies a vital place in Indian economy and contributes substantially to its exports earnings. Textiles exports represent nearly 30% of the country's total exports. It has a high weightage of over 20% in the national production. It provides direct employment to over 15 million persons in the mill, powerloom and handloom sectors. India is the world's second largest producer of textiles after China. It is the world's third largest producer of cotton—after China and the USA—and the second largest cotton consumer after China. The textile industry in India is one of the oldest manufacturing sectors in the country and is currently its largest. The textile industry fulfils a pivotal role in the Indian economy.

Keywords: Textile; Discriminate; Mid Point; Coimbatore.

Statement of the Problem

The textile industry in Coimbatore region has invested Rs 2,000 crore in the past two years. Much of it was triggered by the soft loan package allowed for the textile industry by the Government under the technology upgradation fund scheme. It has pioneered the growth of textile industry in the country and the majority of the population in Coimbatore city depends on the textile industry and its auxiliary industries for their livelihood. So the paper concentrates Textile industry in Coimbatore district.

Review of Literature

Teli.M.D[1] in his article stated the following, Indian textile industry having long enjoyed protection had not paid sufficient attention to quality and competitiveness. However the SWOT analysis indicates that there exists tremendous potential for growth and development of Indian textile industry, provided technological up gradation and earnest efforts to become internationally competitive are committed, with the emergence of GATT, it is high time India takes things very seriously so that the opportunity of gaining major foot-hold in the global textile markets is not slipped-off.

Krishnaveni (1996)[2] analysed the financial performance in terms of financial ratio in ten cotton textile companies in India. She has also used regression models for explaining the earnings before interest and the tax (EBIT) and market price per share.

Syed Zabid Hussain and Habidur Rahman Akon (1997)[3] have analysed the financing of working capital in their case study on Bangladesh textile Mills Corporation. It is found that a large amount of short term financing fixed assets in addition to financing current assets leading to the risk of financial insolvency.

Objectives of the Study

To analyse and compare the performance of the textile companies in Coimbatore district.

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[1]Dr.M.D.Teli, "Intergrating Indian textile industry into world economy" The textile association (India), Mumbai, Dec 1994.

[2]Krishnaveni.M,"A study on the financial performance of selected cotton textile companies in India"1996.

[3]Syed Zabid Hossain and Md. Habiur Rahman Alcon,"Financing of working capital" A case study of Bangladesh Textile mills corporations. Journal of financial management and analysis. Vol.10.No.1, January – June 1997, pp37-43.

Methodology

Data and Sources of Data

The study is based on secondary data. A convenient sample of 8 companies quoted at National stock exchange or Bombay stock exchange has been taken for the purpose of the study. The required data were collected from the capital line plus and other relevant data are collected from journal, magazines, article and websites.

Period of the Study

The study period covers 11 years from 2002-03 to 2012-13 and they are collected from 8 companies. The financial years starts from 1st April to 31st March every year.

Tools of Analysis

For the purpose of this analysis various accounting and statistical techniques have been used. Multiple discriminate analysis was used to classify the companies into 'good' and 'poor'.

The Discriminant Function

Multiple discriminant analysis (MDA) is also termed Discriminant Factor Analysis and Canonical Discriminant Analysis. It adopts a perspective similar to Principal Components Analysis, but PCA and MDA are mathematically different in what they are maximizing. MDA maximizes the difference between values of the dependent, whereas PCA maximizes the variance in all the variables accounted for by the factor. Discriminant analysis technique, researcher may classify individuals or objects into one of two or more mutually exclusive and exhaustive groups on the basis of a set of independent variables and a nominal dependent variable. The discriminant analysis is considered an appropriate technique when the single dependent variable happens to be non-metric and is to be classified an appropriate technique when the single dependent variable happens to be non-metric and is to be classified into two or more groups, depending upon its relationship with several independent variables which all happen to be metric. The objective in discriminant analysis happens to be to predict an objects likelihood of belonging to a particular group based on several independent variables. Incase we classify the dependent variable in more than two groups then we use the name multiple discriminant analysis. In this paper explain that performance of textile companies in Coimbatore district. Using multiple discriminant analysis the companies are divided into two groups that is good performance companies and bad performance companies. Under that discriminant analysis calculating discriminate score and cutoff rate.

Formula for using multiple discriminate analysis:

Z=v1x1+v2x2+…..vnxn

v1v2=Discriminant Co-efficient

x1x2=Independent Variables

Z=Discriminant Score

In that paper reveals that with identification of a set of variables to be used for constructing a model to identify "good performers" and "poor performers" among the eight textile companies in coimbatore district. Ratios are used as variables, to identify the "good" and "poor" performers, in the process of identifying discriminant variables and their discriminant co-efficient.

Financial ratio individually do not contribute much, to identify the performance of textile industry in coimbatore district as a whole. Hence ratio analysis, a financial tool and discriminant analysis, a statistical tool are combined for construction of a model to analyse the performance of the textile companies in coimbatore district.

These ratios are calculated from financial statements. That is balance sheet and profits and loss accounts of textile companies in Coimbatore district for eleven years from 2002-03 to 2012-13. Based on these, ratios have been calculated for all the textile companies and for every year separately and average of the ratios of the textile companies from 2002-03 to 2012-13.

Process of Identification of Good Performer and Poor Performer of Textile Companies in Coimbatore District

The process of identification has been done through a simple test. The average for the twenty five ratios for each company have been arranged in the descending order. All the banks have been classified into two groups, the first four and next four. First four companies are give weight of 2 and the remaining companies are give weight of 1. There by each company are gets weights of either 1 or 2 for each ratio depending upon their position. Then weights are added.

Using multiple discriminant analysis the companies are divided into two groups that is good performance companies and bad performance companies. Under that discriminant analysis calculating discriminate score and cutoff rate.

Table1: Classification of textile companies according to the weights of the ratios.

S.No	Weights	Number of textile companies
1	34	2
2	35	1
3	36	1
4	37	1
5	38	1
6	42	1
7	47	1

To identify the good performers and poor performers median has been used. The textile companies having less than median value are considered poor performers and the textile companies having median value and above are considered good performers. The following formula is used to find the median value:

$$\text{Median} = \frac{N+1}{2} \text{ th item}$$

Table 2: Calculation of Median value

S.No	Weight (x) Scores	No of observation	Cumulative Frequency
1	34	2	2
2	35	1	3
3	36	1	4
4	37	1	5
5	38	1	6
6	42	1	7
7	47	1	8

Thus median

$$\frac{8+1}{2} \text{ th item (i.e) 4.5 th item.}$$

The value of 4.5 th item is 37. Hence if it decided to the textile companies who having less than median value (i.e) 37 as poor performer and the textile companies who having median value and above as good performer.

As per the values, Gangotri textile limited, Amarjothi spinning mills limited, Shiva Texyarn limited, Ambika cotton mills limited are identified as good performer and Super sales India limited, Prime textile limited, Precot mills limited , Super spinning limited are identified as poor performer.

Table 3: Classification of selected textile companies in Coimbatore district

S.No	Good performer	S.No	Poor performer
1	Gangotri textile limited	1	**Super sales India limited**
2	Amarjothi spinning mills limited	2	**Prime textile limited**
3	Shiva Texyarn limited	3	**Precot mills limited**
4	**Ambika cotton mills limited**	4	**Super spinning limited**

Table 4: The corresponding discriminant Co-efficient of Variable

S.No	Variable	Discriminate Co-efficient
1	EBITTOTA[i]	2.767

Thus the discriminant function is

Z=2.767EBITTOTA

Using the calculated discriminant function, the textile companies can be classified into poor and good performers.

Table 5: Table shows the discriminant scores of selected textile companies in Coimbatore district based on average ratio

S.No	Textile companies	Actual group	Discriminant score	Discriminant group
1	GAN	1	1.90652	1
2	AMAR	1	0.93813	1
3	SHIVA	1	1.40434	1
4	AMBI	1	1.51293	1
5	SSAL	2	-0.39896	2
6	PRI	2	-3.07123	2
7	PRE	2	-2.04203	2
8	SSPI	2	-0.24971	2

It is inferred from Table that there is no mis-classification between actual group and discriminant group.

The following 2x2 accuracy matrix explains the classification of actual and discriminant classification.

	B		
		1	2
A	1	CC1	MC1
	2	MC2	CC2

Here A= Actual group classification

B=Discriminated group classification

1= Good Performer

2= Poor Performer

Table 6: The description of accuracy Matrix

S.No	Matrix	Indicator	Nature of Classification
1	1.1(CC1)	Actually classified as 'Good Performer' and also discriminated as 'Good Performer'	**Correct Classification**
2	1.2(MC1)	Actually classified as 'Good Performer' but discriminated as 'Poor Performer'	**Mis Classification**
3	2.1(MC2)	Actually classified as 'Poor Performer' but discriminated as 'Good Performer'	**Mis Classification**
4	**2.2(CC2)**	**Actually classified as 'Poor Performer' and also discriminated as 'Poor Performer'**	**Correct Classification**

Table reveals correct classification and mis classification in each group and in the total number of textile companies in Coimbatore district.

Table 7: Classification of Textile Companies in Coimbatore District

S.No	Types of performance	Correct Classification	Percent Correct	Mis-Classification	Percent Error	Total number of companies
1	Good	4	100	0	0.00	**4**
2	Poor	4	100	0	0.00	**4**
Total		**8**	**100**	**0**	**0.00**	**8**

It is informed from the table that the correctness in classification is 100 per cent.

Mid-Point Method Classification

The textile companies classify into good and poor performance is based on the mid-point of group's centroids. The value of discriminant function for groups

Group 1 (Good Performer)= 1.440

Group 2 (Poor Performer)= -1.440

The mid-point between the groups centroids   1.440 + (-1.440)/2 = 0

This mid-point was used to classify the textile companies into good and poor performance by computing discriminate score for the individual textile company. If the score is less than 0 the textile company is classified as a Poor performer and if it is more than 0, the textile company is classified as Good Performer.

Conclusion

The discriminant analysis has revealed that the Gangotri textile limited, Amarjothi spinning mills limited, Shiva Texyarn limited, Ambika cotton mills limited have their performance was good and other companies that is Super sales India limited, Prime textile limited, Precot mills limited, Super spinning limited have their performance was poor.

[i] EARNING BEFORE INTEREST AND TAX TO TOTAL ASSETS

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