A Case Study on Prediction of Corporate Failure for Scooters India Ltd

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Abstract

Industrial sickness is a cause of long mismanagement, outdated technology, excess human resources, delay in payments, resource utilization & macro economical variables etc.   Failure of industrial unit leads to frustration among investors, youths & affects foreign direct investment.   Financial statements give valuable information about the business.   Therefore early prediction is must for prevention of corporate failure. Early predication of Industrial sickness can be made by using financial ratios & Altman's Z score which may help in decision for revival & rehabilitation.

Keywords:

Altman's Z score, Financial Ratio & Industrial Sickness etc

Introduction

Scooters India Ltd was incorporated in 1972 situated at 16 Km mile stone, South-west of Lucknow, the capital of Uttar Pradesh on NH No 25 and is well connected by road, rail and air transport. Scooters India Ltd was originated from M/s. Innocenti of Italy from which it bought over the plant and machinery, design, documentation & copyright etc. The company had started production in Feb 1975. The company also possesses the world right of the trade name LAMBRETTA / LAMBRO scooters in India. The company incurred losses ever since its inception so much so that at one point of time (in 1989-90).

Board of Industrial Finance & Reconstruction had received application for revival from sickness to Scooters India Ltd vides case number 504/1992 & declared no longer sick up to last order dated July 2000. BIFR had been sanctioned the revival scheme in the year 1996 to Scooters India Ltd. Again BIFR received application for sickness from the company vide case number 501/2010 & declared as sick unit by last order dated Jan 2014.

Importance of The Study

Late Pandit Jawar lal Nehru more emphasized on the heavy industry of building the sound economy.   No doubt, India had made tremendous growth in the industrial sector. Due to various causes, some SME's &

Heavy units went into sickness and closure. If early prediction can be made for the corporate failure, an industrial unit can be saved by revival & rehabilitation schemes. There was a time most of people depended on the agriculture but due to industrialization, more workforce burden on the industrial units. Industrial sickness can lead unemployment in the society. So to check the sickness it is necessary to develop early warning signals. The study can be helpful for similar type of companies to detect sickness at incipient stage with help of the selected models and to initiate corrective actions as early as possible. This may help in reducing sickness and closure in India

Objective of The Study

A) To identifying the tools for predicting corporate failure of Scooters India Ltd.

B) To test the widely used models for prediction of corporate failure for the Scooters India ltd.

Review of Literature

Subhash Chander Verma, 2013, (A Study of Factors Responsible for Growth, Sickness and Mortality of SME's (Boughtout Parts and Ancillary) in MIDC, Pimpri-Chinchwad) found in his studies that Indian Pricing System no competitive in the global market, because of economies of scale. It is a paradox that most industrialized countries like USA, Japan, China & Italy are looking forward to doing superior business due to the marketing opportunity in India, while our own product not getting good market and not having fast expansion due to known competitive prices. This is a lesson for SME's. In the similar lines the employees from the SME's haves shown the great concern about availability of fixed capital(60%),working capital (65%).60% SME's are facing longer lead time to obtain the raw material, 60% SME's are facing problem of scarcity of raw material & 70% are facing storage problems. Similarly there are problems in the area of marketing, trained manpower, lack of trade fairs & volume discounts. Very interestingly it is also revealed that the lack of marketing competency among SME's & staff affected by the welfare & social security. [1]

Dr. Krishn Awatar Goyal, (2013) "An Empirical Case Study on Prediction of Corporate Failure in The Selected Industrial Unit in India" the researcher calculate the five years ratio of a company for calculating Z score for applying the Altman's model. In which a year shows least Z score represent more sickness. According to the researcher Altman model is simple tool for predicting the corporate failure, Investor can simply check the company positing applying this model. Beside Z score gives an indicator about the financial health of a company. According to the author regular check is necessary for corporate failure or predict. [2]

Mr. Jadhav Mangesh Dagadu (2012-13) conducts as for

sickness in small scale industries in Aurangabad District. This study was field survey; where from 50 Samples are selected from the Industrial areas of Aurangabad District for the study. The research had objective to find out the reasons for Industrial sickness in the small scale industries in Aurangabad. The researcher find out internal causes of sickness, external problems relating to banks & other financial institutions, sickness made by government due to delayed in payment of bill, red-tapism, changing governmental policies, external problems; for raw material, power, marketing, labor, finance & other natural causes. [3]

Fayza Chouhary, 2012, "Empirical Study on Reasons of Industrial Sickness-With Reference to Jammu & Kashmir Industries Ltd", the researcher found that financial reasons are the most important reasons considered by the respondents of industrial sickness and another chief reason for the sickness of the industry is the managerial inability i.e. not able to cope up with the dynamism occurring in the modern day market. Rest factors which influence the sickness in the industry are marketing problems and the corporate planning problems. However the impact of obsolete technology is least on these units in comparison to the other factors. The difference in the opinion exists between the employees of these units in some of the aspects like marketing problems, managerial inability, HR problems, changes acts an important reason for sickness. The researcher also concluded that there exist some variation between the views and opinion of employees of these units regarding the reasons of sickness. Overall the researcher concluded that the reason of industrial sickness in this PSU is mainly due to the internal failure thus a suitable revival strategy is to bring in the desire changes in the managerial ability & the Human Resources of the industry. [4]

Magnus Forsberg och Nicklas Mattsson (2006), "From Business Success to Failure- A study of Swedish gazelle companies and their use of management accounting" the researcher study showed a higher growth rate could be linked to a higher occurrence of bankruptcy. The outcome of the survey does not support the belief that hypothesis of a strong correlation between rapid growth and bankruptcy. Half of the survey group acknowledged that rapid growth had some negative influence on business, but only one respondent ranked it as the most influential factor of business failure. The conclusion here is that a larger survey group is needed to conduct a proper analysis regarding these initial findings. The researcher had taken the internal & external factors of business failure. The study examine possible reasons for why some of these previously successful companies gone bankrupt and it management accounting information played a role in the bankruptcy. A quantitative approach used to examine the internal & external factors of business failure. [5]

Altman (1968) made a significant role in the area of business bankruptcy prediction by constructing a model known as Z score. The researcher collected necessary data relating to bankrupt and non bankrupt firms and establishing linear combination to derive a discriminate function for group separation. The researcher applied statistical technique known as multiple discriminate analyses that evolved a set of discriminate coefficient which when applied to actual ratios formed mutual exclusive grouping. The discriminant functions as follows:

$Z=V_1X_1+V_2X_2+\ldots\ldots\ldots\ldots=V_nX_n.$ Where Z=overall index, $V_1V_2\ldots.V_n$ are discriminate coefficient, $X_1X_2\ldots..X_n$ are independent variables i.e. ratios.

Altman used matching pair samples of 33 bankrupt with 33 non bankrupt manufacturing companies. The researcher collected data from Moody's industrial manual & selected five year before the bankrupt annual reports of selected manufacturing companies for calculation of liquidity, profitability, leverage, solvency & activity ratio for the prediction. [6]

Research Hypothesis

H1: Corporate failure can be predicted with help of statistical tools and Altman's model a strong model for prediction of corporate failure

Ho: Altman model is not significant model for prediction of corporate failure.

To analyze the performance of Scooters India Ltd, the researchers adopt ratio technique & Altman's Z score. Altman's used methodology called as Multiple Discriminate Analysis (MDA) for predicting the relationship of more independent variables. Seven years financial ratios were used to before the sickness of Scooters India Ltd for predicting the corporate failure.

$Z=1.2X_1+1.4X_2+3.3X_3+0.6X_4+.999X_5$

Note:

X_1= Working capital/Total Assets

X_2=Retained Earnings/Total Assets

X_3=EBIT/Total Assets

X_4=Market Value of Equity/Book Value of Total Debt

X_5=Sales/Total Assets

If Z score Above 2.99 will be indicate Good Health of the company.

Score between 1.81 to 2.99 indicate to Gray Zone

Score below 1.81 score stands of probable failure of the company.

Table :1 Showing calculation of Various Ratios of cooters India Ltd

Scooters India Ltd (Ratio Analysis)							
X1 (Working Capital/Total Assets)							
Years	2009	2008	2007	2006	2005	2004	2003
Total Current Assets	24.84	45.62	58.15	73.89	54.7	50.51	52.39
Total Fixed Assets	-2.94	24.72	45.59	65.49	59.68	56.25	232.38
Total Assets	21.9	70.34	103.74	139.38	114.38	106.76	284.77
Working Capital	8.7	0	0.08	0	9.73	8.7	0.28
Ratio	0.3973	0.0000	0.0008	0.0000	0.0851	0.0815	0.0010
X2 (Retained Earning/Total Assets)							
Years	2009	2008	2007	2006	2005	2004	2003
Retained Earning	-56.42	-28.76	-6.29	16.21	14.65	13.26	189.29
Total Assets	21.9	70.34	103.74	139.38	114.38	106.76	284.77
Ratio	-2.5763	-0.4089	-0.0606	0.1163	0.1281	0.1242	0.6647
X3 (Earning Before Interest & Tax/ Total Assets)							
Years	2009	2008	2007	2006	2005	2004	2003
EBIT	-22.49	-16.4	-4.35	5.27	3.23	4.85	5.79
Total Assets	21.9	70.34	103.74	139.38	114.38	106.76	284.77
Ratio	-1.0269	-0.2332	-0.0419	0.0378	0.0282	0.0454	0.0203
X4 (Market Value of Equity Shares/Book Value of Total Debt)							
Years	2009	2008	2007	2006	2005	2004	2003
Market Value of Equity Shares	42.99	42.99	42.99	42.99	42.99	42.99	42.99
Book Value of Total Debt	24.23	23.19	27.94	39.42	23.73	27.28	29.02
Ratio	1.7742	1.8538	1.5387	1.0906	1.8116	1.5759	1.4814
X5 (Sales/Total Assets)							
Year	2009	2008	2007	2006	2005	2004	2003
Sales	138.22	154.49	193.78	169.93	144.15	160.14	148.6
Total Assets	21.9	70.34	103.74	139.38	114.38	106.76	284.77
Ratio	6.3114	2.1963	1.8679	1.2192	1.2603	1.5000	0.5218

Source: Calculated financial ratio from published financial statement of Scooters India Ltd. .on the website							
Compilation of Selected Ratios:							
Ratios\Years	2009	2008	2007	2006	2005	2004	2003
X1	0.3973	0.0000	0.0008	0.0000	0.0851	0.0815	0.0010
X2	-2.5763	-0.4089	-0.0606	0.1163	0.1281	0.1242	0.6647
X3	-1.0269	-0.2332	-0.0419	0.0378	0.0282	0.0454	0.0203
X4	1.7742	1.8538	1.5387	1.0906	1.8116	1.5759	1.4814
X5	6.3114	2.1963	1.8679	1.2192	1.2603	1.5000	0.5218
z Score	0.8507	1.9646	2.5669	2.1599	2.7206	2.8656	2.4090
Source: compiled from the published Financial statement of the company and calculated by the Researcher							

Source: compiled from the published Financial statement of the company and calculated by the Researcher

Table:2

Showing calculated values of Z score of Altman's Model

Year	2009	2008	2007	2006	2005	2004	2003
Z Score	0.8507	1.9646	2.5669	2.1599	2.7206	2.8656	2.4090
Probable Indication	Failure Zone	Gray Zone	Gray Zone	Gray Zone	Gray Zone	Gray Zone	Gray Zone
Average Score	0.1215						

Source: Value calculated by the Researcher

Conclusion

The above calculation & review of literature for prediction of corporate failure shows Altman's Model as good tool of for prediction. The table shows that Altman's model is giving signal of sickness five years prior to sickness. The Z score value is below 2.99. If the remedial actions would have been taken since it leaves signals, the revival would be easier. The study also has scope for further research on corporate failure due to labor cost, technology & other aspect of the corporate failure of Scooter India Ltd.

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