A STUDY ON INDUSTRIAL SICKNESS ANALYSIS WITH THE REFERENCE TO SIRPUR PAPER MILL LTD.

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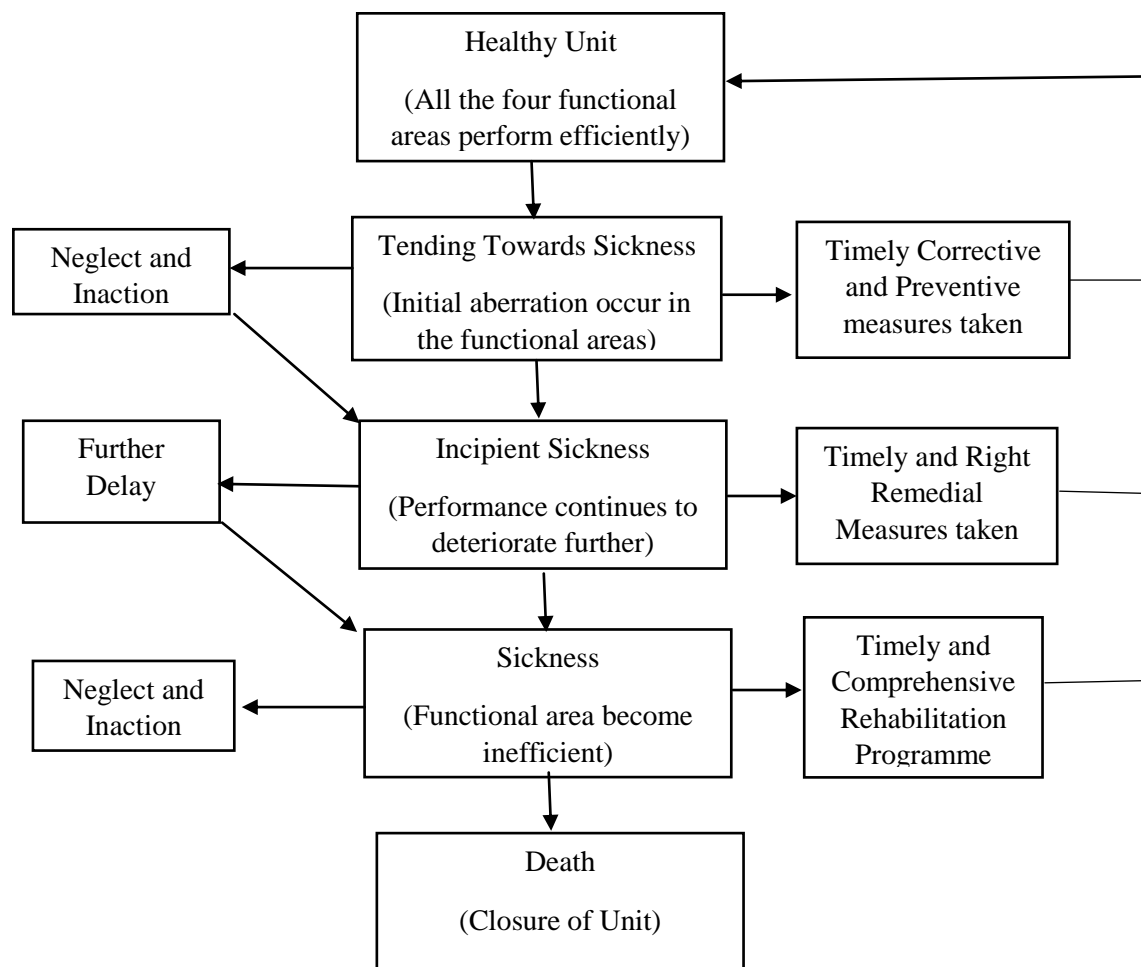
ABSTRACT

Business organizations are set up with a purpose of create value to the nation. This facilitates the organizations to generate revenue to support all its stakeholders. All companies try hard in the competitive environment to get success. But some companies are unable to generate revenues for its survival. It is sure that organizations cannot survive without earnings and this inability to generate revenues would lead to sickness. To remove sickness in companies the Government of India established Board of Industrial and Financial Restructuring (BIFR) 1987. As a legal bodyit has been receiving many applications from various companies to declare them as sick. In order to remove sickness in the companies, Identification of level of sickness as well as which factor is more significant among all factors influence the profitability position of the company is very important for the revival of the sick companies. So an attempt has made in this paper to identify the stage of sickness and major influencing factors of industrial sickness with the reference to Sirpur Paper Mill Ltd, KomaramBheemDistrict in Telangana State.

Key words:Analysis, Economy,Industrial Sickness, Profits, Revenue.

1. INTRODUCTION

Industrial unit is termed as sick when it is unhealthy and it is in financial distress on a continuous basis. According to the Goswami Committee (1993), some of the signals of ill business health are when a unit is performing systematically worse than the average, failing to cover its fixed costs and frequently reneging on the debt payment obligations. In India, Sickness has spread all the units irrespective of big, medium or small in both private and public sector. Significantly it is a major areas of concern due to its implications for the entire economy besides of course it is being a negative indicator of the health and efficiency of the industrial sector (V.K. Vasal, 1998). The present policies of the government is unable to cure the Industrial sickness problem under which the number of sick companies has grown at a higher rate every year. Any country is unable to

afford growing unemployment with a large number of sick units in the private and public sector in a long time. So it is need to analyze the issues concerning sickness of a company for revival and rehabilitation. Sickness means 'disease or act of being ill'. Sickness can be defined as whose accounts are systematically irregular and required to study to evolve a nursing program and a close to follow up. Companies act 2002 (amendment) mentioned that sick industrial company means an industrial company which has accumulated losses in any financial year equal to 50% or more of its average net worth during four years immediately preceding such financial year. In order to break these adverse effects, proper analysis is required at micro level in each company because industrial sickness can be divided into various stages. To cure this problem, identification of the level of sickness is very important.

FIGURE: I STAGES OF SICKNESS

Source: Management and Monitoring of Industrial Sickness, S.S Srivastava and R.A Yadav

Industrial sickness may not happened all of sudden in a company. It is a gradual process with various stages which nearly take many year to decline the health of a unit. If sickness continuous for a long period it become chronic (Bidani&Mitra). An understanding of stages of sickness according to the figure 1 can support timely detection and corrective action. If the problem is detected at an early stage, corrective actions can be taken very easily and effectively otherwise the company would be closed.

II. COMPANY PROFILE:

Sirpur Paper Mill Limited was established in 1938 as an integrated paper mill under the control of Hyderabad Construction Company Ltd. In 1953, the management was taken by Birla Brothers. The total capacity of the company is 83,550 tons per annum. White paper, printing paper, bank ledgers, Indian account book paper, imitation art, imitation laid craft, type writing paper, duplicating paper, wrapping papers, art paper and bond paper. It providesmore than 3944 direct employment opportunities. The company got losses from 2008-09 to 2013-14 continuously which is huge burden to the company because of increasing in raw material cost and unavailability of reliable power as the major reasons that impacted the profitability of the company. Board of Industrial Finance & Reconstruction has received application for revival from sickness of Sirpur Paper Mill Limited vides case number 30/2015. According to BIFR Report, the audited balance sheet of the company as on 31st March, 2014 its net worth was reported to be Rs. 17522.55 lakhs and the entire net worth was claimed to have been fully eroded on account of accumulated losses of Rs. 20361.30 lakhs

III. REVIEW OF EXISTING LITERATURE:

JR Dikshit and PC Basak (2013-14) mentioned that sickness in India Industries are growing every year. Number of cases registered as sick with BIFR has been increase these days. Sickness in Textile, Paper, Chemicals, Food Processing Mechanical and Metallurgical Industries are more in India. The severity of the sickness of the unit may vary with different industries. AMD. Farmanulla& C. Rama Devi et al (2016) explained that many traditional and modern industries are being affected by industrial sickness. Globalization creates internal and external competition to the domestic companies. This competition reduces demand and growth opportunities for all small, medium and large scale companies. Durgaprasad N & Dr. G. Sunitha(2016) mentioned that industrial sickness is huge in India based on various reports from RBI and Ministry of Commerce & Industry as well as BIFR. Entrepreneurial incompetence, Financial Mismanagement, wrong demand forecasting, defective plant and machinery, poor employee welfare measure, imperfect production schedules are the internal reasons of industrial sickness. Dr. Navneeta Singh (2011) said that industrial sickness is an organic process which has four stages includes healthy stage, tending towards sick, incipient sickness, final stage.

Various causes prevailing for industrial sickness which are called internal, external and mixture of both internal and external reasons. FayzaChowdary (2012) analyzed the reasons of Industrial sickness with reference to Jammu & Kashmir Ltd in this study. Employees view about the important reasons of sickness has gather

through personal interview. Production problems, financial barriers, managerial inability, defective technology, lack of marketing promotion activities, poor industrial relations leads to companies became sick. Dr. K.A Goyalet. al. (2012) explained that various internal and external reasons influence the performance of the company's profitability position. External factors like government policies, regular power cuts, marketing condition, non-availability of financial resources for operations, erratic supply of inputs influence the profitability level of the company. Its shows adverse effect on banks and resources will be wasted as well as it shows negative impact on employment opportunities.A.K.M SolaymanHoque (2014) viewed that ratios are one of the important tool for financial analysis.It helps to identify the strengths and weakness of firm and current financial condition can be determined. Financial health of a company can be determined through multiple discriminant analysis. Ratios are applied in this mathematical function to determine the level of sickness. From the above literature review it was proved that internal and external factors are the reasons of sickness. Identification of sickness in the initial stage is very important. But most of the people are not aware about the methods to identify the stages of industrial sickness. As well as identification of factors which show significance effect on sickness also very important to revival.

IV. OBJECTIVES OF THE STUDY:

➢ To ascertain the level of industrial sickness in selected Sirpur Paper Mills Limited.

➢ To identify the major influencing factors that impact industrial sickness of Sirpur Paper Mills Limited.

V. RESEARCH METHODOLOGY:

The present study is explained the analysis of financial health of Sirpur Paper Mills Ltd. This entire study is based on secondary data. It was collected from Sirpur Paper Mill company website, data base web sites like capital line, money control and various journals, RBI Reports and books on Industrial sickness etc. The period of study is from 2004-05 to 2013-14. Altman's model has been adopted to analyze the level of industrial sickness as well as multiple regression analysis is used to know which factors are most significant on company's sickness.

VI. ANALYSIS:

Discriminate Analysis techniques is used to calculate bankruptcy ratio. It uses the Z value to represent overall index of corporate financial health. The formula is

$$Z\ Score\ Model\ Financial\ Health = 1.2\,X_1 + 1.4\,X_2 + 3.3\,X_3 + 0.6\,X_4 + 1.0\,X_5$$

Where X_1 represent working capital to total assets

X_2 = Retained earnings to Total Assets

X_3 = EBIT to Total Assets

X_4 = Market Value of Equity to Total Outside funds

X_5= Net Sales to Total Assets

If the Z score is above 3, the company is too healthy and the score is in between 2.7 to 2.9 it is considered as tending towards sickness. When the score is in between 1.8 to 2.7 it is called incipient sickness and if it is below 1.8, it is considered as sick company. It can be viewed in figure 1. Various ratios are calculated from the annual reports of Sirpur Paper Mill ltd. And applied in the mathematical function to the Z score of the company. It is as follows.

TABLE NO: I CALCULATIONS FOR VARIOUS RATIOS USED IN ALTMAN'S SCORE MODEL FOR SIRPUR PAPER MILLS LIMITED.

Year	X_1	X_2	X_3	X_4	X_5
2004-05	0.107302	0.034993	0.078716	1.13013	0.825222
2005-06	0.067777	0.028272	0.063714	0.83602	0.677368
2006-07	0.037909	0.014809	0.042034	0.538875	0.498907
2007-08	-0.01267	0.049553	0.042835	0.451848	0.454882
2008-09	0.042306	0	0.05553	0.262818	0.624601
2009-10	0.05635	0	0.043665	0.258103	0.624958
2010-11	0.103913	0	0.030036	0.318432	0.660489
2011-12	0.155302	0	0.035345	0.243099	0.695287
2012-13	0.105414	0	-0.1152	0.170109	0.705438
2013-14	0.053452	0	-0.09628	0.087271	0.946751

Source: Author Analysis

TABLE NO: II STATEMENTS SHOWING THE Z SCORE HEALTH ZONE FOR THE SIRPUR PAPER MILL LTD.

Year	Z score for Sirpur Paper Mill Ltd
2004-05	1.932562
2005-06	1.503375
2006-07	1.022181
2007-08	0.916968
2008-09	1.010064
2009-10	0.985283
2010-11	1.068759
2011-12	1.137193
2012-13	0.546792
2013-14	0.736077
Total	**10.85925**
Avg.	**1.085925**

TABLE:III FINAL RESULT OF ALTMAN'S Z SCORE

SUGAR COMPANY	Z SCORE MODEL FINANCIAL HEALTH	INFERENCE
Sirpur Paper Mill Limited	1.089	Failure certain. Financial embarrassment is very high

As per above result it is clear that the Z score value is 1.089 which is below of 1.80. It is in the fourth stage represents in danger level. The financial health of the company is worst position and failure is certain to predict. This study is helpful for all the stakeholders of the company. It is clearly mentioned in the figure 2 about the failure position of the Sirpur Paper Mill Ltd.

Figure: II Z score of Sirpur Paper Mill Limited
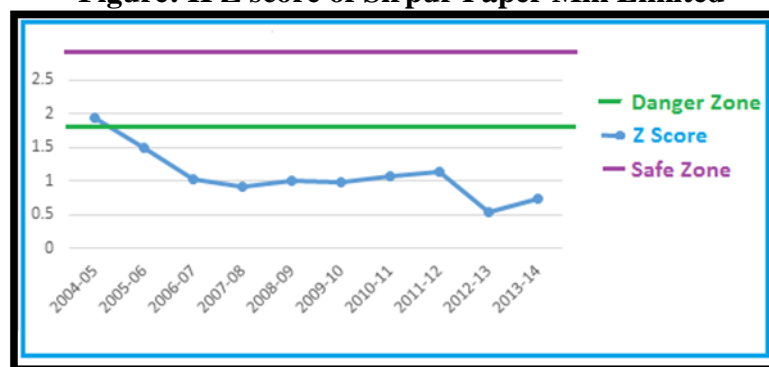
VII. CAUSES OF INDUSTRIAL SICKNESS:

The financial and profitability position of a company will be based on sales, equity, assets and other important financial facts. Many empirical studies including Lawrence (1978), Clair (1987) and Hunder and Srinivasan (1990) have provided empirical evidence that shows Return on Total Assets is an indicator for company's ability to generate profit. It can be calculated Net Income divided by Total Assets. It has taken as a dependent variable in the valuation of company performance in out study. The Primary purpose of this analysis is to examine the factors which influence the sickness of Sirpur Paper Mill Ltd.

Factors are identified for this study for the purpose of applying multivariate techniques, the ratio of (Y) Return on Total Assets is taken as dependent variable and the remaining twenty four variable are (X_1) Debt-Equity Ratio, (X_2) Long term debt to Equity (X_3) Quick Ratio (X_4) Current Ratio (X_5) Working Capital to Total Asset Ratio (X_6) Fixed Assets Turnover Ratio (X_7) Inventory Turnover Ratio (X_8) Debtors Turnover (X_9) Total Assets Turnover (X_{10}) Interest Cover Ratio (X_{11}) Price Earnings Ratio (X_{12}) Economic Value/EBIDTA (X_{13})Dividend Per Share (X_{14}) Earnings Per Share (X_{15}) Market Capitalization /Sales (X_{16})PBIDT/Sales Ratio (X_{17}) Sales/Net Assets Ratio (X_{18}) Profit After Tax/Profit Before Interest & Depreciation and Taxes Ratio (X_{19}) Net Assets/Net Worth Ratio (X_{20}) ROC / Net Worth Ratio (X_{21}) Operating Profit Ratio (X_{22}) Return on Capital Employed (X_{23}) APATM(After Tax Profit Margin)

TABLE IV: MULTIPLE REGRESSION ANALYSIS OF THE SELECTED VARIABLES WITH THE RATIO OF RETURN ON TOTAL ASSETS OF SIRPUR PAPER LTD

Ratio ID	Multiple Regression Co-efficient	T Value	p-value
Group-1			
X_1	-22.53	-1.60	0.153
X_2	25.33	1.54	0.165
Group-2			
X_3	-102.27	-0.846	0.429
X_4	-52.52	-2.042	0.087
X_5	369.02	1.042	0.337
Group-3			
X_6	-12.27	-0.592	0.585
X_7	1.772	3.234	0.031
X_8	-1.21	-1.488	0.210
X_9	-8.25	-0.692	0.526
X_{10}	4.958	6.705	0.002
Group-4			
X_{11}	-0.007	-0.007	0.994
X_{12}	1.913	1.985	0.118
X_{13}	-1.074	-0.394	0.713
X_{14}	0.506	0.653	0.549
X_{15}	-19.96	-0.407	0.704
Group-5			
X_{16}	-2.157	-2.854	0.214
X_{17}	0.886	0.371	0.773
X_{18}	-0.003	-0.523	0.693
X_{19}	0.093	0.710	0.606
X_{20}	-0.02	-0.370	0.774
X_{21}	2.233	2.930	0.209
X_{22}	0.062	0.633	0.640
X_{23}	0.408	4.214	0.148

Significant at *5%, Source: Computed

TABLE V: ANOVA

Groups	Sum of Squares	F Static	P Value
Group-1	322.4455804	5.309838409	0.039523041
Group-2	297.8378225	2.511820423	0.155367453
Group-3	518.3568629	24.93608296	0.004096759
Group-4	460.6150335	4.954730053	0.073107576
Group-5	534.9017389	786.0548492	0.027578654

From the above empirical study of Sirpur Paper Mill Limited, it is observed that inventory turnover ratio and interest coverage ratios are having significant impact on Return on Assets where inventory turnover ratio with co-efficient of 1.7724 shows positive impact at 5% (0.0031) significant level and Interest coverage ratio with co-efficient of 4.9581 shows positive impact at 5% (0.0025) significant level. The presented values indicate that these two variables are individually contribute significantly to variations in the ratio of return on total assets

when influence of other variables are insignificant. In connection with this the R^2 value of the total ratios is 79.36. Even overall ANOVA results of p values reveals that the model is significantexcept Group-2(10% Significant Level). It consists of liquidity ratios and overall ANOVA results (p = 0.1553) are not significant for group-2, hence the model is not significant.

VIII. CONCLUSION:

Sirpur Paper Mill Limitedhas been got losses from 2008-09 to 2013-14 continuously. It was unable to meet minimum working capital requirements in last few years. To know the solvency position of the company Altman's Z score test has been conducted. Based on the test result we can conclude that it is in a solvency position. Majorly two factors are influencing the profitability position of the company. It was found with the help of financial information of the company through multiple regression analysis. If the company focus more on two factors which shows significant impact on the sickness of the company it would be better for the company to come out of troubles.

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