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AN ANALYSIS OF FINANCIAL DISTRESS CONDITION OF PHARMACEUTICALS INDUSTRY IN BANGLADESH

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Abstract

Financial distress condition is one of the important factors for determining the market value of the firms. Investors always wanted to know the extent to which the firm is financially solvent before making investment. In this connection this paper simply introduces the financial distress condition of pharmaceuticals industry in Bangladesh. The study analyses the financial distress conditions of the pharmaceuticals industry in Bangladesh. The study includes 10 samples companies among the numbers of Pharmaceuticals Company in Bangladesh economy. The convenient random sampling method was used to take the samples from the population. The data source for this article was mainly secondary source. The Altman's Z score model was used to determine the financial distress condition of the selected companies. The result of the Altman's model Show that, Among the well performing companies Renetta pharmacy top of the list consisting their respective Z score values of (5.13) for 2018 and (4.46) for 2017 which is much better than the standard value (2.99). The company found to be financially healthy because Altman's suggest the companies having Z score above 2.99 are said to be financially viable. In case of Mid-level performing company Beximco pharmacy consisting their respective Z-score values of (2.05) for 2018 and (1.89) for 2017 which is found near about to 1.81; the company is seems to be under financial risk. In case of Poor standard firms, Global pharmacy, ACME pharmacy, BEACON pharmacy financial condition are in poor standard. Their respective Z-score values for the companies are Global pharmacy (1.03) in 2018 and (1.10) in 2017 which is less than 1.81, so the companies are classified as financially unhealthy.

INTRODUCTION

Background of the study

Financial distress is a condition in which a company or individual cannot generate revenue or income because it is unable to meet or cannot pay its financial obligations. This is generally due to high fixed costs, illiquid assets, or revenues sensitive to economic downturns. Ignoring the signs of financial distress can be devastating for a company. There may come a time when severe financial distress cannot be remedied because the company or individual's obligations are too high and cannot be paid, and there is just not enough revenue to offset the debt. If this happens, bankruptcy may be the only option.

If a company or individual experiences a period when it cannot pay its bills and other obligations by their due date, it is likely experiencing financial distress. Some of these expenses may include (expensive) financing, opportunity costs of projects, and employees who aren't productive. Employees of a distressed firm usually have lower morale and higher stress caused by the increased chance of bankruptcy, which could force them out of their jobs.

Companies under financial distress may find it difficult to secure financing. They may also find their market value dropping significantly, customers cutting back orders, and suppliers changing their terms of delivery.

Looking at a company's financial statement can help investors and others determine its financial health. For example, negative cash flow under the cash flow statements are one indicator of financial distress. This could be caused by a big difference between cash payments and receivables, high interest payments, and a drop in working capital.

OBJECTIVES OF THE STUDY

a) To analyze the financial condition of the selected major units of pharmaceuticals industry in Bangladesh.
b) To determine the financial distress condition of the selected pharmaceuticals companies in Bangladesh.
c) To recommend some suggestions for overcoming financial distress condition of companies in Bangladesh.

REVIEW OF RELATED LITERATURE

According to Altman (1968), failure, insolvency, default and bankruptcy are four different terms and they all mean that a business is in distress. Any sort of financial distress is an unfortunate situation for a business firm. Bankruptcy may be the worst case scenario for certain companies, but in the case of the business' stakeholders, default also can cause problems. Shareholders will lose their capital, depositors will lose their deposit, businesses will not get capital for the investment & government will not be able collect tax.
Altman (1983) distinguished between stock-based insolvency and flow-based insolvency, all of which usually lead to financial distress. The former occurs when a firm has negative net worth causing the value of its assets to be less than the value of its debts while the later occurs when operating cash flow is insufficient to meet current obligations.
A study conducted by Chaitanya (2005) measured financial distress of IDBI using Altman Z-Score Model. The model expressed that the financial performance of the bank was not satisfactory and indicated possible bankruptcy.

Ooghe&Prijcker (2008) identified the causes of corporate failures or bankruptcy to be the characteristics of management, for example inadequate management qualities and skills, and poor corporate policy and strategies. It is the responsibility of the financial manager of the company to measure the financial performance and also to forecast the financial situation of the company.

Gilbert et al. (1990) gave the 3 key reasons for financial distress. They argued that the principal factors influencing the probability of bankruptcy, ceteris Paribas, could be associated with the (1) Asset mix (2) financial structure (3) corporate governance.
Platt and Platt (2002) have defined a financially distressed firm as one that reports either several years of negative net operating income, suspension of dividend payments, or major restructuring or layoffs.

Operational efficiency problems are typically captured with negative profit and poor corporate performance (Gilbert et al., 1990; 11uropean and Mcewen, 2001).

Problems with the financing structure and liquidity adequacy are frequently explained by low cash-flow levels that are insufficient to cover maturing liabilities and by low interest coverage ratios (Whitaker, 1999; Purnanandam, 2005).
The classification belonging to the first category typically refers to economic bankruptcy, while the second involves financial bankruptcy (Hotchkiss, 1995).
Similar to our concept, a number of studies in the literature have argued that bankruptcy is an organic part of a longer process and a possible outcome of financial distress (Gordon, 1971; 11uropean, 1988).

As numerous authors have pointed out, financial distress often remains below the surface and it is only upon the declaration of bankruptcy that it becomes obvious and evident for all (Pindado and Rodrigues, 2005).

Obviously, as several authors have noted, financial distress does not always go hand in hand with bankruptcy. A company may avoid bankruptcy even in the face of financial distress (through, among other things, asset sales, downsizing, closure of loss-making operations) (Hashi, 1997), while unforeseen exogenous shocks (natural disaster, litigations, global economic/financial crisis) may culminate in a sudden, unexpected bankruptcy situation even if the company was not previously facing financial distress (Meyer, 1982).

One of these trends attempts to explore whether the application of mathematical/ statistical methods improves the accuracy of bankruptcy prediction models. The first Hungarian bankruptcy prediction model is founded on the application of discriminant analysis and logistic regression analysis based on indicators derived from 1990 and 1991 balance sheet and profit and loss account data (Virag – Hajdu, 1996; Hajdu – Virag, 2001).

MATERIALS AND METHOD

This research is type of descriptive research. Descriptive research is used to describe characteristics of a population or phenomenon being studied.
I have used data mainly selected from secondary sources and the sources like that collected annual report from websites and review of the organization.

Total number of pharmaceuticals companies' in Bangladesh is my research population of the study.
The research samples are 10 promising pharmaceuticals companies in Bangladesh. Like that
• Square pharmacy • Beximco pharmacy • Global heavy pharmacy • Renata pharmacy • Linde pharmacy • ACME pharmacy • BEACON pharmacy • IBN SINA pharmacy • Orion pharmacy • Silva pharmacy
Sampling technique is non-probability convenience random sampling method has been used in this study.
MS Word and MS Excel are the main tools. For conducting my research on financial distress condition of pharmaceuticals industry in Bangladesh I have used Altman's Z score model to determine the financial health of the concerned firms.

Methods of determining financial distress:

The proposed study conducted under the Altman's model to determine the financial distress of the target companies. The model is described below:

Altman Z-score model z=1.2x1+1.4x2+3.3x3+0.6x4+1.0x5

X1 = (current assets – current liabilities)/total assets

X2= (Retained earnings/total assets)

X3= (EBIT/total assets)

X4= (Book value of the equity /Total liabilities)

X5= (Net sales/ Total assets)

X1= Working capital / total asset Working capital is a common measure of a company's liquidity, efficiency, and overall health. Total assets show the overall assets of banks including both short and long-term. The WC/TA ratio is a sign of a bank's liquidity and ability to meet creditor's short-term obligations.

X2 =Retained earnings / total assets Retained earnings are the amount carried out to the coming years from net earnings. Accumulated Retained Earnings to Total Asset (TA) is the ratio that measures the accumulated profitability of the banks.

X3 =Operating earnings / total assets Earnings before Interest and Taxes (EBIT) show the operating profit of banks. EBIT to Total Asset measures the operating efficiency of an organization. The value of this ratio indicates the capacity of the firm to generate satisfactory earnings to pay off its fixed obligation like interest.

X4 =Market value of equity / Total liabilities this is the ratio of Market Value of shareholder's Equity to total liabilities. This ratio indicated the performance of the fair market value of the bank's stock in comparison to the total liabilities. The higher the ratio, the higher the market price of the firm's share is.

X5= Net sales/ Total assets

The sales to total assets ratio measure the ability of a business to generate sales on as small a base of assets as possible. When the ratio is quite high, it implies that management can wring the most possible use out of a small investment in assets. The formula for sales to total assets is to divide net annual sales by the aggregate amount of all assets stated on an organization`s balance sheet.

RESULT AND DISCUSSION

From the calculation we see that the following company performing well in terms of financial distress condition. We can summarize the calculation by differentiating three different level or position of the company. The differentiations are as follows:

Better Company: The companies are classified as better when the Altman's Z score model result is better than the standard value.

Company name:	Financial result (Year-2018)	Financial result (year-2017)
Renata pharmacy	(5.13)	(4.76)
Silva pharmacy	(5.03)	(4.19)
Linde pharmacy	(4.47) (year-2014)	(4.87) (year-2013)
IBN SINA pharmacy	(4.00)	(3.65)
Orion pharmacy	(3.18) (year-2015)	(3.15) (year-2014)
Square pharmacy	(3.31)	(3.47)

From the above results of the different companies we can see that Renetta pharmacy top of the list consisting their respective Z-score values of (5.13) for 2018 and (4.46) for 2017 which is much better than the standard value (2.99). The company found to be financially healthy.
Then Silva pharmacy is 2nd of the list consisting their respective Z-score values of (5.03) for 2018 and (4.19) for 2017 which is much better than the standard value (2.99). The company found to be financially healthy.

Linde pharmacy is 3rd of the list consisting their respective Z-score values of (4.47) for 2014 and (4.87) for 2013 which is much better than the standard value (2.99). The company found to be financially healthy.
IBN SINA pharmacy is 4th of the list consisting their respective Z-score values of (4.00) for 2018 and (3.65) for 2017 which is much better than the standard value (2.99). The company found to be financially healthy.

Then Square pharmacy is 5th of the list consisting their respective Z-score values of (3.31) for 2018 and (3.47) for 2017 which is much better than the standard value (2.99). The company found to be financially healthy.
And Orion pharmacy is 6th of the list consisting their respective Z-score values of (3.18) for 2015 and (3.15) for 2014 which is much better than the standard value (2.99). The company found to be financially healthy.

Medium Company:
The companies are classified as medium in which the z score value is near or slightly above the minimum criteria for determining the financial distress of the company.

Company name:	Financial result (Year-2018)	Financial result (year-2017)
Beximco pharmacy	(2.05)	(1.89)

From the above results of the companies we can see that Beximco pharmacy consisting their respective Z-score values of (2.05) for 2018 and (1.89) for 2017 which is found near about to 1.81; the company is likely to go to bankruptcy soon.

Low Graded Company:
The lower graded companies have the z score value less than 1.81 which indicates that the company are not performing well in terms of liquidity and other operational areas of the business. The summary of the results is tabulated below:

Company name:	Financial result (Year-2018)	Financial result (year-2017)
Global pharmacy	(1.03)	(1.10)
ACME pharmacy	(1.59)	(1.30)
BEACON pharmacy	(1.59)	(1.41)

The result of the above calculations represents that all the companies namely, Global pharmacy, ACME pharmacy, BEACON pharmacy financial condition is in poor standard. Their respecters Z-score values for the companies are Global pharmacy (1.03) in 2018 and (1.10) in 2017 which is less than 1.81, so the company is classified as financially unhealthy.
ACME companies Z-score model result are (1.59) in 2018 and (1.30) in 2017 which is less than 1.81, so the company is also classified as financially unhealthy.
BEACON companies Z-score values are (1.59) in 2018 and (1.41) in 2017 which is less than 1.81, so the company is also classified as financially unhealthy.

RECOMMENDATIONS AND CONCLUSION

Recommendations:

After analyzing the all calculation finally, we can see that 5 companies' financial position is good and other companies' financial position is not satisfactory at all. Healthy companies must be catching up their financial growth and developed their financial position by maintaining the appropriate mix of debt and equity in their capital structure. Beximco pharmaceutical company position is medium level in the financial position. Their financial position Altman's Z-score model result is (2.05) which are found near about to 1.81; The Company is likely to go to bankruptcy soon. So this companies should be doing that grow up their financial position, and maintain the all financial cost to remain in the marketplace.
From the careful investigation of the facts we can summarize the recommendations for all the firms as follows.

• The well performing five companies should capitalize on their financial position they should increase the number of products line or introduce new products to continue the level of growth they have.
• The best performing companies should also have a look at the leverage ratio of the firms.
• The volume of working capital to total asset must be kept in appropriate proportion.
• The distribution of dividend and retained earnings ratio must be appropriate to be financially solvent.
• The operating ratio of income must be enhanced in terms of total investment.
• The volume of sales to total asset ratio must be appropriate.
• The Becon Pharma, Acme Pharma and the global Pharmaceuticals companies must make sure an appropriate portion of capital and debt mix to exist in the market place as well as they should have refocused on their operating profit and dividend decision.

CONCLUSION

Financial distress is a situation when the companies no longer able to fulfill its obligations to the debtor because the company had insufficient funds where total liabilities are greater than total

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assets and cannot achieve the economic objectives of companies that profit. From the discussion it can be concluded that the financial position and operational performance of most of the selected pharmaceuticals were relatively satisfactory. The inefficiency of financial management may be a major cause for such a poor position of the state. This view was also substantiated by using Prof. Altman's z-score model. By applying this model, it is seen that the overall financial position of the sample pharmaceuticals was good and the middle level of bankruptcy except only one pharmaceutical (Beximco pharmacy). And other companies' financial position was so poor. The main reasons attributed to such a situation were reported to be poor market demands, scarcity of raw materials, high competition, vanished quota system, management in attention, lack of realistic goals, strict government regulations, political instability, increased price of raw materials and others, adverse environmental factors etc. In order, to save the pharmaceuticals from total bankruptcy the financial performance of the sample pharmaceuticals should be improved as early as possible. They can overcome this situation by adopting appropriate capital structure policy, prospective dividend policy and ensuring the operational efficiency as a whole.

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Appendix: Model for calculating financial distress of the different company:

Company Name	Ratios	Total
Beximco corporation 2018	working capital to total asset ratio 2018	
	(working capital/ total asset) = (current assets - current liabilities)/ total assets = (10832521567-8096861126)/42165015439	0.064879863
	retained earnings to total asset ratio 2018 (Retained earnings/total assets) = (14631128276/42165015439)	0.346996867
	EBIT to total asset ratio 2018 (EBIT/total assets) = (366165790/42165015439)	0.079833144
	Book value equity to total liabilities ratio 2018 (Book value equity/total liabilities) = (27104389931/42165015439)	0.642817028
	Sales to total asset ratio 2018 (Sales/ total assets) = (17380728002/42165015439)	0.412207319
	Z-score model for Beximco pharmacy for 2018	
Altman Z score model	Z=(1.2x1+1.4x2+3.3x3+0.6x4+1.0x5) =1.2(0.064879863) +1.4(0.346996867) +3.3(0.079833144)+0.6(0.642817028)+1.0(0.412207319)	2.049537125