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# AN EVALUATION OF FINANCIAL HEALTH OF NIGERIAN TEXTILE INDUSTRY ON ALTMAN'S SCALE

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#### **ABSTRACT**

For economic growth to prosper in any give economy, textile industry as one of the manufacturing sector that contributes to the development of any economy needs to be developed and enhanced. The contributions of the sector to both developed and developing economy has proved to be effective. Development of textile industries in developed or even some emerging markets (for example South Africa, Mexico, India, Malaysia etc) has been in the increase. Nigeria being an emerging market needs this sector to develop its economy. Nigerian began its textile industries since before its independence of 1960 with over 140 textiles company before the year 2000 operating in different locations of the country. As at 2001, there were fewer than 20 textiles operating as a result distressed or bankrupt and liquidation for several reasons. Multivariate discriminant analysis was used to evaluate the health of some of the textile companies operating in the country. Population for the study is the six quoted textile industries in Nigerian stock exchange with the sampling size of threehealthy textile industries in the capital market. Edward Altman Z-score model were used for analysis from the secondary data of the company's financial report. These companies were found to be healthy and financially vibrant. The companies report has prepared their account in accordance to internationally acceptable standards (IFRS). Therefore, Government should formulate policies that will encourage patronization of local textile materials as this will increase the rate of turnover in textile industries and should also discourage exportation of textile material into Nigeria.

Keywords: Textile, Industry, Financial health, Corporate failure and Nigeria.

#### INTRODUCTION

Amidst a climate of unprecedented financial crisis and rising interest rates, the finance sector and other stakeholders are scrutinizing the performance of corporate organizations more closely than ever before. The nervous lenders pour over the financial statements looking for any sign of financial distress, so also do by other stakeholders. The search continues for an accurate means of predicting failure before it occurs.

The textile industry in Nigeria is arguably the most endangered sector in the economy. Adeduro, (2009) opined that the textile industry is almost dead and beyond comatose now. \*Corresponding Author www.ijmrr.com 3551

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"At a time, we had almost over 140 textile firms, but now we have just about 45 and out of these, we have less than 20 that are functioning, the functioning ones are below their installed capacity". The rate of distress in Nigerian textile industry has had serious implications for the survival of the Nigerian economy.

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A massive waste of economic resources occurs as a result of corporate failure. The personal costs to those affected are also significant. The impact of such events on investors, shareholders, tax payers, creditors, banks and employees is horrendous. Attempts to evaluate financial health of textile industries may be a useful tool in preventing further collapses.

Aruwan (2009) stated that about 2,500 textile workers have lost their jobs following the closure of only three textile factories: International Textile Industry, First Spinners Limited and Reliance Textile Industry. The contagion effect of bankruptcy spreads outside these parties to the industry in which the company belongs and the financial community once the bankruptcy announcement is made. The failure of the firm also portends harmful effects to the efficient operations of the market (Cripton and Misra, 1999). Cost reductions can also be achieved if financially distressed companies are identified on time before failure occurs.

Scribe, (2007) opined that the revival of the dying and crippled textile sector and the dire need to preserve employable jobs would help in protecting the remaining 20,000 direct jobs as well as millions of indirect jobs linked to it. United Nations Industrial Organization (UNIDO, 2008) estimates that a 20% increase in the textile output means hundred thousand additional jobs in cotton farming and textile industry, \$50million foreign exchange savings, \$30million export and N200million revenue.

Early detection of signals for corporate failure will help to arrest problems such as decline in productivity, high inflation, low foreign exchange, unemployment, over reliance on importation, low per capital income and general decline in growth and development associated with failure of textile industries in Nigeria (Felix, 2009).

Therefore, corporate failure is inimical to the survival of Nigerian economy and its cost can be better imagined. Warner, (2007), when examining the bankruptcy costs, proposes that controlling the number of firms that fail is important in order to guarantee sustainable economic growth. He opined that, it will be of great value if a financial model that can predict corporate failure with a high degree of certainty can be produced.

Based on the above problem, the research poses to evaluate the financial health of Nigerian textile industry. The objective of the study is to evaluate the financial health of Nigerian textile industries using Edward Altman's revised multivariate discriminant analysis. Knowing this might hinder a company from being financial distressed and early actions could be taken as a precaution.

Subsequently this study is divided into five parts part two is the literatures review, meaning of corporate failure and reasons for company failure, part two the research methodology, part three, presentation, interpretation and analysis of data while part four is the results and discussion and lastly part five conclusions and policy recommendation.

#### LITERATURE REVIEW

## Meaning of Corporate Failure

Over the years, there have been several definitions of business failure and a number of theories and thoughts on what constitute a failed business. There are some scholars who view business failure as "discountenance of business" (Fredland and Morris, 1976). There are others who view failure as "bankruptcy" and the most cited work in this school of thought is Dun and Bradstreet (1969) and their definition of failure as: those businesses that cease operations following assignment or bankruptcy; ceased with loss of creditors after such actions as execution, foreclosure or attachment voluntarily withdrew leaving unpaid obligations; were involved in court actions such as receivership, reorganization or arrangement, or voluntarily compromised with creditors (Watson and Everett, 1966).

Other views of failure include business "disposed of to prevent further losses" and "failing to make a go of it" (Watson and Everett 1969). Susan (2009) opined that "failure is impossible". Failure is when your initial plan does not pan out. Failure is when your business does not make any profit and you have to shut it down. Failure is when you run out of money and you have to close up shop. Dictionary.com (2009) defined failure as

"an act or instance of failing; lack of success; non-performance of something, required or expected; a subnormal quantity or quality; a condition of being bankrupt by reason of insolvency; the condition or fact of not achieving the desired ends; a cessation of proper functioning or performance, a decline in strength or effectiveness". Accessed, July, 2013

Argenti (1976) used various terms, all unpleasant, to explain the concept of failure: collapsed, failed, bankrupt, broke and bust. He defined failure as the inability of an organization to survive. Bibeault (1982) defines business failure from economic standpointsas a situation whereby the realized rate of return on investment capital is significantly and continually lower than prevailing rates on similar investments. Glaessner and Mas (1995) hold a contrary view; they opined that insolvency needs not be synonymous with failure. Failure occurs only when insolvency is officially recognized and the organization is closed. Caprio and Klingebiel (1997) see financial distress as a situation where a significant portion of the organization is insolvent. Chancharat, (2007) opined that a financially distressed company is said to be one which has entered into one of the following states (i) voluntary administration (ii) a scheme of arrangement, (iii) receivership, (iv) liquidation.

Failure in this work is defined as the cessation of activities and operations of a firm following assignation or the filing of bankruptcy proceedings. The cessation of operations would have followed actions such as foreclosure or attachment, involvement in court actions such as receivership or voluntary compromises with creditors.

#### Reasons for the Company failure

Business failure mostly appears in a critical situation as a consequence of a complex process and is rarely dependent on a single factor. Arditi et al. (2000) found budgetary and macroeconomic issues as the main reasons for corporate failure. Over 80% of the failures were caused by five factors, namely insufficient profits (27%), industry weakness (23%), heavy operating expenses (18%), insufficient capital (8%) and burdensome institutional debt

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(6%). All these factors, except for industry weakness, are budgetary issues and should therefore be handled by companies that are cognizant of the effects of these factors on their survivability.

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Kivrak and Arslan (2008) examined the critical factors causing the failure of firms through a survey conducted among 40 small to medium sized companies. A lack of business experience and country's economic conditions were found to be the most influential factors to company failure. A scrutiny of the sub factors related to the lack of business experience confirms that difficulty with cash flow and poor relationship with the client drove the proprietor's failure. In addition, preparing an accurate and realistic bid proposal with the profit margin being carefully determined is highly critical. (Arslan et al. ,2006). However, due to high competition, companies are usually forced to reduce their profit in order to win the bid and this would increase the default risk substantially. Kangari (1988) found that more than half of business failures were due to unrealistic profit margin.

Schaufelberger (2003) studied business failure and found that the primary causes of business failure were insufficient capital/excessive debt, lack of managerial maturity, lack of early warning measures, increase in project scope, poor billing procedures, failure to evaluate project profitability, unfamiliarity with geographical areas, and poor use of accounting systems. Davidson and Maguire (2003), based on their accountancy experience, identified ten most common causes of companies' failures: (i) growing too fast; (ii) obtaining work in a new geographical region; (iii) dramatic increase in single job size; (iv) obtaining new type of work; (v) high employee turnover; (vi) inadequate capitalization; (vii) poor estimating and job costing; (viii) poor accounting system; (ix) poor cash flow; and (x) buying useless stuff. Osama (1977), on the other hand, presented a study of the factors that contribute to the failure of companies in Saudi Arabia and found that the most important factors were: difficulty in getting orders, bad judgment, and lack of experience in the firm's line of work, difficulty with cash flow, lack of managerial experience, and low profit margins.

## RESEARCH METHODOLOGY

Population of this study is the six (6) quoted textile industries in Nigeria stock exchange. They are: United Nigeria Textiles Plc (healthy), Funtua Textiles Limited (healthy), ENPEE Industries Plc (healthy), Arewa Textiles (failed), Zanfara Textile Industries Limited (failed), Supertex Limited (failed). The sample for this study is the three healthy textile industries quoted in Nigerian stock exchange which include United Nigeria Textiles Plc, Funtua Textiles Limited, ENPEE Industries Plc.

The data for this study are from secondary source which is five years summary of audited financial statements of textile industries submitted to stock exchange market. Secondary data is appropriate because the financial statement is more detailed.

From the annual report and accounts (five years financial summary of textile companies) collected from the sampled textile companies, a set of financial ratios and the multivariate discriminant analysis of Edward Altman's revised Z-score model were used to analyze the datawhich aided in evaluating the financial health of Nigerian textile industry and conclusion reached.

The Z-score model is:

 $Z = 0.012X_1 + 0.014X_2 + 0.033X_3 + 0.006X_4 + 0.999X_5$ 

Where  $X_1$  = working capital/total assets

 $X_2$  = Gross profit/sales

X<sub>3</sub> = Current assets/current liabilities

 $X_4$  = Debt capital/all long term capitals

 $X_5$  = Sales/Total assets

Z = Overall index

However, a textile company with Z –score above 2.675 represents healthy firm, as such, it is not likely to fail. Whereas firm with Z- score below 1.81 is unhealthy and likely to fail and the region between 2.675 and 1.81 is the gray area or zone of ignorance because of misclassification.

# Presentation, Interpretation and Analysis of Data

Table 1: Five years financial summary of united Nigeria textile plc.

Year	2008 <del>N</del> 000	2009 <del>N</del> 000	2010 <del>N</del> 000	2011 <del>N</del> 000	2012 <del>N</del> 000
Financial item					
Sales	31,989,308	32,713,031	31,838,790	26.629.146	29,993,483
Total assets	12,817,344	12,574,302	12,487,478	13.000,338	13,082.122
Gross profit	1,576,683	(335,184)	340,475	246,626	210,965
Current asset	7,933,566	8,113,821	7,786,582	9,309,708	10,477,040
Current liabilities	2,207,374	2,333,896	2,202,162	2,630,842	3,239,789
Deb capital	606,015	595,682	567,953	556,834	549,772
Long-term capital	9,644,724	9,717,363	9,812,662	9,016,410	10,003,955

Source: Data from financial statement, 2013

Table 2: weighted financial ratios of united Nigerian textile plc.

	2008	2009	2010	2011	2012
X1 (working capital)	61%	64%	26%	71%	80%
X2 (Profitability)	4.9%	-1%	1%	0.9%	0.78%
X3 (Liquidity)	3.1	3:1	3:1	3:1	3:1
X4 (Gearing)	6.2%	6.1%	5.7%	6.1%	5.4%
X5 (Turn over)	2.4	2.3	2.5	2.0	2.2
Z-Score	3.33	3.48	3.38	2.99	3.29

Source: computed from table 1

Data above in table 2 shows that united Nigerian textile plc is financially sound with computed average Z-Score 3.29 over the period of five years. In the years of assessment, Z-score for each year range from 2.99 (lowest) to 3.48 (highest) which are above the distress zone.

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Table 3: Five Years Financial Summary of Funtua Textiles Limited

Year	2008	2009	2010	2011	2012
Financial item					
Sales	1,790,009,170	1,913,777,731	1,972,124,272	1,999,885,322	1,886,670,601
Total assets	869,760,996	858,794,225	829,569,385	886,357,015	878,019,155
Gross profit	(9,435,967)	22,701,950	36,078,896	113,399,935	(21,342,310)
Current asset	437,141,032	464,744,963	537,883,291	546,232,986	569,104,448
Current liabilities	90,177,027	91,330,573	191,592,698	103,547,266	68,389,849
Deb capital	90,177,027	91,330,573	191,592,698	103,547,266	68,389,849
Long-term capital	869,760,996	858,794,225	829,569,385	886,357,015	878,019.155

Source: Data from financial statement, 2013

Table 4: weighted financial ratios of Funtuatextiles limited

	2008	2009	2010	2011	2012
X1 (Working capital)	50%	54%	64%	61%	64%
X2 (Profitability)	0.5%	1.1%	1.8%	5.6^	1.1%
X3 (Liquidity)	5:1	5:1	3:1	5:1	8:1
X4 (Gearing)	10%	10%	23%	11%	7%
X5 (Turn over)	2.0	2.2	2.3	2.2	2.1
Z-Score	2.83	3.08	3.32	3.23	3.18

Source: computed from table 3

Table 4 present Z-scores of Funtau textile limited. There was upward movement in Z-scores between the year 2008 and 2010, however downward movement between 2011 and 2012. This represents the financial position of the organization. The Z-score range between 2.83 and 3.32 which are above the distress point. The average Z-score is 3.12. The organization is financially sound on Altman's scale.

**Table 5: Five Years Financial Summary of Enpee Industries** 

Year	2008 <del>N</del> 000	2009 <del>N</del> 000	2010 <del>N</del> 000	2011 <del>N</del> 000	2012 <del>N</del> 000
Financial item					
Sales	2,947,133	2,791,468	2,983,598	2,936,934	3,559,104
Total assets	1,049,951	1,159,375	1,313,012	1,314,573	1,716,086
Gross profit	31,059	43,529	54,213	61,544	164,150
Current asset	686,114	764,985	841,132	841,489	1,154,398
Current liabilities	728,829	868,139	1,027,670	604,196	1,178,609
Deb capital	-	8,750	30,112	61,134	121,324
Long-term capital	241,957	268,681	642,175	684,629	520,479

Source: Data from financial statement, 2013

Table 6: weighted financial ratios of Enpee Industries

	2008	2009	2010	2011	2012
X1 (Working capital)	65%	65%	64%	64%	67%
X2 (Profitability)	1.9%	1.5%	1.8%	2%	-4.6%
X3 (Liquidity)	1:1	1:1	1:1	1:1	1:1
X4 (Gearing)	0%	3%	4%	8%	2%
X5 (Turn over)	2.8	2.4	2.2	2.2	2.0
Z-Score	3.62	3.24	3.04	3.07	2.78

Source: computed from table 5

In the table above are financial data of Enpee industries. There was downward movement in financial position between 2008 and 2010, a slight upward in 2011 and downward in 2012. The Z-scores are above the distress zone; however the changes in the financial position downward pose treat to the financial health of the organization. The average Z-score of the organization is 3.15. The organization is financially healthy on Altman's scale.

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#### RESULTS AND DISCUSSION

In this study, variables include: Corporate failure, working capital ratio, profitability ratio, liquidity ratio, gearing ratio and turn-over ratio. Corporate failure is the dependent variable while working capital ratio, profitability ratio, liquidity ratio, gearing ratio and turn-over ratio are independent variables. Data relevance to the variables is contained in table 1-6. From the analysis, this study found that the three textile industries (United Nigeria textile plc, Funtuatextile limited Enpee industries) are financially healthy on Altman's scale as their Z-score are high above 2.675 which is the discriminant point.

#### CONCLUSION AND POLICY RECOMMENDATIONS

This study contributes to the body of knowledge based on the findings that, the few textiles remaining are healthy from their financial statements using Altman's Z-score model. Scholars can use same in order to check other sector using the same model. The gap for the study is to establish why other textiles companies failed.

Therefore, this study concludes that the three healthy textile industries (United Nigeria textile plc, Funtuatextile limited Enpee industries) will continue to survive as their Z-score are high above 2.675 which is the discriminant point. However the study recommends that:

- 1) Government should formulate policies that will encourage Nigerian to patronize local textile materials as this will increase the rate of turnover in textile industries in Nigeria.
- 2) Government should discourage exportations of textile material.

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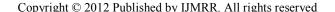
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