

**RATIO ANALYSIS: PARADIGM FOR IDENTIFYING CAUSES OF CORPORATE
FAILURE IN NIGERIAN TEXTILE INDUSTRY****Azeez Yisa¹, Yusuf Muhamad Alkali*², Okoh Umale³**¹First Bank of Nigeria Plc, Lagos, Nigeria²Waziri Umaru Federal Polytechnic Birnin Kebbi, Kebbi State, Nigeria³Federal University Kashere, Gombe State, Nigeria.**ABSTRACT**

Failure of textile industries is a great sign of un-healthy economic environment in any country. Developing countries are frown to failure of the industries as a result of the neglect of the sector. Government participation in the sectors has been at zero level in most developing economy those developing or emerging market like Malaysia and South Africa has taken textiles industries to a greater height. Nigeria been a developing country its textile industries has collapsed to an alarm rate and this has affected the economy of the country drastically. Therefore, neglect of this sector has been one of the major problems for the development of the economy. Nigerian government has put in funds to bail out this sector when it was always late. The work force in the sector is over 3,000 but as a result of the failure of the sector over 2,500 lost their jobs; this has improved the unemployment rate to an alarming rate. Despite the importance of the sector few studies were conducted on the causes of their failure. Multivariate discriminant analysis using Edward Altman revised Z-score model for three failed textiles quoted in Nigerian Capital market were used for the analysis. Low working capital, poor profitability, high gearing ratio and poor turnover contributes to their failure. Government of Nigeria should create a regulatory body and good enabling environment to access to loan as to increase their liquidity and maintain adequate working capital, reduce operation cost, maintain current ratio of 2:1, maintain moderate gearing ratio, and high rate of turnover.

Keywords: Textile, Nigeria, corporate failure, Discriminant analysis.**INTRODUCTION**

One of the excruciating factors in nation's economies of the world is corporate failure. 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 identify the cause of corporate failure may be a useful tool in preventing further collapses. 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 (Aruwan, 2009). 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).

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.

Based on the above problem, this study poses to identify causes of corporate failure in Nigerian textile industry. The study utilizes Edward Altman revised Z-score to identify causes of corporate failure in the Nigerian textile industry.

The objective of the study is to identify the causes of corporate failure in Nigerian textile industry using Edward Altman revised Z-score. Knowing these causes might hinder a company from being financial distressed as early precaution could be taken.

The study is structured into five sections. Section one is introduction, section two reviews related literature, section three explore methodology, section four is on results and discussion of data and section five dwell on conclusion and recommendations.

LITERATURE REVIEW

Causes of Corporate Failure

Argenti (1976) identifies twelve elements that causes failure and links them together thus: If the *management* of a company is poor then two things will be neglected: the system of *accounting information* will be deficient and the company will not respond to *change* (some companies, even well managed ones, may be damaged because powerful *constraints* prevent the managers from making response they wish to make). Poor managers will also make at least one of three other mistakes: they will *overtrade*; or they will launch a *big project* that goes wrong; or they will allow the company's *gearing* to rise so that even *normal business hazards* become constant threats. The following symptoms will appear: certain *financial ratios* will deteriorate but, as soon as they do, the managers will start *creative accounting* which reduces the predictive value of these ratios and so lends greater importance to *non-financial symptoms*. Argenti was silent about the nature of the organization, size and even ownership structure. Yet, they at least buttress the symptom and possible causes of failure organizations.

Argenti (1976); Dun and Bradstreet (1969); Wichmann (1984) amongst other concluded that irrespective of the size of any business - large, medium or small, - several researches and statistics appear to have ranged poor management or management inability as the main cause of business failure in general. Belleman, (2009) identified the following as the main causes of business failure in Nigeria: Disasters and crises, Fierce market competition, Infrastructural inadequacy and lack of social support, Multiple and high taxes, Poor accounting and book keeping practices, Management inability, Poor marketing and sales efforts, Poor economic

conditions, Improper and poor planning, Financial problems. Pricewaterhouse Coopers (2006) classified the causes of corporate failure into internal factors and external factors.

Internal Causes: PriceWaterhouse Coopers (2006) identified the following as internal causes of corporate failure. Inadequate management: one person/autocratic rule, Combined chairman and chief executive, Unbalances/ineffective management team; Missing knowledge/skills/attributes, Gaps/overlaps in roles, Unbalanced board (e.g. all accountants).

Non-executive directors do not contribute, Lack of communication/in-fighting, Ineffective/incompetent managers, Inability to think strategically, Neglect of core business, Lack of management in depth, Corruption, Aptitude (and attitude), Lack of control, Personal interests, Poor planning no derive, No corporate policing, Organizational inertia and confusion, No strategic direction, Inability to make decisions, Inability to implement change, Poorly defined accountabilities. Lack of Financial Control: Poor management accounts, poorly designed systems, inadequate information, poorly used information, Control hindered by organization structure, Inadequate costing systems.

External Causes: Pricewaterhouse Coopers (2006) grouped external causes of corporate failure into Economic causes and Legal /Regulatory causes. Economic: Strong competition,

Lower cost alternatives or substitutes, obsolete product range, Poor new product development, Changes in market demand, New products, Cyclical/economic changes, Long term decline, Changes in pattern of demand, Adverse movement in external costs, (Raw materials, fuel, interests, rates), Exchange rates, property prices. Legal and Regulatory: Judiciary, Auditing standards, corporate governance, No corporate policing.

Udenwa (2009) stresses that mismanagement; government apathy and absence of a strong domestic industry due to influx of imported textiles are the causes of failure of textile industries in Nigeria. Vanguard (2008) shared in the Udenwa's view above and lamented that the most serious problem afflicting the textile industry in Nigeria is the unabated influx of counterfeit textiles from China. According to Olarenwaju (2009) the markets in Kano, Ibadan, Onitsha and Lagos are flooded with smuggled textiles through nation's land borders, particularly, Niger Republic which now occupy over 80% market share. He said: "The situation in the Nigerian Textile Industry is alarming. Unless urgent steps are taken by the government a total collapse is imminent".

Doris M (1995) concluded that business failure is attributed to the combined effect of fierce competition in the market place and heavier debt burdens carried by companies. He stressed that the matters will grow worse when these two factors are accompanied by an economic downturn.

RESEARCH METHODOLOGY

Cross section survey design was employed for this study. Population of this study is the six (6) quoted textile industries in Nigerian 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).

Sample for this study is the three failed Nigerian textile industries quoted in Nigerian stock exchange. These include ArewaTextiles, Zanfara Textile Industries Limited and Supertex Limited.

The data for this study are from secondary source. 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 and data for the failed textile industries can only be accessed from secondary source. 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 Edward Altman's revised Z-score were used to analyze the data which aid in identifying the causes of corporate failure in Nigerian textile industry.

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_3	=	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 Arewa Textiles

Year Financial item	2007 ₦ 000	2008 ₦000	2009 ₦000	2010 ₦000	2011 ₦000
Sales	944,286	1,557,152	1,598,461	1,246,755	1,018,649
Total assets	1,400,763	2,580,186	2,531,205	1,614,243	1,652,910
Gross profit	(213,099)	32,303	90,689	63,976	38,433
Current asset	225,715	374,246	307,228	400,914	480,221
Current liabilities	96,063	60,274	49,663	40,097	42,840
Deb capital	216,004	180,215	136,453	270,293	479,640
Long-term capital	400,763	580,186	531,205	614,243	652,910

Source: Data from financial statement, 2011

Table 2: weighted financial ratios of Arewa textiles

	2007	2008	2009	2010	2011
X1 (Working capital)	16%	14%	12%	24%	29%
X2 (Profitability)	-22%	2%	5%	5%	3%
X3 (Liquidity)	2:1	6:1	6:1	9:1	11:1
X4 (Gearing)	53%	31%	25%	44%	73%
X5 (Turn over)	0.67	0.60	0.63	0.77	0.61
Z-Score	0.93	1.17	1.19	1.68	1.80

Source: computed from table 1

Table 2 above, is data of financial position of Arewa textiles. It shows that Arewa textiles is financially unhealthy as the Z-score range between 0.93 and 1.80 in the years of assessment which is below the distress point. The average Z-Score for the years of assessment is 1.35.

Table 3: Five Years Financial Summary of Zamfara Textile Industries Limited

Year Financial item	2007 ₦000	2008 ₦000	2009 ₦000	2010 ₦000	2011 ₦000
Sales	1,577,837,915	1,174,297,920	932,114,558	1,007,745,638	1,003,511,984
Total assets	3,323,478,110	2,337,798,997	2,365,655,211	2,323,823,526	2,324,525,906
Gross profit	177,433,809	60,103,639	50,893,242	20,298,042	17,831,808
Current asset	168,567,466	136,882,616	154,504,844	142,623,007	171,020,482
Current liabilities	389,567,791	399,865,058	448,516,112	535,670,749	612,729,234
Deb capital	88,462,516	71,480,938	73,965,555	31,343,270	26,651,301
Long-term capital	235,015,594	266,318,009	291,689,656	292,480,256	297,874,605

Source: Data from financial statement, 2011

Table 4: weighted financial ratios of Zamfara textile industries limited

	2007	2008	2009	2010	2011
Working capital	5%	5%	6%	69%	7%
Profitability	11%	5%	5%	2%	1%
Liquidity	1:	1:3	1:3	1:4	1:4
Gearing	37%	26%	20%	10%	8%
Turn over	0.47	0.50	0.39	0.43	0.43
Z- Score	0.93	0.81	0.71	0.62	0.60

Source: computed from table 3

Financial position of Zamfara textile industries is unhealthy on altman's scale with downward movement of Z-scores from 0.93 in the year 2007 to 0.60 in the year 2011. The average Z-score for the years of assessment is 0.73 which is highly unhealthy for the survival of the industry.

Table 5: Five Years Financial Summary of Supertex Limited

Year Financial item	2007	2008	2009	2010	2011
Sales	3,283,389,854	3,748,922,228	3,912,000,073	4,760,743,851	4,661,748,869
Total assets	6,898,978,640	6,047,755,900	6,930,882,101	8,093,472,893	8,212,192,582
Gross profit	214,897,677	25,546,574	24,180,165	36,594,536	30,804,007
Current asset	92,682,982	255,971,032	64,533,841	321,360,614	547,651,007
Current liabilities	364,680,446	512,181,992	393,022,282	546,893,113	658,733,907
Debt capital	364,680,446	512,181,992	393,022,282	546,893,113	658,733,907
Long-term capital	534,198,194	535,573,908	537,879,920	546,579,780	553,458,675

Source: Data from financial statement, 2011

Table 6: weighted financial ratios of Super-tex limited

	2007	2007	2009	2010	2011
Working capital	1%	4%	0.9%	3%	6%
Profitability	6%	0.6%	0.6%	0.7%	0.6%
Liquidity	1:4	1:2	1:6	1:2	1:1
Gearing	68%	96%	73%	100%	100%
Turn over	0.47%	0.61%	0.56%	0.58%	0.56%
Z-Score	1.00	1.14	1.04	1.25	1.27

Source: computed from table 5

The financial position of supertex limited is unhealthy on Altman's scale as the Z-scores are below the distress point in the years of assessment. The financial trend is uncertain as it has up and down movement within the five years of assessment. The average Z-score in the years of assessment is 1.14.

DISCUSSIONS

From the study, variables include: working capital ratio, corporate failure, profitability ratio, gearing ratio, liquidity 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, the study found that low working capital, profitability, liquidity and rate of turnover contributed to failure of textile industries in Nigeria. High gearing ratio hinders the survival of textile industries in Nigeria.

CONCLUSION AND RECOMMENDATIONS

The study will contribute to body of knowledge by providing evidence why textiles failed in Nigeria. It also concludes that rate of turnover is one of the major factor affecting the survival and failure of textile industries in Nigeria. Low profitability, working capital and liquidity contributed to failure of textile industries in Nigeria. High gearing in textile industries in Nigeria contributed to their failure.

This study should be conducted in other failed textiles or even similar textile using other predictive models to compare results.

The recommendations reached by the study are:

- 1) Creation of regulatory body to regulate affairs of textile industries in Nigeria.
- 2) Government should create enabling environment to make textile industries have access to loan as to increase their liquidity.
- 3) Textile industry in Nigeria should maintain adequate working capital, reduce operation cost, maintain current ratio of 2:1, moderate gearing ratio and high rate of turnover.

REFERENCES

- Altman EI. Financial Ratios, Discriminant Analysis and Prediction of Corporate Bankruptcy. *Journal of Finance* 1968; 23: 189-196.
- Argenti C. Predicting Corporate Failure. *Empirical Evidence for U.K. European Accounting Review* 1976; 13 48-61.
- Barnes U. Failing Company Discriminant Analysis. *Journal of Accounting Research* 1987; 12: 73-81.
- Beaver WH. Financial Ratio as Predictors of Failure. *Empirical Research in Accounting Selected Studies. Journal of Accounting Research* 1966; 5.
- Chamcharat O. Z- Scores- a Guide to Failure Prediction (Business Failure). *International Journal of Digital Accounting Research* 2007; 37: 97-109.

- Cripton O, Misra V. Corporate Failure: Why Organizations Fail to Learn. FIC Congress, Australia, April. 1999.
- Doris M. Bankruptcy Prediction Using Neural Networks. Decision Support System. Accounting Research 1995; 25: 109-131.
- Felix A. Textile Industries Failure in Nigeria. Africa News 2009; 6.
- Frdyman U, Altman EI, Kao B. Discriminant Analysis. New York: Hafner. 1985.
- Fredland K, Morris E. Predicting Corporate Failure of Australians Listed Companies. 1976.
- Ohlson JA. Financial Ratios and the Profitability of Bankruptcy. Accounting Research 1980; 18: 109-131.
- Olarenwaju B. The Nigeria Government is Seeking Various Ways to Revive the Ailing Textile Sector to Boost the Economy. Africa News, January 2009.
- Pricewaterhouse Coopers. Corporate Failure and Bankruptcies in Ghana, November 2000.
- Scribe K. Financial Ratios as a Means of Forecasting Bankruptcy. Management International Review 2007; 32 15-21.
- Sun D. Failing Company Discriminant Analysis. Journal of Accounting Research 2007; 22: 16-29.
- Udenwa M. Why Textile Company Fails in Nigeria. Vanguard News Paper, August 11, 2009.
- United Nations Educational, Scientific and Cultural Organisation Conference 2009.
- Conference on Sustainable Development Ability of Textile Industry 2009.
- United Nations Industrial Organisation. Conference on Industrial Development. Geneva 2008.
- Warner C. Predicting Corporate Failure, Bench Testing the Z-Score. The Kordamentha Research Unit 2007; 706: 110-122.
- Watson O, Everett I. Business Failure and its Consequences in Australia. University of California Press, Berkeley, CA May, 1966.

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