

Corporate Financial Analysis of Cadbury Plc: An Edward Altman's Discriminant Financial Model Investigation

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Abstract

The study examines the corporate financial analysis of Cadbury PLC in Nigeria. Secondary data are collected from Annual Reports and Accounts of Cadbury Plc 2018. Edward Altman's discriminant financial model was used for the analysis. The study shows that Cadbury PLC will not fail; because, the result is above 2.675 as stipulates in the discriminant financial model. The study concludes that Cadbury PLC performances is outstanding in terms of prudent financial management, product development and efficient customers' service delivery as evident in the analysis. Hence, the study recommends that the firm should improve on the quality of products so as to increase the market value of shares and shareholders' wealth maximization. The management of Cadbury PLC should focus on training and retraining of manpower that will enable the firm to respond to the increasing customers' demand. Investors should invest massively in the company's shares in the stock market; because, Cadbury PLC is financially sound and stable in her operations.

Keywords: Corporate, Financial Analysis, Cadbury PLC, Nigeria.

INTRODUCTION

Firms are expected to be managed effectively and efficiently in terms of allocations of financial resources in managing the business. Hence, planning is a systematic programming decisions and creations with a view of achieving organization objectives. The study conducted by Nsiah and Aidoo (2022) revealed that this objective could be achieved through efficient corporate financial planning by minimizing cost and maximizing shareholders' wealth. The work of Kherademand and Bahar (2021) posited that the systematic approach for achieving effective management performance is the financial planning and budgeting. Thus, strategic financial planning stresses a balance relationship between financial goals and organizational objectives; and, these involve the questions of firm's long-term growth, profitability, investment and viable decisions making. The financial plan of large companies may have required detailed document containing financial plans for different strategic business units. However, long-term financial forecasts are prepared with the related items of profit and loss account and balance sheet (Andabai, 2021).

The study carried by Raheman and Nasir (2017) indicated that financial planning involves financial policy that has direct interaction with the scope and resources development of a firm. Study by Nsiah and Aidoo (2017) argued that the financial policies, investment and

financing choices should; therefore, be considered at corporate level and should not be treated as functional policy decisions. The work of Zoppa and McMahon (2021) maintained that because, business strategies involve operational planning are focused on how to compete in a particular market and competitive market. Thus, this fact will enable the financial managers to know the level of firm's growth, performances, investments during a given period of time. However, for effective planning could be achieved effectively which should be used for forecasting and predictions purposes. The work of Bhunia and Sarkar (2022) also affirmed that financial models and ratios were also used to know the level of productivity and performances of firm's that will enable the financial manager to advise the business organization for corporate decision-making.

Financial Analysis and Modeling

The empirical study by Amidu and Abor (2022) stressed that financial modeling facilitates financial forecasting in an organization and it makes forecasting easy. The study also indicated that financial model has three components such as: (i) current financial statement and growth model (ii) a system of equations base on the relationship between financial variables (iii) projected financial statements. The work of Andabai (2017) affirmed that financial model of large companies can be very complicated when more details are considered. Gombola and Ketz (2021) stated that financial forecasting is the basis of financial planning because, forecasts are merely estimates based on the past data.

Thus, planning means what a company would like to achieve in the future, and includes necessary action plans for realizing the pre-determined intensions. Hence, financial forecasting is an integral part of financial planning. It uses past data to estimate the future financial requirement. Ugenba and Efibu (2023) opined that a financial planning model establishes the relationship between financial variable and targets, and facilitates the financial forecasting and planning process.

Study conducted by Ugenba and Efibu (2023) emphasized that the major strategic decision making framework will be summarized as: a firm operates in a complex environment, strategy is a central theme that establishes a match between the firm's competences and opportunities created by environmental changes, a firm is multi-directed; strategy is a link between the multiple goals of the firm and its plans and policies, product-market scope, competitive advantages, distractive competences and synergy and the most important components strategy, market documented is most desirable strategy, a firm should have a balanced portfolio of businesses. Because, according to Gombola and Ketz (2018), the company establishes an effective and efficient match between it resources, opportunities and risks. However, the work of Parker (2018) asserted that financial planning provides a mechanism of integrating goals of multiple stakeholders.

The work of Zoppa and Macmahon (2021) concluded that financial plan should be developed within the overall context of strategic planning. Al-Kuwari (2017) posited that the following steps are involved in financial planning: past performances, analysis of the firm's past performance to ascertain the relationships between financial variable and the firm's financial strengths and weaknesses Operating characteristics, analysis of the firm's operating characteristics-product, market, competitions, production and making policies to achieve its growth objectives, corporate strategy and investment needs and cash flow from operations financing alternative.

The study of Bashar and Islam (2021) showed that financial planning involves the firm's long-term growth, profitability, investment and financing decisions. It focuses on aggregate capital expenditure programmes and debt-equity mix rather than the individual projects and sources of funds. Financial planning also involves an interface between corporate policy and planning and the trade-off between financial policy variables (Andabai, 2017).

Theoretical Framework

The theoretical framework of the study is premised on financial statement analysis theory by Williamson (1970). The theory involves the analysis of financial statements of firms and to identify operational financial problems which may affect the market value of the business. Thus, any person who wish to analyze financial statements of firm should be in a position to identify the causes and effect of finance and the operational problems of such firm. However, in order to identify the cause and effect, the symptom which represents an indicator of the problem should be observed.

The work of Kheradmand and Bahar (2021) stressed that it is the responsibility of the financial manager to observe the symptom in order to identify the causes such as: declining liquidity, declining profits, extended debt recovery period, increasing volume of inventory, declining return on total assets, increasing operating expenses etc. Financial ratios represent appropriate variables which should be observed over time to assess possible problems in order to be able to identify the causes.

The study carried out by Andabai (2017) posited that strategies are developed to manage the business firm in uncertain and imperfect market conditions and environment to exploit opportunities. However, it is an important management task to analyze changing market conditions and environment to make forecast, plan, generation and allocation of resources. The work of Pandey (2006) revealed that Boston Consulting Group (BCG) model makes it very clear that a firm for its ultimate success needs a balanced portfolio of products or business. The individual businesses are analysed to form a corporate portfolio, which should act as a guide to commit the firm's resources.

The work of Gombola and Ketz (2018) stressed that strategic planning ensures that portfolio of businesses is balanced in terms of profits, cash flows and overall corporate risk. The relationships predicted by the portfolio models are substantiated by the PIMS (Profit Impact on Market Share) data analysis.

Empirical Review

Gweji and Karanja (2017) investigated the effect of financial leverage on firm performance of deposit taking savings and credit co-operative in Kenya. The study utilized secondary data sourced from financial statements of 40 savings and credit co-operative societies (SCCOS) sampled for the study from 2000 to 2012. Descriptive and analytical designs were both adopted. The result shows perfect positive correlation between financial leverage surrogated by debt-equity ratio with ROE and profit after tax at 99% confidence interval, and a weak positive correlation between debt-equity ratio with ROA and income growth.

Thaddeus and Chigbu (2016) examined the effect of financial leverage on bank performance using 6 banks from Nigeria. The study utilized secondary data from Nigerian Stock Exchange fact book and the financial statements of the sampled banks. Debt-equity and coverage ratios were taken as proxies for financial leverage and these constitute the independent variables,

while earning per share (EPS) representing performance is the dependent variable. Multiple regression technique was used to establish whether relationship exist between financial leverage and performance of sampled banks. The findings show mixed results. While some banks report positive relationship between leverage and performance, others revealed negative relationship between leverage and performance.

Akinmulegun (2017) evaluated of financial leverage on selected indicators of corporate performance [Earnings per Share (EPS), Net Assets per Share (NAPS)] in Nigeria using the Vector Auto-Regression (VAR) technique. Findings indicated that leverage shocks exert significantly on corporate performance. Also, the measures of corporate performance (EPS, NAPS) depends more on feedback shock and less on leverage shock but the leverage shocks on EPS indirectly affect NAPS of firms as the bulk of the shock on NAPS was received from EPS of the firms. Shah (2013) employed a sample of 35 listed companies from Food Producer sector of KSE. The research was conducted to find out the Relationship between financial leverage and financial performance.

Akande (2017) adopted the Ordinary Least Square (OLS) regression analysis on panel data collected from financial statements of 10 Nigerian firms over 20 years from 1991-2010. ROA, ROE, EPS and DPS on one hand and DC (total debts to capital employed) on the other hand, were surrogated for firm's performance and debt financing respectively. The findings show that positive relationships exist between DC and ROE, EPS and DPS, while negative relationship exists between DC and ROA. The study therefore, concluded that financial leverage will considerably impact on firm performance.

Rajni (2023) conducted a study on the impact of financial leverage on shareholders return and business sector underwriting from the Indian Telecom part organizations. Study period consisted of years 2004-2023. Hypothetical framework comprises of Independent variable as financial leverage and dependent variable comprise of Shareholder return & market capitalization. The population includes 7 companies of Indian Telecommunication Industry. It was concluded that a Positive Correlation is found between budgetary influences and shareholders return for Telecommunication Industry and negative connection is found between monetary power and business promotion for telecom Industry. The total valuation of a firm can be Increased by the different bounding of three variables as Financial leverage, Shareholder return & market capitalization.

METHODOLOGY

The study adopted *ex-post-facto* research design to source requisite information. Secondary data were used and sourced from Annual Reports of Cadbury PLC as shown on appendix 1&2. Edward Altman's discriminant financial model was used to test the financial soundness and stability of the Cadbury PLC.

Model Specification

Descriptive, percentages, and financial ratios were used to analyze the data collected from 2018 Annual Reports of Cadbury PLC. Edward Altman's discriminate financial model was used to predict the success and failure of the firm. The Edward Altman's model was adapted as: $Z = 0.012 X_1 + 0.014 X_2 + 0.33 X_3 + 0.006 X_4 + 0.010 X_5$.

Where:

- Z** = Discriminant functions score of firm.
- X₁** = Net Working Capital/Total Assets (%).
- X₂** = Retained Earning /Total Assets (%).
- X₃** = EBIT/Total Assets (%).
- X₄** = Market value of total Equity/Book value of debt (%).
- X₅** = Sales/Total Assets (times).

Edward Altman, established a guideline **Z** score, which will be used to predict as firms either financially sound, a score above 2.675 or a score below 2.675 as likely to fail.

DATA PRESENTATION AND ANALYSIS

The financial statement was used to measure the performance of the firm over a period of time. Thus, financial models and ratios analysis were adopted to evaluate the level of performance as indicated on table 1.

Table 1: Analysis of Cadbury PLC Annual Reports (2018).

X ₁	$\frac{\text{Net working capital}}{\text{Total Assets \%}}$	7.13
X ₂	$\frac{\text{Retained Earnings}}{\text{Total Assets \%}}$	14.07
X ₃	$\frac{\text{EBIT}}{\text{Total Assets \%}}$	65.03
X ₄	$\frac{\text{Market value of total Equity}}{\text{Book value of debt \%}}$	2.33
X ₅	$\frac{\text{Sales}}{\text{Total Assets \%}}$	3.7

Source: Researchers' Computation, 2024.

Note: All the final answers were computed from Cadbury PLC 2018 Annual Reports and Accounts as indicated on table 1. Edward Altman used certain criterion to measure the firm's financial performances. Consequently, he established a guideline, **Z** score which was used to classify firms as either financially sounds or not, that is, a score above 2.675 accepted, and below 2.675 rejected. **X₁** = 5.16, **X₂** = 13.0411, **X₃** = 55.2, **X₄** = 248, **X₅** = 2.7. **Z** = 0.012(5.2) + 0.014 (12.04) + 0.033 (53.2) + 0.006 (243) + 0.010 (2.6) = 0.0624 + 0.182 + 1.82 + 1.488 + 0.027 = 3.3264. Decision Criterion: The performance of Cadbury PLC is viable and financially sound and stable; because, the score is above 2.675, as stipulated in Edward Altman's discriminant financial model.

CONCLUSION AND RECOMMENDATIONS

The study concludes that the performance of Cadbury PLC is outstanding especially in efficient management of finance, product development and innovation as shown in the financial statement analysis. Hence, the liquidity position of the firm is increasing as evident from the analysis and the gross profit margin is also increasing and matches with the industry average. The net profit margin is also increasing and that is why the market value of the share prices are appreciating. The study therefore recommends that return on investment, return on earnings, dividend per share and earnings per share ratios should also be used to know profit after and before taxes that will be allocated to the shareholders as dividend. Cadbury PLC should improve on the quality of products so as to increase the market value of shares and

shareholders' wealth maximization. The management of Cadbury PLC should focus on training and retraining of manpower that will enable the firm to respond to the increasing customers' demand. Investors should invest massively in the company's shares in the stock market; because, the firm is financially sound and stable in the business.

Contribution to Knowledge

The study was able to expand the existing contemporary literature and updated the data of the study that will enable researchers and scholars to use it for further studies. Consequently, from the results, the study has also contributed to knowledge by discovering that Cadbury PLC will not fail because the company is financially sound and stable.

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Appendix 1: Profit and Loss Account of Cadbury PLC Annual Reports for the Year Ended 30th June, 2019

	2008		2029	
	₦=000	₦=000	₦=000	₦=000
Turnover		53,651,871		468.59
Cost of Sales		(27,844,590)		(23,960,2)
Cross profit		25,807,201		22,899,1
Advertising and promotion Expense	4,072,091		3,468,792	
Distribution expenses	4,379,760		3,593,641	
Administration expenses	5,131,486		4,154,899	
Exceptional term	-		3,639,264	
		(13,583,387)		(14,345,5)
Trading profit		12,223,864		8,053,5
Interest Received		764,119		
Interest paid		1,551,212		(1,833,9)
Profit before Taxation		11,436,771		6,276
Taxation		(3,996,669)		(1,417,1)
Profit after taxation		7,440,102		4,859,
Proposed dividend		(4,719,762)		(3,539.)
Retained profit for the year transferred to General Revenues.		2,720,340		1,319
Earnings per share (kobo)		631		852
Dividend per share (kobo)		400		680

Source: 2009 Annual Reports of Cadbury PLC.

Note: This statement is for the period of 2019. Cadbury PLC Annual Reports had net operating revenue (sales) of approximately N47 billion and N54 billion. After subtracting the cost of goods, selling and administrative expenses, the firm's operating income was about N23 billion and N26 billion. Because of high level of cash, cash equivalent and marketable securities during 2019 and income of 101.20 percent. Furthermore, Cadbury PLC Annual Reports reported income before tax of N11.4 billion. After paying taxes of N3.9 billion and N1.4 billion, the income available to common stock holders was approximately N20.9 billion.

Appendix 2: Balance Sheet of Cadbury PLC Annual Reports as at 30th June, 2019

	2018	2019
	N'000	N'000
Fixed Assets	29,531,969	29,179,56
Long term Debtors and prepayment	181,775	379,23
Current Assets, (Amounts failing due within one year)		
Stock		
Debtors and prepayments	12,933,042	13,780,946
Deposits for Imports	3,231,294	1,451,095
Cash and Bank Balances	50,854	3,119,921
	<u>11,921,255</u>	<u>2,055,958</u>
	<u>30,136,445</u>	<u>20,407,820</u>
Current liabilities (Amounts failing due within one year)		13,844,403
Creditors and Accruals	18,089,672	1,217,451
Taxation	<u>2,580,134</u>	15,061,854
	<u>20,670,006</u>	
Net Current Assets	<u>9,466,439</u>	5,345,966
Total Assets less Current Liabilities	39,180,183	34,904,762
Deferred Tax Liability	(6,968,521)	5,548,363
Provision for Gratuity	(2,763,880)	(2,628,957)
Term Loan	<u>(8,500,000)</u>	(8,500,00)
Net Assess	<u>20,947,782</u>	18,277,442
Capital and Reserves	589,970	589,970
Called up share Capital	147,493	
Bonus issue Reserve	1,545,787	1,693,280
Share Premium Account	3,790,263	3,945,560
Fixed Assets Revaluation Reserve	14,874,289	11,998,633
Revenue Reserve	<u>20,947,782</u>	<u>18,277,442</u>
Total Equity (Shareholders' Funds)	13,423,342	13,842,342
	11,642,647	10,084,366

Source: Annual Reports and Accounts of Cadbury PLC Annual Reports 2019.