



ASSESSMENT OF THE EFFECT OF BOARD INDEPENDENCE ON OPERATING EFFICIENCY IN LISTED CONSUMER GOODS FIRMS IN NIGERIA

Abdullahi Shafii Sayuti

Federal University, Birnin Kebbi

Mohammed Shaba

Federal Polytechnic, Bida

Idris Ndagi Mohammed

Federal Polytechnic, Bida

Abstract

Recently, the consumer goods industry has experienced reduced profitability, driven by operational inefficiencies and economic instability. This highlights the importance for companies to streamline their processes and boost market value in order to stay competitive. This study examine the effect of board independence on operating efficiency in listed consumer goods firms in Nigeria. The information from 4 firms in 2019–2023 was examined using Random effect model. The findings revealed that board independent and firm age are important in enhance operating efficiency in consumer goods firms; while, the firm size is insignificant in improve operating efficiency of consumer goods firms. The study concludes by recommending that firms should adopt Company Allied Matters Acts of 2020 (CAMA) in order to increase the proportion of non-executive and independent directors to one-third of the total number of director on the board. Also, ensure transparency, and objectivity in the appointment of board members. In addition, firms should utilize institutional knowledge and experience accumulated over time to drive strategies decision as well as provide monitoring programs where experienced management can guide newer executives.

Keywords: Board Independence, Operating Efficiency, Consumer Goods

1. Introduction

In today's dynamic and competitive business environment, corporate governance has gained significant attention (from researchers, policymakers, and investors), especially in emerging markets like Nigeria, due to its critical role in enhancing firm performance, transparency, and accountability. Among the various components of corporate governance, board independence has emerged as an important mechanism for ensuring effective oversight, protection of shareholders' interests, and strategic decision-making. Board independence refers to independent of non-executive members from management control. The role of board independent becomes more pronounced in the consumer goods firms, because the competition is cruel and operational efficiency is important for reduce production costs, increased operating margins, profitability, and sustainability (Derouiche et al., 2020). However, achieving optimal levels of operating efficiency depends not only on internal management practices but

also on the quality of governance, particularly the effectiveness of the board. Studies have suggests that firms with high operational efficiency will perform better in competitive markets (Lee et al., 2019).

While the literature acknowledges the role of corporate governance in enhancing firm performance, empirical evidence on relationship between board independence and operational efficiency, (especially in the Nigerian consumer goods sector) remains limited and inconclusive (Ehikioya, 2009; Uwuigbe et al., 2014). Some studies suggest that independent boards contribute to improved efficiency by enforcing performance standards and minimizing managerial slack (Fama & Jensen, 1983; Klein, 1998) due to resource availability and experience (Kyere & Ausloos, 2021; Ogundajo & Onakoya, 2016; Nworji et al. 2011). Others argue that the presence of independent directors may not yield significant outcomes in environments where governance structures are weak or compliance is minimal (Kyere & Ausloos, 2021; Adegbite, 2015). In addition,

Uadiale, (2010) and Ehikioya, (2009) highlight issues of bureaucratic inertia and diminish returns in larger or older firms.

Thus, there is a pressing need to empirically examine how board independence, firm size, and firm age influence firm performance during and after COVID-19 pandemic using robust panel data techniques. This study seeks to address this gap by providing evidence from listed firms in Nigeria, using random effects modelling to control for unobserved heterogeneity.

2. Methodology

The data were obtained from the annual financial reports of listed consumer goods firms for 5 years, from 2019 to 2023. This period was chosen to see the effect of COVID-19 on listed consumer goods firms in Nigeria. A total of 4 listed consumer goods firms (Dangote, Nestle, BUA and Honeywell) were selected due to their high operational efficiency ratios with average turnovers (Account receivable, Inventory and Asset) greater than 100% and some having average operating expenses below ten Billion Naira.

2.1 Model specification

The present study aims to investigate the Effect of board independence on operating efficiency in listed consumer goods firms in Nigeria, with a focus on three independent variables: board independence (BOI), firm size (FSIZE), and firm age (AGE). To estimate the proposed model; we employ a panel data regression analysis leverage the advantages of cross-sectional and time-series data. To address the research objective, below is the model specification for the objective:

$$OPE_{it} = \beta_0 + \beta_1 BOI_{it} + \beta_2 FSIZE_{it} + \beta_3 AGE_{it} + \varepsilon_{it}, \dots 1$$

OPE_{it} = Operating Efficiency (measured by operating profit margin, asset turnover ratio)

BOI_{it} = Board Independence (measured by proportion of independent directors on the board)

$FSIZE_{it}$ = Firm Size (measured by log of total assets)

AGE_{it} = Firm age (number of years since incorporation)

ε_{it} = Error term

3. Results and Discussion

3.1 Descriptive Statistics

Table 1 presents descriptive statistics for variables involved in the study. The research comprises a total sample of 4 listed consumer goods from 2019 to 2023. Operating efficiency is measured using operating profit margin. The mean value for operating efficiency is 0.3715 (37.1%). The minimum efficiency is 0.08 (8%), while the maximum is 1.5789 (157.8%), and the standard deviation is 0.4536 (45.3%). The standard deviation of Operating efficiency for the sample firms is relatively high (> mean value), indicating that the sample firms have a spread-out operating profit margin score from the mean value. It also suggests that the sample firms have heterogeneous operating efficiency. The firm's size was measured using the natural logarithm of total assets. The larger value of the natural logarithm of total assets indicates the larger firm's size. The maximum value of a firm's size is 8302, and the minimum size is 7.13. The mean value of the firm's size is 4159.05, and the standard deviation is 18562.65. Since the standard deviation is above the mean value, indicating that the sample firms have relatively heterogeneous characteristics in terms of firm size.

Board Independence is measured by proportion of independent directors on the board. The mean value for board independence is 0.6281 (62.8%). The minimum board independence is 0.5 (50.0%), while the maximum is 0.7 (70.0%), and the standard deviation is 0.0813 (8.1%).

Firm age refers to the maturity of firms calculated from the initial establishment until the investigation period (2019–2023). The oldest sample has a firm age of 50 (maximum). Meanwhile, the youngest has a firm age of 14 (minimum). The mean value of the firm's age is 26, and the standard deviation is 13. A standard deviation less than the mean value implied that the sample's character is relatively the same age (homogeneity).

Table 1 Descriptive statistics

Variable	Mean	Std. Dev.	Min	Max
OPE	0.37	0.45	0.08	1.57
FSIZE	4159.05	18562.65	7.13	8302
BOI	0.62	0.08	0.50	0.70
AGE	26.5	13.48	14	50

3.2 Multicollinearity test

The multicollinearity test for the independent variables (predicators) as presented in Table 2 indicated that all the predicators had VIF less than 5. The highest was

3.92, which is firm size. Meanwhile, the tolerance in all the predicators was observed to be greater than 0.1. This therefore indicated that there was no threat of multicollinearity.

Table 2: Multicollinearity Test (VIF and Tolerance)

Variable	VIF	T
BOI	3.79	0.26
FSIZE	1.14	0.87
AGE	3.92	0.25
Average VIF	2.95	-

3.3 Housman Specification

The probabilities of the models (84.24%) are greater than 5% significance level and the study concludes that random model is preferred to test the null hypotheses. The Model revealed that the probability of the board independent has positive and statistical significant on operating efficiency (sig<0.006 and coefficient = 6.1475). This is supported by the findings of Klein (2002), Bhagat and Bolton (2008), Jackling and Johl (2009), and Olayiwola (2010). this show that board independent ensured better decision making, firm optimize costs, improve resources allocation, and boost profitability. Studies with contrary view are Agrawal and Knoeber (1996), and Bhagat and Black (2002) who reported inconsistent evidence that increasing board

independence may not always lead to better performance.

Also, coefficient of age has positive and statistical significant on operating efficiency (sig<0.030 and coefficient = 0.02960). This is in line with the findings of Coad, Segarra, & Teruel (2013) and Majumdar (1997) Found that older firms tend to have better performance due to learning effects and stability. this implied that older firms with experienced may have better financial strategies, and high operating efficiency results in better profit margins, enhance shareholders returns and boosting stock market performance. This study is not inline with Henderson (1999) who found that older firms may become less efficient over time due to organizational inertia and resistance to change.

Table 3: Panel data regression output

Method	Random Effect	
Dependent Variable	OPE	
	Coefficient	P-value
BOI	6.1475	0.006
FSIZE	3.40e-06	0.525
AGE	.02960	0.030
Intercept	4.2886	0.013
	Summary	
R-sq	0.8990	0.3280
Prob>chi2	0.0000	0.0501
Wald chi2(3)	142.35	7.81

4. Conclusion and Recommendations

The research concludes that board independent and firm age are important in enhance operating efficiency in consumer goods firms; while, the firm size is insignificant in improve operating efficiency of consumer goods firms. The study recommends that:

Firms should adopt Company Allied Matters Acts of 2020 (CAMA) in order to increase the proportion of non-executive and independent directors

References:

- Adegbite, E. (2015). Good corporate governance in Nigeria: Antecedents, propositions and peculiarities. *International Business Review*, 24(2), 319–330.
- Agrawal, A., & Knoeber, C. R. (1996). Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis*, 31(3), 377–397.
- Bhagat, S., & Black, B. (2002). The non-correlation between board independence and long-term firm performance. *Journal of Corporation Law*, 27(2), 231–273.
- Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance*, 14(3), 257–273.
- Coad, A., Segarra, A., & Teruel, M. (2013). Like milk or wine: Does firm performance improve with age? *Structural Change and Economic Dynamics*, 24, 173–189.
- Ehikioya, B. I. (2009). Corporate governance structure and firm performance in developing economies: Evidence from Nigeria. *Corporate Governance: The International Journal of Business in Society*, 9(3), 231–243.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301–325.
- Henderson, R. (1999). The innovator's dilemma as a problem of organizational competence. *Administrative Science Quarterly*, 44(2), 256–282.
- Jackling, B., & Johl, S. (2009). Board structure and firm performance: Evidence from India's top companies. *Corporate Governance: An International Review*, 17(4), 492–509.
- Klein, A. (1998). Firm performance and board committee structure. *The Journal of Law and Economics*, 41(1), 275–303.
- Klein, A. (2002). Economic consequences of improved disclosure. *Journal of Accounting and Economics*, 33(3), 375–400.
- Kyere, M., & Ausloos, M. (2021). Corporate governance and firm performance in Africa: A review. *Journal of African Business*, 22(1), 34–56.
- Majumdar, S. K. (1997). The impact of size and age on firm-level performance: Some evidence from India. *Review of Industrial Organization*, 12(2), 231–241.
- Nworji, I. D., Adebayo, O., & Adeyanju, O. D. (2011). Corporate governance and bank performance: A pooled study of selected banks in Nigeria. *International Journal of Business and Management*, 6(6), 217–225.
- Ogundajo, G. O., & Onakoya, A. B. (2016). Effect of corporate governance on financial performance of listed manufacturing firms in Nigeria. *International Journal of Research in Business Management*, 4(8), 1–16.
- Olayiwola, W.K. (2010). Practice and standard of corporate governance in the Nigerian banking industry. *International Journal of Economics and Finance*, 2(4), 178–189.
- Uadiale, O. M. (2010). The impact of board structure on corporate financial performance in Nigeria. *International Journal of Business and Management*, 5(10), 155–166.
- Uwuigbe, U., Peter, D., & Oyeniyi, A. (2014). The effects of corporate governance mechanisms on firms' financial performance: Evidence from Nigerian listed firms. *Corporate Ownership and Control*, 11(2-2), 365–373.

to one-third of the total number of director on the board. Also, ensure transparency, and objectivity in the appointment of board members.

In addition, firms should utilize institutional knowledge and experience accumulated over time to drive strategies decision; provide monitoring programs where experienced management can guide newer executives.