CORPORATE GOVERNANCE AND FIRM VALUE IN LISTED DEPOSIT MONEY BANKS IN NIGERIA: EVIDENCE FROM DYNAMIC PANEL DATA METHOD

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Abstract

This study investigates the impact of corporate governance on firm value in listed deposit money banks in Nigeria using the panel data framework. Corporate governance is measured in terms of board size, while firm value is measured by market price per share. The empirical analysis is based on a model that controls for bank profitability and credit risk. Also, the empirical analysis is based on 96 firm-year panel observations obtained from 8 listed deposit money banks over the period from 2010 to 2021. Our results show that the relationship between corporate governance and firm value is consistent with the fixed effect theory. Hence, for listed deposit money banks, the effect of corporate governance on firm value is moderated by unobserved bank-specific factors such as culture, management quality and leadership style. Also, we find that consistent with the agency cost theory, improvement in corporate governance practices enhances firm value. More specifically, we find that board size increase leads to higher market value. Based on these results, we conclude that board size increase serves as a signal to investors that bank managers are pursuing objectives that are consistent with their overall interest.

Key words: Corporate governance, firm value, board size, fixed effect.

Introduction

The separation of ownership (principal) from management (agent) especially in large corporate corporations has a tendency to lead to principal–agent problem as a result of the differences in the interests of both groups. Corporate governance provides an overarching structure to mitigate the possible issues of conflict of interest among the critical stakeholders in an organization (Goergen, 2012). This is recognition of the role of goal congruence - consistency or agreement of individual goals with company goals (Ding, Dong, Liang, & Zhu, 2017). Corporate managers as agents of the firms are expected to act in the 'best interest' of the organisation and its owners. However, where the interest of the organization substantially differs from that of managers, the party with more power and information at its disposal will tend to take undue advantage of the other party(s).

As espoused by Adeusi, Akeke, Aribaba, and Adebisi (2013), corporate governance involves establishing the structures and processes and mechanisms to optimize management decisions and activities, provide transparency and accountability in a manner that ensures that shareholders' interests and values are enhanced in the long term. Through the corporate governance structures, the agency problem is mitigated leading to aligned interests. Gompers, Joy, and Andrew (2003) noted that ultimately, corporate governance is majorly aimed at improving financial performance, shareholder value and by extension firm value which in the long run. Adeusi et. al, (2013) further stated that a well implemented corporate governance structure enhances the confidence of stakeholders in the management team consequently leading to better risk perception and reduction in the cost of capital. Claessens, and Yurtoglu (2013) cited in M'ithiria, Musyoki, and Shawa (2017) provided empirical evidence to support this position in their research in developing/emerging markets which revealed that firms with good corporate governance practices benefit from better access to cheaper financing and higher financial performance. Aligning the objectives of the organization to that of its managers through corporate governance ensures that managers will take decisions that are in the best interest of the organization as it also aligns to their own interests.

Haryono, and Paminto (2015) opined that corporate governance is a critical element in improving the economic efficiency, growth potentials and stakeholders' confidence in the corporation. They further stated that objective setting and performance monitoring mechanisms associated with corporate governance provides a level of trust that is essential for the proper functioning of corporations in a country. In Nigeria, corporate scandals and failures have led to stricter regulation of corporate governance systems - for example, the specification of qualifications and skillsets of the audit committee and the risk management committees, increasing the number of independent members representation in board of directors, limiting the tenure of certain board members as well as delineating the roles of the chief executive officer and that of the chairman in addition to new financial reporting rules and standards especially in issues relating to the remuneration of top executive and other board members. In this research, the dynamic relationship between corporate governance and firm value in listed deposit money banks in Nigeria.

Literature Review

Theoretical Review

Corporate governance is a concept based on theory. Some of the theories that find relevance in studies on corporate governance include agency theory, asymmetric information theory, resource dependency theory and stakeholders' theory. For the purpose of this research, agency theory is deemed the most relevant. The theory supports the establishment of the structures associated with corporate governance as a means of mitigating the principal-agent problem (Mitnick, 1973). Borlea and Achim (2013) cited in M'ithiria, Musyoki, and Shawa (2017) characterized the agency theory as involving the study of the agency relationship that subsists between the firm owners (agents) and managers of the organizations (agents) and the problems that arise as a result of this relationship. The problems are associated with the separation of ownership and control and associated conflict of interest between the objectives of the organization and that of individual managers. The corporate governance mechanism provides a means of addressing the agency problem. Key in this is providing the structure and process of monitoring the activities of managers through such mechanisms as the audit committee which oversights the accounting choices and practices of the organization to ensure they are in the best (long term) interest of the firm owners.

Corporate governance also offers protection to managers from unreasonable (performance) demands and unfair treatment from owners. For example, it offers remuneration structures to incentivize managers to better performance in addition to setting out processes for the termination of the services of managers including severance packages. Thus, M'ithiria, et. al (2017) stated that the various corporate governance mechanisms proposed in the agency theorists revolve around protection of shareholder interests; motivating managers to acts in shareholders' interests; and reduction of agency costs associated with agency problem in line with (Ross, 1973) who asserted that compensation package(s) offered to managers can help to reduce agency problem by aligning interests.

Empirical Review

Sadiq and Gebba (2021) evaluated how transparency owing to corporate governance affect the financial performance and firm value of family owned businesses in the United Arab Emirates (UAE). Secondary data was collated from the annual reports and accounts of sampled companies. Findings of the research revealed that financial performance was not significantly affected by corporate governance. Furthermore, findings revealed that family owned businesses in the Emirate are more likely not to make their records publicly accessible.

In another similar research, Temiz (2021) evaluated the effects of corporate governance disclosures on firm value and performance of firms in Turkey. The research utilized data from Standard and Poors (S&P) transparency disclosure index data for the country. The research, which implemented a two-step least square regression using the fixed effects technique, revealed that the disclosure of governance information does have significant impact on firm value. The research however, noted that information disclosure was not standardized making it difficult to measure the benefits/costs to corporations of disclosing such information.

Butt, Shahzad, and Ahmad (2020) investigated the impact of corporate social responsibility on the firm value of non-financial quoted companies in Pakistan. The research extracted data from the audited reported of sample companies and analyzed using correlation and regression analysis. Findings of the research revealed that corporate social responsibility had a significant effect on firm performance. However, when corporate governance is included in moderating role, the effect of corporate social responsibility became significantly weaker Ochego, Omagwa and Muathe (2019) focusing on Kenyan commercial banks sought to determine the relationship between corporate governance and firm value in connection to the moderating role of financial performance. Collecting data from a sample of 40 commercial banks, findings of the research established that there was a significant relationship between financial performance and firm value - and thus concluded that banks with good financial performance tend to have higher market value. They suggested the need to improve the corporate governance environment in the industry in order to improve achievement of objectives.

Gerged and Agwili (2019) investigated the relationship between corporate governance and firm value and profitability financial and non-financial listed companies in Saudi Arabia. The research used a sample data from audited annual reports of companies listed in the period 2012 to 2016. Findings were indicative of the fact that corporate governance mechanisms improved market value but not necessarily book value. The findings also revealed that CG reforms had improved performance albeit at much less desirable levels.

Elvi, and Dina (2019) investigated the relationship between corporate governance mechanisms on firm value. The purposive sampling technique was applied to select a sample of 242 companies listed in the Indonesian stock market for the period 2013 to 2017. The research results revealed that the board of directors' size, board independence, audit committee size, and institutional ownership all had positive and statistically significant relationship with firm value.

Goel (2018) conducted an analytical review of social reporting and corporate governance disclosures in India with the intention of determining the implications financial performance. The research developed a corporate governance disclosure index which was applied to period covering - FY 2012–13 as Period 1 to FY 2015–16 as Period 2). Findings of the research revealed significant improvement in corporate governance structures - however the effect on financial performance was only in the period immediately after CG reforms in the country. In subsequent periods, the linkages between CG disclosures and financial performance appeared to be very weak.

Nazir, and Afza (2018) investigated the relationship between corporate governance and firm value with reference to how the relationship is mediated by managerial behavior towards earnings management in emerging market economies. The research used a 1944 firm year data from listed companies in Pakistan. The research confirmed role of corporate governance in mitigating agency problem by revealing that corporate governance significantly and positively affect firm value. The research also found that corporate governance mechanism also helps to mitigate opportunistic earnings management behaviour of managers which ultimately enhances firm value. Thus, even though opportunistic behaviour by managers has a negative influence on firm value, this is substantially mitigated by corporate governance mechanisms.

M'ithiria, Musyoki, and Shawa (2017) conducted a literature review with a view to determine the relationship between corporate governance characteristics and firm value. The review concluded that documented empirical evidence does not provide conclusive evidence of the relationship between corporate governance, board structure and firm value. Furthermore, the review found that although resource dependency and agency theories were the main theories in exploring the subject matter, they do not provide adequate explanation of the effect of board structure on firm value.

Haryono, and Paminto (2015) sought to determine the relationship between corporate governance and firm value - with particular interest in the moderating role of risk and financial performance in Indonesian listed mining sector companies. Applying a structural equation modelling (SEM) technique for data analysis, findings of the research revealed that corporate governance had a statistically significant positive effect on firm value through financial performance. However, there was no meaningful effect on firm value through firm risk. Thus, corporate governance was established to have firm value enhancing qualities if properly structured and implemented.

Ficici, and Aybar (2012) investigated the relationship between corporate governance and firm value in emerging market countries - with reference to those issuing audited reports. The research focused on 54 companies in countries in Latin America, Eastern Europe and Asia. Findings of the research suggested that there is a statistically significant correlation between corporate governance structures and market values and/or performances of companies in emerging markets. The results further indicated that social political indicators including weak legal structures and corruption affect corporate governance structures and by extension also affect their market values. Thus, investors are well advised to pay attention not only to corporate governance structures of companies in emerging markets but also to their legal and political environments.

Research Methodology

Data and Variables

To analyze the impact of corporate governance on firm value, we use yearly panel data on eight listed deposit money banks in Nigeria over the period from 2010 to 2021. Hence, our sample contains 96 firm-year observations. The banks are UBA, Fidelity, UBN, Wema, Access, FCMB, GTB, and Zenith. The data were all sourced from published financial statements, annual reports, and result presentations of the individual banks. For reliable and robust results, all empirical analyses are based on log-transformed data. The EViews software package is used.

The study variables are described as follows:

- **Dependent Variable**: Our dependent variable is firm value, which is measured by market price per share (MPS).
- **Explanatory Variable**: The main explanatory variable is corporate governance, which is measured by board size.
- **Control Variables**: Our control variables are profitability and credit risk. The measures used for these variables are respectively earnings per share and non-performing loan ratio.

Tables 1 – 4 show some summary statistics for both bank-level and pooled data.

Table 1: Summary Statistics for Market Price Per Share

BANK	Mean	Std. Dev.	C.V.	Skew.	Kurt.
ACCESS	7.94	2.05	25.80	-0.42	1.63
FCMB	2.99	1.74	58.24	1.41	4.76
Fidelity	1.96	0.60	30.70	-0.40	2.19
GTB	25.50	8.02	31.47	0.46	2.48
UBA	6.61	2.58	39.07	-0.20	1.59
UNION	7.19	2.00	27.82	0.26	2.10
WEMA	0.80	0.30	37.83	0.55	1.77
Zenith	18.88	5.10	27.00	0.43	1.93
All	8.76	8.69	99.13	1.51	4.89

Table 2: Summary Statistics for Board Size

BANK	Mean	Std. Dev.	C.V.	Skew.	Kurt.
ACCESS	15.50	1.24	8.02	-0.44	2.48

FCMB	11.25	2.18	19.37	0.93	2.18
Fidelity	14.42	1.62	11.25	0.49	3.44
GTB	13.08	2.27	17.39	-2.82	9.35
UBA	17.50	1.24	7.10	-0.15	1.48
UNION	15.08	1.51	9.98	0.02	1.62
WEMA	12.17	0.72	5.90	-0.23	2.11
Zenith	12.25	0.97	7.88	-1.15	3.42
All	13.91	2.47	17.77	-0.15	3.14

Table 3: Summary Statistics for Earnings Per Share

BANK	Mean	Std. Dev.	C.V.	Skew.	Kurt.
ACCESS	5.99	12.00	200.34	2.99	9.99
FCMB	0.64	0.46	71.22	-1.61	5.17
Fidelity	0.55	0.36	64.99	0.53	2.03
GTB	4.47	2.03	45.51	-0.09	1.62
UBA	1.87	1.00	53.33	-0.38	2.66
UNION	0.12	5.07	4409.03	-1.82	7.33
WEMA	6.54	8.12	124.18	0.05	3.28
Zenith	4.39	2.24	50.90	0.13	1.74
All	3.07	5.86	190.99	3.76	27.94

Table 4: Summary Statistics for Non-Performing Loan Ratio

BANK	Mean	Std. Dev.	C.V.	Skew.	Kurt.
ACCESS	4.62	2.88	62.36	1.09	3.19
FCMB	4.02	1.00	24.92	0.50	2.49
Fidelity	6.74	6.86	101.77	2.77	9.17
GTB	5.04	1.77	35.12	0.20	1.33
UBA	3.81	1.97	51.56	0.10	1.61
UNION	7.13	4.36	61.17	2.47	7.87

WEMA	10.28	14.92	145.11	2.67	8.76
Zenith	3.78	1.21	31.99	-0.06	2.27
All	5.66	6.34	112.00	5.95	44.69

Model and Methods

Consistent our study objectives, we specify the dynamic relationships between corporate governance and firm value as follows:

$$LMPS_{it} = \beta_0 + \phi_i + \gamma_i + \beta_1 LMPS_{it-1} + \beta_2 LBSIZE_{it} + \beta_3 LEPS_{it} + \beta_4 LNPLR_{it} + \epsilon_{it} \quad (1)$$

Where:

β_0 represents the model intercept; β_2 captures the effect of board size on market price per share; β_3 and β_4 respectively capture the effects of earnings per share and non-performing ratio on market price per share, while ϵ_{it} is the error term. Also, we incorporate one period lagged value of market price per share as an additional explanatory variable. Hence, β_1 is the parameter that determines the degree of persistence of market price per share. Our model also controls for the unobserved cross-sectional heterogeneity or bank-specific effects, ϕ_i (such as culture, management quality and leadership style) that may play a significant role in the relationship between corporate governance and firm value.

Although, there are several methods of estimating a panel data model, we focus on the two conventional methods: namely, fixed effect and random effect method. However, these methods have different assumptions regarding how ϕ_i should be treated. Whereas the fixed effect method treats ϕ_i as an important explanatory factor that also correlates with corporate governance practices, the random effect method treats ϕ_i as part of error process. To determine which assumption is valid in our case, we employ both the Likelihood ratio and the Hausman tests. Both tests are conducted under the alternative hypothesis that the fixed effect assumption is valid. Hence, their significance would validate the view that ϕ_i correlates with other explanatory variables.

Analysis and Discussion

Table 5 shows the estimation results for the dynamic relationship between corporate governance and firm value, incorporating the moderating role of profitability and credit risk. Both fixed effect and random effect results are reported.

Table 4: Estimation Results; DV = MPS

Variable	Random Effect	Fixed Effect
C	-0.7137	-1.3400
	(0.1702)	(0.2087)
LMPS(-1)	0.8976	0.1634
	(0.0000)	(0.1122)

LBSIZE	0.2603	0.9550
	(0.1915)	(0.0220)
LEPS	0.1189	0.3002
	(0.0013)	(0.0001)
LNPLR	0.0964	0.0533
	(0.2015)	(0.5494)
R-squared	0.8759	0.9396
Adjusted R-squared	0.8687	0.9289
F-statistic	121.77	87.726
	(0.0000)	(0.0000)
Durbin-Watson stat	2.2607	1.9818
Likelihood Test	–	65.160
		(0.0000)
Hausman	53.308	–
	(0.0274)	

From the lower panel of Table 5, both the Likelihood ratio (p-value = 0.0000) and the Hausman (p-value = 0.0000) tests are highly statistically significant, hence, accepting the fixed effect model as the plausible description of the dynamic relationship between corporate governance and firm value. This implies that unobserved firm-specific effects such as culture, management quality and leadership style are important explanatory factors for firm value for listed deposit money banks in Nigeria. Hence, our subsequent analysis would be based on the fixed effect results.

In terms of the overall performance of our model, the fixed effect Adjusted R-squared is 0.9289, indicating that our model is highly explained, accounting for approximately 92% of the total variation in firm value. Also, the F-statistic has a zero probability, which suggests that the estimated model is highly significant. Further, the Durbin Watson statistic (DW = 1.9818) is very close to its ideal value of 2, indicating that our model has little or no specification error.

From the upper panel of Table 5, the coefficient on LMPS(-1) (beta = 0.1634, p-value = 0.1122) is positive but not statistically significant, implying that market price per share does not significantly depend on its own historical performance. In other words, market price per share is not persistent and hence cannot be predicted based on its previous values.

Further, from the fixed effect results, we can see that the coefficient on LBSIZE (beta = 0.9550, p-value = 0.0220) is positive and significant at the 5% level, implying that corporate governance is a significant determinant of firm value: the higher the board size, the higher the value of the firm in the stock market. Also, the large size of the LBSIZE coefficient shows that the effect of corporate governance on firm value is also significant in economic sense. The estimated coefficient implies that a 1% increase in board size would, on average, lead to about 0.96% increase in firm value, holding other factors constant. This finding implies that investors assign a sizable weight to corporate governance in their pricing or valuation model. Also, this finding is consistent with the theoretical view that larger board size induces effective monitoring and control of corporate managers' excesses, thereby reducing the agency problem between managers and shareholders.

Based on this theoretical view we contend that investors in the Nigerian banking sector see board size increase as an effective way of reducing agency problem through improved monitoring, hence, they prefer banks with larger board size over banks with smaller board size. Our finding also agrees with several studies including Ficici, and Aybar (2012), Nazir, and Afza (2018), Elvi, and Dina (2019), and Gerged and Agwili (2019). On the contrary, our results disagree with the findings reported by Temiz (2021) and sadiq and gebba (2021).

Concluding Remark

This study employs the panel data design to investigate the dynamic relationship between corporate governance and firm value in listed deposit money banks in Nigeria. Corporate governance is measured by board size, while firm value is measured by market price per share. Our analysis is based on 96 firm-year panel observations obtained from 8 listed deposit money banks over the period from 2010 to 2021.

Our empirical analysis shows that the relationship between corporate governance and firm value is consistent with the fixed effect theory. Hence, for listed deposit money banks, the effect of corporate governance on firm value is moderated by unobserved bank-specific factors such as culture, management quality and leadership style.

Further, consistent with the agency cost theory, our empirical analysis shows that improvement in corporate governance practices enhances firm value. More specifically, we find that board size increase leads to higher market value. Hence, we conclude that board size increase serves as a signal to investors that bank managers are pursuing objectives that are consistent with their overall interest.

References

Abdulazeez, D.A; Ndibe, L, & Mercy, A.M. (2016) Corporate governance and financial performance of listed deposit money banks in Nigeria. *Journal of Accounting and Marketing,* 5(1). 153-164.

Adeusi, S.O.; Akeke, N.I.; Aribaba, F.O. & Adebisi, O.S. (2013). Corporate governance and firm financial performance: Do ownership and board size matter? *Academic Journal of Interdisciplinary Studies,* 2(3). 251-259. https://doi.10.5901/ajis.2013.v2n3p251

Ali, F.; Abdelnabi, M.; Iqbal, H.; Alaeddin, O.; & Bin, O. (2016). Corporate governance characteristics and valuation: Inferences from quartile regression, *Journal of Economics, Finance and Administrative Science*, 21(41). 81-88. http://dx.doi.org/10.1016/j.jefas.2016.06.004

Borlea, S.N. & Achim, M.V.(2013). Theories of corporate governance. *Economics Series,* 23(1), 117-128.

Butt, A.A.; Shahzad, A.; & Ahmad, J. (2020). Impact of CSR on firm value: the moderating role of corporate governance. *Indonesian Journal of Sustainability Accounting and Management,* 4(2), 145–163. https://doi.org/10.28992/ijsam.v4i2.257.

Claessens, S. &Yurtoglu, B. B. (2013). Corporate governance in emerging markets: A survey. *Emerging Markets Review,* 15, 1-33.

Ding, J.; Dong, W.; Liang, L. & Zhu, J. (2017). Goal congruence analysis in multi-division organizations with shared resources based on data envelopment analysis, *European Journal of Operational Research* 263(2017). 961–973. http://dx.doi.org/10.1016/j.ejor.2017.06.040

Elvi, Y. & Dina, P. (2019). The impact of corporate governance mechanisms on firm value, advances in economics, *Business and Management Research,* 97. 588-596.

Ene, E.E. & Bello, A.I.E. (2016). The effect of corporate governance on banks' financial performance in Nigeria, *Journal of Business and Management,* 18(11). 99-107.

Ficici, A. & Aybar, C.B. (2012). Corporate governance and firm value in emerging markets an empirical analysis of ADR issuing emerging market firms, *Emerging Markets Journal*, 2. 38-53. http://doi.10.5195/emaj.2012.18

Gerged, A.; & Agwili, A. (2019). How corporate governance affect firm value and profitability? evidence from Saudi financial and non-financial listed firms'. *International Journal of Business Governance and Ethics*. (In Press).

Goel, P. (2018). Implications of corporate governance on financial performance: an analytical review of governance and social reporting reforms in India, *Asian Journal of Sustainability and Social Responsibility*, 3(4). https://doi.org/10.1186/s41180-018-0020-4

Goergen, M. (2012). *International corporate governance,* London, Prentice Hall.

Gompers, P.A.; Joy, L.I. & Andrew, M. (2003). Corporate governance and equity prices, *Journal of Economics*, 118(1). 107-155.

Haryono, U. & Paminto, A. (2015). Corporate governance and firm value: the mediating effect of financial performance and firm risk, *European Journal of Business and Management,* 7(35). 18-25.

M'ithiria, E.N.; Musyoki, D. & Shawa, K. (2017). Corporate governance, board structure and firm value: a review of literature, *Journal of Business & Economic Policy*, 4(4). 72-80.

Mitnick, B.A. (1973). Fiduciary rationality and public policy: The theory of agency and some consequences. *A paper presented at the 1973 Annual Meeting of the American Political Science Association, New Orleans*, LA.

Nazir, M.S.; & Afza, T. (2018). Does managerial behavior of managing earnings mitigate the relationship between corporate governance and firm value? Evidence from an emerging market, *Future Business Journal,*4(2018). 139–156.

Ochego, E.M.; Omagwa, J. & Muathe, S. (2019). Corporate governance, financial performance and firm Value: a case of commercial banks in Kenya*, International Journal of Finance & Banking Studies,* 8(4). 41-49. https://doi.org/10.20525/ijfbs.v8i4.608

Ross, A.S. (1973). The economic theory of agency: The principal's problem. *The American Review,* 6 (2), 134-139.

Sadiq, M. & Gebba, T.R.A. (2021). Financial performance, firm value, transparency and corporate governance. Evidences from family-owned business in UAE, *Transnational Corporations Review*, https://doi.10.1080/19186444.2021.1938496

Temiz, H. (2021). The effects of corporate disclosure on firm value and firm performance: evidence from Turkey*, International Journal of Islamic and Middle Eastern Finance and Management,* 14(5). 1061-1080. https://doi.org/10.1108/IMEFM-06-2020-0269