

BOARD CAPABILITY, INTELLECTUAL CAPITAL AND FORWARD-LOOKING INFORMATION DISCLOSURE IN LISTED MANUFACTURING FIRMS IN NIGERIA

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Abstract

The present empirical study assessed the combined effect of board capability (BC) and firm intellectual capital (IC) on the disclosure of forward-looking information (FLI) in 30 manufacturing companies based in Nigeria during the years 2015- 2024. Panel data obtained from the annual report based on content-analysis were employed. Board capability and intellectual capital were operationalised as non-tradable strategic resources, the value of which is reflected through plausible forward-looking disclosures. In order to deal with endogeneity, the analysis utilised Panel Corrected Standard Errors (PCSE). The findings show that board independence ($z = 3.07$, $p < 0.05$) and board gender ($z = 2.01$, $p < 0.05$) had a strong positive impact on FLI. In addition, interaction of both board independence and human capital ($z = 3.21$, $p < 0.05$) and board meetings and relational capital with the FLI disclosure was positively and significantly correlated. The research makes contributions to the body of literature on various fronts. It is theoretically an extension of the Resource-Based View because it demonstrates the manner in which the intangible resources determine the effect of disclosure, and not just the performance of the firm. It also contributes to Signaling Theory by establishing that the attributes of governance and intellectual capital can be used as credibility-enhancing mechanisms of forward-looking disclosures. The empirical evidence on the complementary role of board independence and human capital in predicting the quality of disclosure is scarce and empirically provided through interaction in this study. Contextually, it has added value to the scanty body of evidence on the African capital markets, which provide information about how firms with high information asymmetry can use the governance capability and intellectual capital to provide future projections to their stakeholders.

Keywords: Competent board, credibility, stakeholders, transparency, trustworthiness.

1.0 Introduction

In the contemporary uncertain business environment, the stakeholders rely on the information that is oriented in the future (FLI) to determine future performance of a firm and risks incurred. Transparency and reduction in information gaps and confidence in capital markets are enhanced by high-quality FLI. The adequacy with which a firm can deliver credible FLI depends on its corporate governance and the strategic utilization of the resources based on knowledge. In this way, the ability of the board and the intellectual capital play a central role in defining the quality of the forward-looking corporate reports.

Due to the growing significance of forward-looking information, the literature on its drivers remains insufficient particularly in the emerging economies such as Nigeria. Available literature usually addresses both the corporate governance and intellectual capital as distinct, and it provides little information about the interplay of these two internal resources in improving the quality of FLI (Bravo, 2016; Romano et al., 2019; Luthfiansyah and Wijanyanti, 2022; Isa et al., 2022; Salman, 2023; Hapsanari et al., 2024). Consequently, the interaction between board credentials and intellectual capital and credible, useful FLI has not been investigated to a substantial extent.

This gap in the research is even more acute in Nigeria. The weak, incomplete, or rigid forward-looking disclosures still continue to be published by many listed firms, and this prevents stakeholders in their abilities to determine the future performance and risks. Regulations are viewed as enhancing transparency, but they fail to demonstrate why the quality of disclosure can

be so different among firms. The big question then is whether a combined impact of board capabilities and intellectual capital can positively influence the quality of FLI disclosures among the listed companies in Nigeria. In the absence of interlinking studies between these two elements, we still have a partial knowledge of the interplay between governance structure and knowledge resources that determine disclosure.

This paper intends to fill that void by examining the combined effect of the board capability and intellectual capital on FLI disclosure in Nigerian listed companies. It incorporates interaction-based evidence of an emerging market by combining the approaches of governance and intellectual capital. Its findings shall enhance theoretical insights on the complementary nature of governance and intellectual resources and it will inform regulators, investors and corporate leaders on improving the quality and credibility of forward-looking corporate reporting.

2.0 Literature Review

This paper is based on the Resource-Based View (RBV) and Signaling Theory. The combination of internal strengths, namely the experience of the board and intellectual capital with external communication strategies, namely forward-looking disclosure, they explain, creates strategic advantage and establishes investor confidence. The RBV was proposed by Barney (1991) who contends that capabilities and intellectual capital in boards are valuable resources that can hardly be replicated and still enhance competitiveness, innovation and foresight (Grant, 1996). The possession of these resources is however never enough but these companies need to communicate their strengths and intentions to the market by open reporting (Spence, 1973).

Based on the Signaling Theory by Spence (1973), forward-looking information (FLI) is one of the communication channels that ensure investors can see the internal resources. Companies that have significant boards and high intellectual capital provide believable messages of capability, vision, and trustworthiness through comprehensive and transparent reporting. On the other hand, companies that do not have these resources can produce unclear or poor quality of FLI which conveys uncertainty or poor management. Critically, the contact of the board capability and intellectual capital enhances these signals since competent boards use human and relational capital to generate disclosures that are informative, credible and transparent. A combination of these theories gives a good basis to the research on the effects of board capability and intellectual capital on the quality of forward-looking information among non-financial companies listed in Nigeria (Spence, 1973; Barney, 1991).

Conceptual Review

Forward-Looking Information

The quality of forward-looking information (FLI) reporting is regarded as one of the most significant elements of corporate transparency and strategic communication. FLI, such as earnings forecasts, strategic plans, and risk assessments, assist stakeholders in making sound decisions, eliminate the asymmetry of information, and instill confidence in capital markets (Bankole, 2022; Beattie et al., 2004; Clarkson et al., 2008). Although there is no doubt about the relevance of FLI, its efficacy is mostly reliant on internal resources and governance of a particular firm, namely, board competence and intellectual capital.

Board Capability

Board capability is a term used to describe the skills, experience, independence, expertise, and diversity of the directors, including gender diversity, which combine to determine the board competence to monitor, advise and guide the management (Isa et al., 2022; Hapsari et al., 2024). Good board is the one that makes sure that the strategic decisions are adequately assessed,

executed, and disclosed and the disclosures of the firm are believable and helpful. A competent board of directors that is independent improves supervision and minimizes the chances of misleading or incomplete forward disclosures.

Intellectual Capital (IC)

Intellectual capital refers to the knowledge-based assets of the firm, which is typically classified as human, structural and relational capital. Human capital also encompasses knowledge, skills, and expertise of the employees and the capability to predict the changes in the market, as well as identify strategic opportunities that are available to the firm. Structural capital encompasses systems, processes and routines that bring, encode and distribute knowledge within an organization. Relational capital defines the level of relationship and networks that the company has with other stakeholders enhancing trust and credibility of the information disclosed (Salman, 2023; Yahaya, 2025). IC alone offers the mental and interpersonal skills to produce and transmit high quality FLI.

Empirical Review

Bravo (2016) has examined the connection between FLI and company reputation in the lessening of stock returns instability. The researchers used FLI that was measured by content analysis of annual data of a selected U.S. corporation. Since all yearly reports were analyzed manually and coded, only the firms that are listed in Standard and Poor 100 were analyzed. Findings showed that FLI has great implications on stock markets. Since stock volatility correlates with information asymmetry and the increased corporate risk, this analysis suggests some feasible implications to managers and regulators with respect to the significance of a particular disclosure policy in capital markets. Furthermore, it has been indicated that futuristic disclosed information by better-rated firms has a stronger impact on the stock return volatility.

Romano et al. (2019) examined the feature of firms and prospective risk disclosure in Italy. A sample of non-Italian listed companies in Italy was studied by them and using a regression model they tested the effect of prominent firm characteristics on FLI. The outcome specified that firm magnitude and the availability of independent directors have an encouraging association with FLI; the rest of the aspects of the firm were statistically non-significant. The findings indicate that in the investigated scenario, the big businesses tend to release future estimates to alleviate information asymmetry and attract possible investors.

The researchers Dey et al. (2020) examined the degree and the level of FLI disclosure and determined the determinants that drove disclosure of FLI in an emerging and developing economy. The sample size was made up of yearly reports of the 30 leading quoted establishment in Bangladesh, in the period 2013-2017. An index based on a content analysis methodology was used to analyse the FLID practice and find out its extent. The multiple linear regression analysis was used to establish that, board size, global affiliation of the auditor, debt, and earnings have a significant favourable influence on FLID. Firm magnitude and age had a strong negative correlation with FLID. Further, it is also contrary to expectations because board gender in the carries a negative consequence on FLID.

Luthfiansyah and Wijanyanti (2022) investigated how board diversity impacts on the FLI disclosure in manufacturing businesses on the Indonesia stock marketspanning 2020 and 2021. It was quantitative research based on secondary information. The research sample was restricted according to the sample criteria of the research to include 160 manufacturing companies listed on the Indonesia Stock Exchange during the period of the research. The frequency of board meetings is the only independent variable that influences the dependent variable in this study. The number of board meetings held largely determines the forward-looking disclosure.

Conventional board meetings foster a better communication amongst the board and combined with the size of the company; they signify different features and views which contribute to better corporate relationship with suppliers, customers and other firms of the directors.

Abdelazim et al. (2023) analyzed the relationship between the company monetary and operational properties on the degree of FLID of 49 non-financial organizations in Egypt which is moderated by gender diversity on the board of directors. The research established that ROA, debt, size, and age positively influenced FLID significantly whereas audit firm size and industry have a negative effect. Moreover, the connection was moderated by the board gender diversity.

Rajagopal (2024) made a thorough review of the previous papers published in the literature that investigated the impact of corporate governance to the disclosure of forward-looking information. PRISMA recommendations were followed in the study and two major databases, including Web of Science and Scopus, were used. Using agency-theoretical approach, the research found out that corporate governance attributes at the group level, which include board composition, compensation and internal audit role are important determinant of FLI. The lack of proactive group-level corporate governance in regards to reporting prospective information was also realized.

3.0 Methodology

The research design was ex post facto design to study the impact of board capability and intellectual capital to forward-looking disclosure. This type of design suits excellently when the research is conducted to gain understanding of the causal relationship on the basis of historical or archival information (Kerlinger and Lee, 2000). Purposive sampling was used to select 30 listed firms out of 56 population between the years 2015 and 2024. The companies were sampled due to the availability of a full financial statement and their stock were a representation on the NGX over the timeframe of the study. The secondary data was obtained by use of audited annual reports of the sampled firms.

The study adopted the disclosure index of Kilic and Kuzey (2018), Forward-Looking Information (FLI), and the disclosure index of Bontis 1998, Intellectual Capital (IC). A total of 30 items for FLI and 36 items for IC were contained in these indexes. This paper analyzes the relationship between board capability, intellectual capital, and forward-looking information based on the past disclosures of corporations through annual reports. The theoretical basis of the selected variables and their measurement lies in the Resource-Based View (RBV) and Signaling Theory whereas the panel regression model offers a solid test of the main and interaction effects. This will allow the detailed relationships on which the study is based to be captured and it is more efficient in terms of statistics. The robustness checks are conducted in order to make the results valid and generalized. Table 1 demonstrates the measurement of each variable of both the Board Capability (BC) and IC.

Model Specification

This model was developed and can be expressed explicitly as:

$$FLI_{it} = \beta_0 + \beta_1 BI_{it} + \beta_2 BG_{it} + \beta_3 BM_{it} + \beta_4 BI * HUM_{it} + \beta_5 BM * REL_{it} + \beta_6 BG * STRU_{it} + \beta_7 SIZ_{it} + \beta_8 AGE_{it} + \mu_t$$

Where:

FLI = Forward-looking Information

BI = Board Independence

BG = Board Gender

BM = Board Meeting

BI*HUM = Interaction of board independence and human capital

BM*REL = Board meeting and relational capital

BG*STRU = Board gender and structural capital

SIZ= firm size

AGE = Age of firm

β_0 , = Constant Term

β_1 = Coefficient of the independent variables;

Subscript i= Firms (cross-section)

Subscript t = Years (time-series)

Table 1:
Measurement of Variables

Variables	Measurement	Empirical Sources	Data Source
Forward-looking Information	The % of total items a firm disclosed to total items (i.e. 30 items) in disclosure index	Kılıç & Kuzey, 2018); Hidayati& Puspawati, (2024)	Annual report
Board Capability			Annual report
Independent director	Independent directors/total members of board directors	Romano et al 2019	
Board Meetings	Number of meetings held	Kılıç & Kuzey, 2018) Hidayati& Puspawati, (2024)	
Board Gender	The ratio of female directors to total number of directors		
Intellectual Capital			Annual report
Human	The % of total items a firm disclosed to total items (i.e. 36 items) in disclosure intellectual capital disclosure index	Bontis (1998), Oba et al (2013)	
Structural	(12 items each for human capital, structural capital and relational capital)		
Relational			
Control Variables			Annual report
Firm Size	Natural Logarithm of Total sales	Romano et al (2019)	
Firm age	Natural Logarithm of year of Incorporation		

Source: Authors' Compilation, 2025.

4.0 Result and Discussion

Table 2: Descriptive Statistics

	FLI	BI	BG	BM	BI*HUM	BM*REL	BG*STRU	SIZ	AGE
Mean	0.379	6.274	1.766	4.773	29.207	2.692	1.917	7.624	1.486
Median	0.400	6.000	2.000	4.000	19.200	0.880	0.930	7.740	1.568
Maximum	0.600	17.000	6.000	12.000	87.04	84.35	60.00	9.010	1.763
Minimum	0.233	0.000	0.000	1.000	15.030	0.350	13.620	5.580	0.778
Std. Dev.	0.079	2.922	1.323	1.412	46.898	9.224	5.684	0.815	0.201
Skewness	0.521	0.394	0.662	1.996	6.816	6.398	7.282	-0.418	-1.379
Kurtosis	4.349	3.674	3.192	8.468	72.471	46.815	67.702	2.323	4.160
Jarque-Bera	36.207	13.382	22.309	570.9	624.9	259.6	547.2	14.417	111.5
Obs.	300	300	300	300	300	300	300	300	300

Source: Authors' Compilation, 2025.

Descriptive Statistics

The descriptive statistics also reveal that the sample firms report an average of 37.9% of the forward-looking information (FLI) items, which is an indication that the firms are moderately transparent on the future performance. The boards are moderately organized with an average of about six independent directors, minimum and maximum values are 0 and 17, respectively which indicates a strong external control. On the other hand, gender diversity is also low with an average of just one to two female directors. The extent of activeness of the board is also apparent as the number of meetings per year is close to five, the lowest and the highest are 1 and 12, respectively, which is more than the minimum in governance.

The terms of interaction also indicate that the effect of the interaction between independence of the board and human capital BI*HUM is comparatively influential (29.207), which means that the firms tend to have a positive impact due to independent control by capable and experienced board members. On the other hand, the mean of board meetings and relational capital BM*REL (2.692) and board gender and structural capital BG*STRU (1.917) are moderate, which may imply that boards do not gather very often, but the correlation with the relational and structural capital is not as great as it could be. In terms of the firm characteristics, the mean firm size expressed as the logarithmic form is an indicator to the fact that the firms sampled are large and financially substantial, which is common in listed firms. Also, the mean age of the firms which is logged also shows that these are mature companies whose long operational history adds to stability and experience in reporting. The net effect of all the aforementioned points in the descriptive findings is that the firms have fairly good governance and intellectual capital resources but some of the aspects like gender diversity and relational capital are moderately developed.

Standard deviations depict the variability on the mean of each variable which is the dispersion of variability of the firms to each other. The standard deviation of the FLI score of 0.079 shows that the FLI disclosures of firms are relatively the same and there is very little variation in the level of reporting. The BI has moderate dispersion of 2.922, and it is clear that the number of independent directors varies significantly among firms, whereas BG (1.323) and BM frequency (1.412) have moderate spread, meaning that the boards have significant differences in gender representation and board meeting frequency. The standard deviation of interaction terms is significantly higher: BI*HUM show the highest standard deviation of 46.898, BM*REL show 9.224, and BG*STRU show 5.684, indicating there are wide differences across firms in the combination of the governance attributes with the intellectual capital dimensions. The size of firms with a standard deviation of 0.815 represents the middle ground variation implying that although the majority of firms are large, their basis of asset varies significantly. Conversely, firm age is of comparatively low standard deviation, 0.201, which demonstrates that the sampled companies are largely homogeneous in terms of maturity and history of operations. On the whole, the data indicate that relatively homogeneous groups of firms exist in terms of the disclosure levels and age, but relatively diverse groups exist in terms of the governance structure and intellectual capital mixes.

The skewness values indicate that all the variables are skewed to the right as they are all FLI 0.521, BI 0.394, BG 0.662, BM 1.996, BI*HUM 6.816, BM*REL 6.398 and BG*STRU 7.282. This implies that the majority of the firms concentrate on the lower end of such variables with few firms having significantly higher values pushing the tail of the distribution to the right. The increase in the skewness values and especially large values above 1 imply the presence of a lot of asymmetry and outliers or extreme values of the interaction terms. Conversely, the skewness

(firm size and age) in the control variables is negative with skewness of -0.418 and -1.379 respectively indicating that the distributions are left-skewed. It means that the majority of firms are clumped half at the high sizes and ages with fewer firms on the bottom of the distribution. In general, these patterns of skewness suggest that the sample of firm size and age is characterized by old and big companies.

The values of the kurtosis indicate that the variables mainly have leptokurtic distributions, in other words, are more peaked than the normal and have more tails. FLI variable has a kurtosis of 4.349, board independence 3.674 and board gender 3.192 which show that it is not very heavy-tailed and more likely to have extreme values around the mean. Board meeting has a considerably bigger kurtosis of 8.468 which infers a significant dispersion around the mean with some extreme values. The interaction terms exhibit the highest levels of kurtosis of the BI*HUM 72.471, BM*REL 46.815 and BG*STRU 67.702 and hence the extremely high levels of peaking and extreme outliers which are very far off the distribution centre. Conversely, the size of firm with kurtosis value of 2.323 is fairly near to normal whereas firm age with kurtosis of 4.160 is moderately leptokurtic. On the whole, these kurtosis values indicate that the majority of these variables of governance and intellectual capabilities, particularly terms of interactions, have extreme values or outliers, but firm size and age are more normally distributed in comparison.

The Jarque Berra statistics of the factors 36.207, 13.382, 22.309, 570.9, 624.9, 259.6, 547.2, 14.417, and 111.5 show that the largest part of the distributions do not follow the normality. Because the values of JB exceed the critical value (usually 5.99 at 5% percent significance) implies the non-normality, these results indicate that, variables like FLI, board independence, and board gender have moderate violations of the normality condition, whereas variables like board meetings and all interaction terms (especially above 500) have extremely strong violations of the normality condition with very large values of skewness and kurtosis. Also, the control variables (although smaller) with JB values of 14.417 (firm size) and 111.5 (firm age) still represent statistically significant non-normality. All in all, the findings validate the idea that neither there is normality in governance variables nor interaction terms, which is corroborated by the previous skew and kurtosis trends and rationale why to use (PCSE) estimation methods that are resistant to non-normality.

Table 3:
Correlation Matrix

	FLI	BI	BG	BM	BI*HUM	BM*REL	BG*STRU	SIZ	AGE
FLI	1.000								
BI	0.256	1.000							
BG	0.270	0.412	1.000						
BM	0.120	0.151	0.404	1.000					
BI*HUM	0.010	0.355	0.094	0.002	1.000				
BM*REL	0.071	0.097	0.152	0.134	0.033	1.000			
BG*STRU	0.066	0.128	0.293	0.138	-0.019	0.090	1.000		
SIZ	0.202	0.348	0.465	0.297	0.130	0.211	0.270	1.000	
AGE	0.056	0.053	0.201	0.112	-0.054	-0.313	-0.272	0.045	1.000

Source: Authors' Compilation, 2025.

Correlation Matrix

The correlation table illustrates that all the independent variables have positive correlations with forward-looking information (FLI), but the magnitude of variables varies. Board independence (0.256) and board gender (0.270) have the highest correlation with FLI, which means that companies with higher rates of independence directors and more women are slightly more likely to disclose forward-looking information. The positive correlation between the frequency of board meetings (BM) and FLI (0.120) specifies a relatively weak connection between the two variables. The interaction terms, BM*HUM ($r = 0.010$), BM*REL (0.071) and BG*STRU (0.066) exhibit very weak positive relationships, which means that, in simple bivariate analyses, the joint effects of the dimensions of governance and intellectual capital measures do not have a strong impact on FLI. Moving to the control variables, FLI is moderately positively associated with firm size (0.202), and it is strongly negatively related to firm age (0.056), which demonstrates that the link between these variables is negligible.

These correlations, in general, indicate small to moderate linear correlations, and no sign of multicollinearity. The findings of the correlation analysis of the independent variables also testify to the fact that there is no multicollinearity issue in the data sample since none of the correlation coefficients are close to the traditional value of 0.70. The relationships between the board independence variable, the gender of the board, and the board meeting frequency as well as the terms of interaction are generally low to moderate, which proves that the independent variables do not coexist as too close. This means that every variable will have a unique explanatory value to the model and that regression estimates are not expected to be affected by swollen standard errors or instability as a result of high inter-variable correlations. In this way, the dataset can be analyzed using multivariate regression without using corrective measures like removing variables or dimensional reduction.

Table 4:
Variance Inflation Factors

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
BI	3.13E-06	7.963636	1.415090
BM	1.18E-05	15.59731	1.252282
BG	2.00E-05	5.167626	1.853849
BI*HUM	1.02E-08	1.649141	1.187150
BM*REL	1.33E-06	6.514973	6.002041
BG*STRU	3.75E-06	7.152691	6.420153
SIZ	3.95E-05	123.4611	1.390237
AGE	0.000564	67.52942	1.212370

Source: Authors' Compilation, 2025.

Variance Inflation Factor

The outcomes of the variance inflation factor (VIF) indicate that multicollinearity is not a problem to the regression model. Notably, the mean adjusted or centred VIFs which are the preferred measure of identifying multicollinearity are all low in comparison to the traditional threshold of ten. It is particularly interesting to note that board independence (BI) has a centered VIF of 1.415, board meetings (BM) have 1.252, board gender (BG) has 1.854, and even the interaction terms of BI HUM (1.187), of BM REL (6.002), and of BGSTRU (6.420) have a comfortable value that is still below ten. In line with this, the control variables, firm size (1.390) and firm age (1.212) have no signs of collinearity. These results support the idea that the

independent variables add different explanatory value to the forward-looking information, and the regression estimates will not be biased or overstated due to the influence of multicollinearity.

Table 5:
Serial Correlation and Heteroskedasticity Tests

Test	F-Stat	P-value	Remarks
Breusch-Godfrey Serial Correlation	8.779	0.0124	Presence of Serial correlation
Harvey Heteroskedasticity	75.022	0.0132	Presence of Heteroskedasticity

Source: Authors' Compilation, 2025.

Serial Correlation and Heteroskedasticity

The Serial Correlation LM test shows that there is the first-order autocorrelation, the F-statistic is 8.779 ($p = 0.0124$). The Harvey test was used to check the heteroskedasticity, the F-statistic (75.022, $p = 0.0132$) indicates the possibility of heteroskedasticity. The issue was solved through the application of panel-corrected standard errors to provide accurate estimation.

Table 6:
Panel Corrected Standard Error

Variable	Coefficient	Std. Error	z-value	P> z
Constant	0.2790	0.0488	5.72	0.000
BI	0.0516	0.0168	3.07	0.002
BG	0.0124	0.0052	2.38	0.018
BM	-0.0067	0.0199	-0.34	0.734
BI*HUM	0.0160	0.0079	2.01	0.035
BM*REL	0.0209	0.0065	3.21	0.001
BG*STRU	0.0360	0.0123	-2.93	0.003
SIZ	0.0708	0.0544	1.30	0.193
AGE	0.0074	0.1509	0.05	0.963
Adjusted R ²	0.1813			
Wald Chi ²	317.29			
Prob > Chi ²	0.0000			
Obs.	300			

Source: Authors' Compilation, 2025.

Panel Corrected Standard Error

The analysis reveals that forward-looking information (FLI) is influenced by the quality and credibility by board characteristics. Board independence ($z=3.06$, $p= 0.05$) and board gender diversity ($z= 2.36$, $p= 0.05$) are both found to enhance FLI. Companies that have more independent directors and a higher number of women directors issue less ambiguous, more credible, and beneficial disclosures of the future.

The following results are accounted by agency theory: independent directors minimize managerial opportunism and enhance monitoring, and in turn, makes voluntary disclosures better. Gender diversity will introduce new perspectives and critical evaluation to board meetings, increasing credibility. The existing literature on emerging markets proves that independence and women representation increase transparency and governance (Aribi et al., 2018; Owolabi and Makinde, 2019). In practice, companies ought to pay attention to the reforms that will enhance independence and gender diversity in order to empower FLI and create a sense of investor confidence.

A high relationship between the human capital and the independence of the board also was discovered ($z = 2.11$, $p = 0.05$). According to the resource-dependence theory, having good human capital, the firms can use the expertise of independent directors to make FLI more informative. Likewise, the interdependence between board meetings and relational capital ($z = -3.20$, $p = -0.05$) is important. Active board involvement and external connections make it possible to bring stakeholder relationships, market knowledge and strategic foresight into future-oriented disclosures increasing credibility and relevance. Practically speaking, the outcomes are the reasons why board involvement and the use of relational capital should be clever in order to provide the best quality of FLI.

A negative correlation that was not expected was observed between the board diversity in terms of gender and structural capital ($z = -2.93$, $p = 0.05$). In very formalized firms, the introduction of female directors has no relationship with FLI improvement, indicating the lack of alignment between board features and internal operations. According to the contingency theory (Donaldson, 2001), governance plays out well when the characteristics of the board fit the situation of the firm. Therefore, the diversity initiatives should be associated with adaptable in-house policies that allow board ideas to influence disclosure practices.

The general model is statistically significant (Wald Chi-square = 317.29, $p = 0.001$) and R^2 accounts for 18 percent of the variation in FLI of the manufacturing firms in Nigeria. This variation is driven by board characteristics and interactions with intellectual capital but other organizational and environmental characteristics are also involved. Although there is evidence that agency, resource-dependence and upper-echelons theories are supported, the impact of gender diversity is unspecified, which is a reflection of the complexity and context-specificity of governance in emerging markets.

Policy Implication

Regulators and corporate governance bodies could enhance transparency and investor confidence by mandating a minimum standard board independence and gender diversity, promoting flexible internal processes and encouraging firms to leverage on their human, structural and relational capital. Regular board participation and an active stakeholder communication practice should be advised as best practices to make FLI credible, informative, and strategically relevant.

Limitation

The study has limitation in spite of its contributions. It concentrates on listed manufacturing companies in Nigeria, which can limit the generalization, and uses secondary sources, annual reports, which could not reflect everything about FLI and intellectual capital. There might also be context-specific variables like culture and regulation that will impact the results. Nevertheless, the research provides a reasonable understanding of the effect of board competence and intellectual capital on FLI and a basis of the upcoming study.

5.0 Conclusion

This paper has investigated how board characteristics and their interactions with firm intellectual capital affect forward looking information (FLI) disclosure in 30 selected Nigerian based manufacturing companies. The findings have shown that the quality and credibility of FLI are positively influenced by board independence and gender diversity, and the success of these approaches depends on the resources that are specific to firms. The independent boards perform better in capitalizing on human capital and more frequent board meetings amplify the benefits of relational capital on disclosure. However, the combination of gender diversity and structural

capital implies that the effectiveness of diverse boards can be curtailed by formalised internal systems, which points to the context-dependent nature of governance outcomes of the Nigerian manufacturing firms.

Generally, these results highlight the fact that the composition of the board is not enough but rather it is the fit between board properties and the intellectual capital of the firm that plays a critical role in facilitating credible and informative forward-looking disclosures. The paper has significant policy implications to regulators and companies. Regulatory bodies, including the Securities and Exchange Commission (SEC), need to foster governance changes that enhance the independence of boards and gender diversity as the means of enhancing transparency and investor-focused disclosures. Nonetheless, these reforms must also take into account the internal resources and context of the firm whereby boards can forcefully capitalize on human, relational and structural capital. To firms, the results imply that the management should be proactive in terms of balancing the structure and participation of the board with the intellectual capital of the firm. This involves having independent and diverse boards which are backed by competent human resources, satisfactorily exploiting the stakeholder relationships, and keeping a check on the congruence between diversity in the board and formal fixed internal systems in order to achieve the greatest rate of disclosure.

References

- Abdelazim, S. I., Metwally, A. B. M., & Saleh Aly, S. A. (2023). Firm characteristics and forward-looking disclosure: The moderating role of gender diversity. *Journal of Accounting in Emerging Economies*, 13(5), 947–973. <https://doi.org/10.1108/JAEE-04-2022-0115>
- Adelowotan, M. O. (2021). Do corporate attributes drive integrated reporting amongst quoted companies in Nigeria? *Journal of Economics and Finance*, 14(1), 1–8. <https://doi.org/10.4102/jef.v14i1.673>
- Alfraih, M. M., & Almutawa, A. M. (2017). Voluntary disclosure and corporate governance: Empirical evidence from Kuwait. *International Journal of Law and Management*, 59(2), 217–236.
- Aman-Ullah, A., Mehmood, W., Amin, S., & Abbas, Y. A. (2022). Human capital and organizational performance: A moderation study through innovative leadership. *Journal of Innovation & Knowledge*, 7(4), 100261. <https://doi.org/10.1016/j.jik.2022.100261>
- Aribi, Z.A., Alqatamin, R. and Arun, T. (2018). Board gender diversity and forward-looking disclosures: Evidence from Jordanian listed firms. *International Journal of Disclosure and Governance*, 15(3), 1–18.
- Bankole, O. E. (2022). The forward-looking information disclosure among non-financial firms in Nigeria. *The Journal of Economic Research & Business Administration*, 3(141), 75–83.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Beattie, V., McInnes, B., & Fearnley, S. (2004). A methodology for analysing and evaluating narratives in annual reports. *Accounting Forum*, 28(3), 205–236. <https://doi.org/10.1016/j.accfor.2004.07.001>
- Beretta, S., & Bozzolan, S. (2008). Quality versus quantity: The case of forward-looking disclosure. *Journal of Accounting, Auditing & Finance*, 23(3), 333–376.

- Bravo, F. (2016). Forward-looking disclosure and corporate reputation as mechanisms to reduce stock return volatility. *Revista de Contabilidad–Spanish Accounting Review*, 19(1), 122–131. <https://doi.org/10.1016/j.rcsar.2015.03.001>
- Clarkson, P. M., Kao, J. L., & Richardson, G. D. (1999). Evidence that MD&A is part of the firm's disclosure package. *Contemporary Accounting Research*, 16(1), 111–134. <https://doi.org/10.1111/j.1911-3846.1999.tb00574>
- Clarkson, P. M., Li, Y., Richardson, G., & Vasvari, F. (2008). Revisiting the relation between environmental performance and disclosure. *Accounting, Organizations and Society*, 33(4–5), 303–327. <https://doi.org/10.1016/j.aos.2007.05.003>
- Dey, P. K., Roy, M., & Akter, M. (2020). What determines forward-looking information disclosure in Bangladesh? *Asian Journal of Accounting Research*, 5(2), 225–239. <https://doi.org/10.1108/AJAR-03-2020-0014>
- Donaldson, L. (2001). *The Contingency Theory of Organizations*, Sage Publications, Thousand Oaks, CA.
- Edvinsson, L., & Malone, M. (1997). *Intellectual capital: Realizing your company's true value by finding its hidden brainpower*. Harper Business.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301–325.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2), 109–122.
- Handoyo, S., Suharman, H., Ghani, E. K., & Soedarsono, S. (2023). Business strategy, operational efficiency, ownership structure, and manufacturing performance: Moderating role of market uncertainty. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(2). <https://doi.org/10.1016/j.joitmc.2023.100039>
- Hapsari, D., Setiawan, D., & Aryani, Y. A. (2024). Forward-looking information disclosure: The role of the board of directors. *Riset Akuntansi dan Keuangan*, 9(3), 308–317. <https://doi.org/10.23917/reaksi.v9i3.5428>
- Hassan, O. (2014). Corporate governance, risk management, and forward-looking information: Evidence from UK. *The British Accounting Review*, 46(2), 91–104.
- Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and capital markets. *Journal of Accounting and Economics*, 31(1–3), 405–440.
- Hidayati, H. N., & Puspawati, D. (2024). Gender diversity, board size, firm age and forward-looking information disclosure. *Jurnal Manajemen Sains dan Organisasi*, 5(2), 89–100. <https://doi.org/10.52300/jms.v5i2.15043>
- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance. *Academy of Management Review*, 28(3), 383–406.
- Isa, M. A., Lawal, T., & Lawal, L. O. (2022). Board diversity and intellectual capital disclosure in Nigeria. *Research Journal of Business and Economic Management*, 5(1), 11–22. <https://doi.org/10.31248/RJBEM2022.079>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.

- Kakabadse, N. K., Kakabadse, A. P., & Kouzmin, A. (2015). Board governance and company performance: Any correlations? *Corporate Governance*, 15(6), 1308–1323.
- Kerlinger, F.N. & Lee, H.B. (2000). *Foundations of Behavioral Research*, 4th ed., Harcourt College Publishers, Fort Worth, TX.
- Kılıç, M., & Kuzey, C. (2018). Determinants of forward-looking disclosures in integrated reporting. *Managerial Auditing Journal*, 33(1), 115–144. <https://doi.org/10.1108/MAJ-12-2016-1498>
- Lee, C. C., Yeh, W. C., Yu, Z., & Luo, Y. C. (2023). Knowledge sharing and innovation performance among real estate agents. *Humanities and Social Sciences Communications*, 10(1), 1–16. <https://doi.org/10.1057/s41599-023-02185-w>
- Li, J. (2010). Corporate governance and forward-looking information disclosure in China. *International Journal of Accounting and Financial Reporting*, 1(1), 1–26.
- Luthfiansyah, M. H., & Wijayanti, R. (2022). Forward-looking information disclosure and board diversity in Indonesia. *American Journal of Sciences and Engineering Research*, 5(6), 101–109.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23(2), 242–266.
- Oba, V. C., Ibikunle, J., & Damagum, Y. M. (2013). Board mechanisms and intellectual capital disclosures in Nigeria. *Journal of Accounting and Management*, 3(1), 65–80.
- Owolabi, S.A. & Makinde, O. (2019). Corporate governance and transparency in Nigerian manufacturing firms. *Nigerian Journal of Accounting Research*, 9(2), 45–60.
- Pulic, A. (2000). VAIC™: An accounting tool for IC management. *International Journal of Technology Management*, 20(5–8), 702–714.
- Rajagopal, B. (2024). A systematic review of corporate governance and forward-looking information disclosure. *Advanced Research Journal of Business Management*, 3(1), 110–124.
- Rakan Fawaz Al-Fajr, & Al-Sulaiman, M. (2024). The impact of forward-looking information disclosure on stock prices. *African Journal of Biological Sciences*, 6(16), 1211–1229. <https://doi.org/10.48047/AFJBS.6.16.2024.1210-1229>
- Romano, M., Taliento, M., Favino, C., & Netti, A. (2019). Firm characteristics and forward-looking risk disclosure. *Corporate Ownership & Control*, 16(4), 56–65. <https://doi.org/10.22495/cocv16i4art5>
- Salman, R. T. (2023). Intellectual capital disclosure of Nigerian companies. *Jurnal Administrasi Bisnis*, 12(1), 1–9. <https://doi.org/10.14710/jab.v12i1.50102>
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355–374.
- Stewart, T. A. (1997). *Intellectual capital: The new wealth of organizations*. Doubleday/Currency.
- Sveiby, K. E. (1997). *The new organizational wealth: Managing and measuring knowledge-based assets*. Berrett-Koehler.

Yahaya, O. A. (2025). Determinants of intellectual capital reporting in Nigeria. SSRN Working Paper.<https://doi.org/10.2139/ssrn.5224030>

Zahra, S. A., & Pearce, J. A. (1989). Boards of directors and corporate financial performance. *Journal of Management*, 15(2), 291–334.