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GENDER DIVERSITY AND INTELLECTUAL CAPITAL DISCLOSURE IN LISTED NON-FINANCIAL SERVICES FIRMS IN NIGERIA

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Abstract

Intellectual capital disclosure is a valuable information for stakeholders. This study aims to examine the impact of gender diversity on intellectual capital disclosure in 44 listed non-financial services firms in Nigeria during the period 2011 to 2020. Descriptive statistics were adopted to provide summary statistics of the variables. The study adopted generalised least square (GLS) fixed effects regressions to test the hypotheses using the STATA software. The regression results showed that female Blau has a positive and significant impact on ICD of the firms. However, the finding of the study revealed that the presence of ratio of female directors on the board and appointing female as the chief executive officers have no significant impact on the level of intellectual capital disclosure. This study adds to the literature as it is the first study to adopt Blau Index in examining the impact of gender diversity on IC disclosure in listed non-financial services firms in Nigeria. The study recommends that management should consider the inclusion of more women as part of the board of directors of the non-financial services firms in order to influence the decision to increase their ICD. Similarly, more women should be appointed as CEO so as to positively influence the disclosure of ICD.

Keywords: Blau Index, board gender, board size, female CEO, intangible assets, disclosure, Nigeria.

Introduction

Intellectual capital disclosure is a way to report the nature of the intangible value that is owned by the company. The disclosure of intellectual capital is a strategy carried out to report the nature of non-measurable (intangible) values that exist in the organization (Artinah, 2013). However, in

practice, traditional financial accounting only recognizes and records the transactions that are measured in both physical and monetary terms leaving out some assets that are hidden in the firms but create business value for the entity. Studying intellectual capital disclosure in Indonesia, informs that accounting standards to report intellectual capital have a limited scope and the lack of a standard or regulation for reporting ICD may have contributed to conflicting results despite using similar variables (Widiatmoko *et al*, 2020). This scenario is also applicable in Nigeria as lack of accounting standards on IC disclosure give rise to different disclosure level by various firms.

As a result, in recent times, academic researchers have focused their research interests in the area of intellectual capital (IC). In comparison to tangible assets, which are universally recognised, well defined and measured in financial statements of organisations, IC assets are not easily defined, recognised, managed and measured in the traditional sense (Sudarsanam *et al.* 2005). Because of these difficulties, most companies fail to recognise IC in their financial statements even though IC is important to a firm's competitive advantage and contributes to the value creation capabilities of a company (Kamardin *et al,* 2013).

The organisation for Economic Cooperation and Development (OECD) (2006) opined that today the most important factors of production in developed countries are invisible. It states that these intangible assets, also referred to as intellectual capital or intangibles - brand, reputation, trademarks, software, research and development, patents, staff skills, strategy, process quality, supplier and customer relationships and so on, are delivering a fast-growing contribution to corporate competitiveness. It further argued that there is a growing realisation that a company's stock of intangible assets is a key contributor to its capacity to secure a sustainable competitive advantage. However, since present accounting standards do not mandate the recognition of IC in the financial statements, only a relatively few firms disclose it in their annual reports.

The International Accounting Standards Board (IASB) (2010) defines an intangible asset is an identifiable non-monetary asset without physical substance; that is separable. In other words, that is capable of being separated from the entity and sold, transferred, licensed, rented, or exchanged, either individually or together with a related contract, asset, or liability; or that arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or other rights and obligations. The standard states that an intangible

asset is recognized as an asset if it meets the definition of an intangible asset; it is probable that the future economic benefits attributable to the asset will flow to the entity; and the cost of the asset can be measured reliably. However, the inability of being able to measure IC reliably by firms makes it difficult for them to recognize in the financial statements. The IASB (2010) enjoined companies to report on their investment in intangible assets, at least, on a voluntary basis in order to supplement the financial reports and also to provide explanation on the unrecognized assets. It is therefore imperative for firms to disclose IC voluntarily so as to reduce the level of information asymmetry gap between companies and users of financial statements.

There is a growing acknowledgement that IC is a critical sustainable resource that can create value and sustain a competitive edge for organisations (White, 2007; Bismuth & Yoshiaki, 2008; An *et al*, 2011). Hence, failure to incorporate IC in the statement of financial position, traditional accounting, therefore, underestimates the true value of firms. Knowledge and information are prime commodities in today's knowledge-based economy where economic enterprises are increasingly knowledge-based and technology driven (Davenport & Prusak, 1998). It is therefore important that the characteristics of the underlying business and its long-term prospects have to be communicated to the investing community, since this complement in creating value for corporate growth, strategic management, stakeholder relationships and financial results, which ultimately lead to future cash flows for firms.

Intellectual Capital Disclosure (ICD) is defined as the information on the organisation's IC publicised to stakeholders. Voluntary intellectual capital disclosure practices inform stakeholders of certain vital information, which are critical in investment decision making and consequently have a return effect on corporate financial performance (Oba & Bature, 2013). Therefore, the disclosure of intellectual capital in annual reports is important if the stakeholders of firms are to be allowed the opportunity to make informed investment decisions in Nigeria. Gender composition of the board of directors of firms is one of the important governance issues that recent modern corporation managers, shareholders and directors are facing which has drawn attention from the press, major institutional investors and proposals from advocacy groups because of their effect on the performance of organization (Carter *et al.*, 2003). Gender directorship represents the numbers of women on the board of a company. There is strong [illegible] that company performance will improve because women are better than men at multi-

tasking, risk management and communication (Schubert, 2006); and because they have a more participative and process-oriented communication style (Lucas-Pérez *et al.*, 2015). Gender-diverse boards bring more creativity (Hillman *et al.*,2007) and multi-perspectives for board's decision making (Gul *et al.*,2011) and make problem solving more effective (Cohen & Lauterbach, 2008), which is beneficial for firm's financial performance. It is therefore expected that gender diverse board of non-financial services firms in Nigeria will influence IC disclosure.

This study is motivated by the fact that the reviewed of literature by the researchers both in developed and emerging economies revealed that ICD create value, close information asymmetry gap, generate future cash flows and a source of competitive advantage to firms. Several studies (for example, Tedejo-Romero *et al*, 2017 in Spain; Rahman *et al,* 2019 in Bangladesh; Giuseppe *et al*, 2021 in Italy) have been conducted in developed and some emerging economies. However, in Nigeria, there is a limited empirical evidence available on how gender diversity on corporate board influence IC disclosure. Study such as Oba *et al* (2013) was conducted in Nigeria using just ten firms which this study considered inadequate. In addition, unlike environmental disclosure practices which is supported by government policies, intellectual capital disclosure does not have any government policy supporting it. This study will therefore serve as eye opener to government to come up with policies that support ICD since study such as Arrighetti *et al* (2014) conclude that the worth of a country or the entity is no longer measured by the investments in tangible assets alone, but, to a larger extent, by the quantum of intangible resources it is endowed with. Therefore, this study examines the impact of gender diversity on IC disclosure of listed non-financial services firms in Nigeria during the period 2011 to 2020.

Literature Review and Hypotheses Development

Gender Diversity and intellectual capital disclosure

Gender diversity is defined as the proportion of women on the board to total numbers of board members. Researches on women as directors on boards have focused on women's under-representation on the board of directors and this continues to be well documented by many scholars (Burke & Mattis, 2000). Carter *et al* (2003) explain the relationship between board gender diversity and firm performance based on the agency theory. The authors posit that board gender diversity enhances the board's ability to monitor top management. In addition, they

argued that increasing the number of female directors may increase the board's independence since women tend to ask questions that male directors may not ask.

Using a sample of 10 companies during the period 2006-2009, Oba *et al* (2013) found that board gender diversity is non-significant in predicting ICDQ of firms in Nigeria. In a similar study by Rasmini *et al* (2014), the authors found that gender diversity influence the intellectual capital disclosure. Dan and Arianti (2017) examine the factors that affect the disclosure of intellectual capital, in Islamic Banks that registered in the BI during the period 2011-2015 and concluded that women directors show negative significant effect on ICD. Tedejo-Romero *et al* (2017) examine whether the representation of women on the boards of directors of Spanish companies is associated with an increase in voluntary disclosure of information concerning intellectual capital for a period of 2007 to2011. The study found that that gender diversity has a significant positive effect on the levels of disclosure of IC information of the firms.

In another study, Rahman *et al* (2019) examine the determinants of intellectual capital disclosure (ICD) in the pharmaceutical and chemical industries of Bangladesh for the period of 2016 to 2017. The study revealed that there is no significant association between female directors and ICD. In another study, Giuseppe *et al* (2021) investigate the impact of gender diversity attributes on online intellectual capital disclosure in 123 Italian listed companies during the period 2019 The study adopted ordinary least square regression model to test the association between online ICD and different gender diversity measures. The regression results revealed that women's presence on boards is conducive to higher voluntary ICD. The finding also showed that Italian-listed firms conveyed more voluntary information on IC resources when a woman is appointed as a CEO. Herli *et al* (2021) investigate the impact of gender diversity on the board of directors on corporate intellectual capital disclosure in Indonesia during the period 2012 to 2017. Using linear regression analysis, the findings showed that IC disclosure varies for large and small companies. The finding of the study further showed that for companies with large capitalization, the presence of women directors on corporate boards have no significant impact on IC disclosure. However, the finding also showed that for small companies, the existence of gender diversity has a significant effect on IC disclosure. Based on different findings from the above, we formulate the following hypotheses:

H_{01}: The proportion of female directors on a board does not have a significant impact on intellectual capital disclosure.

H_{02}: Female board member CEO does not have a significant impact on intellectual capital disclosure.

H_{03}: Gender diversity (as measured by the Blau index) does not have a significant impact on intellectual capital disclosure.

Theoretical Framework

2.1.1 The Stakeholders Theory

The postulates of this theory give general assumptions that firms operate within a complicated multi-party environment (Cots, 2011). The parties, known as stakeholders, are either affected by or affecting the business (Deegan, 2002). Therefore, companies will disclose information voluntarily to address outside stakeholders' concerns and encourage their engagement in its different activities (Michelon & Parbonetti, 2012). Each category of stakeholders has their unique expectations from the business firms; for example, shareholders want continuous growth of wealth, governmental departments want compliance and the analyst wants information that facilitates their forecast and analysis. In accordance with information requirements of every stakeholder, which is varied, the stakeholder theory supports the view that companies are expected to satisfy all the information needs of these stakeholders. In addition, they communicate a different type of information via annual reports to address different types of stakeholders and in response to a varied and wide range of needs for information.

Since this study addresses intellectual capital disclosure in the annual reports and accounts of some listed non-financial services firms in Nigeria, the annual report is prepared for general purposes and can be used by several stakeholders and not only shareholders. Therefore, this study is based theoretically on the stakeholder theory.

Methodology

This study employed correlation and descriptive research designs. The researchers collected pre-existing data from the annual reports and accounts of the companies The population of this study is the entire non-financial services firms in Nigeria. However, some non-financial services firms were excluded because they deal less in intellectual capital. Those firms which are seen to be

more inclined to IC were selected using data from annual reports and accounts of the during the period 1st January, 2011 through 31st December, 2020. This therefore become working population of the study. The population covers five sectors largely in accordance NSE classification. Stratified sampling technique was used in arriving at the sample (sectoral selection) of this study.

Therefore, the samples of the study are firms in the subsector of consumer goods, indu goods, pharmaceuticals, conglomerates and Information and Communication Technology (. However, for firms to be part of this study, some criteria were employed which are: (i) must have been quoted on the Nigerian Exchange Group (NGX) as at 1st January, 2011 (ii) must have not been delisted from the floor of NGX during the period of study (iii) firms have not been taken over or merged during the period of study (iv) firms must have file com annual reports on the NGX during the period of study. By applying the above filters, forty-(44) firms were adjudged to have met the criteria. Table 1 presents the sectoral distributio firms and sample used in the study.

The descriptive statistics was employed to provide the snapshot of the variables, which minimum, maximum, mean and standard deviation. Also, in order to determine the variatio dependent variable due to variation in any of the independent variables, multiple regres technique using panel data was employed.

Table I: Population and Sample Size

S/no	Sector Distribution	Population	Delisted/Quoted After 2011	Sample
1.	Consumer Goods	21	4	17
2.	Health Care	10	2	8
3.	Industrial Goods	15	6	9
4.	Information & Communication Technology (ICT)	7	2	5
5.	Conglomerates	6	1	5
	Total	59	15	44

Source: Authors Compilation, 2022

Table 1 presents the sectoral distribution of firms and sample used in the study. There are fift nine firms in all. Forty-four firms were selected while fifteen firms did not meet the criteri

either for the fact that they were delisted during the study period or were not quoted as at 1st January 2011.

3.1The Dependent Variable

Intellectual Capital Disclosure (ICD)

This represents the amount of information firms disclose on intellectual capital. The data for this proxy were obtained from the narratives in financial statements through content analysis (that is word counts). A disclosure index was used to quantify the amount of information regarding the IC included in the annual reports of the firms. This tool has most often been applied to quantify the extent of disclosure in annual reports (Li *et al*, 2008; Al-Mamun, 2009; Yi & Davey, 2010). Prior research (Guthrie*et al,* 1999) employed a coding scale to measure the quantity of disclosure concerning the component elements of intellectual capital using a four-point scale as follows: 0 for non-disclosure, 1 for narrative disclosure, 2 for qualitative disclosure and 3 for quantitative disclosure. However, consultations of the relevant literature have shown that the components of IC are mainly presented in a narrative/discursive form (Guthrie *et al*, 1999; Ax and Maton, 2008).

The extent of disclosure was quantified as a ratio of the recorded information items found in the annual reports divided by the maximum number of information items in the disclosure index (Li *et al* 2008; Al-Mamun, 2009; Yi *et al,* 2010). The measurement of extent of ICD is calculated using the following formula:

$$ICD_j = \frac{TADS_j}{MRDI_j}$$

Where ICD_j is intellectual capital disclosure, $TADS_j$ is the total actual disclosure score for a company j and $MRDI_j$ is the maximum relevant disclosure items of the company j.

The construction of intellectual capital index was done by listing intellectual capital items according to their drivers/ indicator in the annual reports of the sampled firms. Previous studies, (Bozzollan *et al.* 2003; Abeysekera *et al.* 2005) used thirty-three items (human capital 11 items; structural capital 12 and relational capital 10). Guthrie and Petty (2000) used twenty five items (human capital 7 items; structural capital 9 and relational capital 9). Li *et al* (2008) used sixty-one items (human capital 22 items; structural capital 16 and relational capital 21). However,

from the information available to the researchers from previous studies, we therefore com
with intellectual capital framework/index for this study.

However, to examine the factors influencing the level of IC disclosure, this study used the co
of IC related words as the unit of the content analysis because of the better comparison
different annual reports (Gao *et al*, 2005). The study then aggregated the disclosure frequenc
of occurrence to determine the quantity of IC disclosure using the content analysis conduc
earlier.

Gender Diversity: This represents the proportion of board seats held by women to total numbe
of directors.

3.3 Control variables

1. **Board Composition:** Board composition is defined as the proportion of outside directo
(non-executive) to the total number of directors (Haniffa & Cooke, 2002). Based o
resource dependency perspective, independent directors provide additional resource
information and legitimacy to a firm. They also improve the quality of manageri
decisions, leading to improved firm performance (Hillman *et al*, 2000; Gabrielsson
Huse, 2005).
2. **Board education:** Previous researches document that the high level of education amon
directors on the boards results in a greater ability to adopt new ideas and acce
innovations (Wally & Baum, 1994; Carmen *et al*, 2005). Siciliano (1996) found that th
diversity of educational background associated with the background of the work of th
company's board of directors has a positive effect on organisational performanc
especially on social performance. Wallace and Cooke (1990) found that the directors wh
have a background in accounting and business education may make a broader level
disclosure to enhance the corporate image and credibility of management. It is therefor
believed that board education will have impact on IC disclosure.
3. **Board Size:** It refers to the total number of directors (executive and non-executive
sitting on the board. The resource dependency theory posits that larger boards are mor
likely to include a large pool of experts with diverse industrial and educational

backgrounds and skills that enhance the board's information processing capabilities. This can mitigate individual directors' deficiencies in business skills through collective decision makings, which in turn improves the quality of strategic decisions and actions made by a firm (Abeysekera, 2010).

4. **Firm Size**: Past studies suggested that size of the company is an important factor, which has a positive impact on the level of disclosure of IC by companies (for instance, García-Meca *et al*, 2005; Kamath, 2008; Li, *et al*, 2008).

Table II: Measurement Variables

Proxies	Measurement
Dependent Variable	
Intellectual Capital Disclosure (ICD)	Total scored items by the company/Total maximum scores(Al-Mamun, 2009; Al-Sartawi, 2018)
Independent Variables	
Board Gender Diversity (FERAT)	Number of women on board of directors over the total number of board members (Saruchi *et al,* 2019; Rahman *et al,* 2019).
Board Gender Diversity (FECEO)	Female CEO was measured as a dummy variable equal to (1) if the firm's CEO is female and (0) otherwise (Nalikka, 2009; Aribi *et al,* 2018).
Board Gender Diversity (FEBLAU)	Gender diversity is defined as FEBLAU $FEBLAU=1-\sum_{i=1}^{n} P_i^2$ where Pi is the percentage of members in eachgender and n is the total number of genders (Nadeem, 2019).
Control Variables	
Board Composition (BDC)	Proportion of board of directors, who are non-executives to total directors (Li *et al*, 2008; Alfraih, 2018).
Board education	Variation of education background is measured by the percentage between member of board with accounting, finance, management and economic education background and all of the members of the board (Ponnu, 2008; Rasmini, 2014).
Board Size (BSZ)	Board size is measured as the total number of board members both executives and non executives (Abeysekera, 2010; Hatane*et al,* 2017)
Firm Size (FSZ)	Natural logarithm of Total Assets (Alshhadat, 2017.

Source: Authors Compilation 2022

Model Specification
The following regression model was used to examine the impact of board diversity variables intellectual capital disclosure:

$y = a + bx$---------- Model 1

$ICD_{it} = \beta_0 + \beta_1 FERAT_{it} + \beta_2 FECEO_{it} + \beta_3 FEBLAU_{it} + \beta_4 BDC_{it} + \beta_5 BED_{it} + \beta_6 BSZ_i + \beta_7 FSZ_{it} +$ Model 2

Where:

ICD_{it} = Intellectual Capital Disclosure of firm i in period t

$FERAT_{it}$= proportion of female director of firm i in period t

$FECEO_{it}$=Female CEO of firm i in period t

$FEBLAU_{it}$=Gender diversity (BLAU) of firm i in period t

BDC_{it}= Board Composition of firm i in period t

BDC_{it}=Board Education of firm i in period t

BSZ_{it}= Board Size of firm i in period t

FSZ_{it}= Firm size of firm i in period t

ε_{it}= Error term

β_0 = Constant

β_1= Constant.

Results and Discussions

The descriptive statistics of all the variables used in the study is presented in table III.

Table III: Descriptive statistics of the variables

Variables	Observation	Mean	Std. Dev.	Min.	Max.
FERAT	440	0.267	0.089	0	0.67
FECEO	440	0.077	0.267	0	1
FEBLAU	440	0.439	0.115	0	0.6
BDC	440	0.820	0.074	0.5	0.925
BED	440	0.624	0.103	0.2	0,88
BSZ	440	8.823	2.475	4	17
FSZ	440	7.019	0.878	4.699	9.261

Source: Generated by the Authors 2022

Table III revealed that the overall mean intellectual capital disclosure score was 0.8397. This means that non-financial services firms in Nigeria disclosed intellectual capital at an average o

84%. The minimum disclosure level is 10% and maximum disclosure level is 134%. The mean value of the female ratio is 0.267, meaning that on the average; the firms had 27% of women represented on the board. The minimum value is 0 and the maximum value is 0.67. Similarly, mean value of the female CEO is 0.077, meaning that on the average; the firms had 7% of women as CEO. The minimum value is 0 and the maximum value is 1.The female Blau had a mean value of 0.439.The minimum value is 0 and the maximum value is 0.60

The board composition has a minimum value of 0.50 and maximum of 0.925. This means that the minimum percentage of non-executive directors is 50% for the firms, while the maximum composition of non-executive directors, to the total number of board members, is 92.5%. The board education has a minimum value of 0.20 and maximum of 0.88. This means that the minimum percentage of board members with accounting, finance, economics and business knowledge is 20% for the firms, while the maximum is 88%. The average percentage of board member education is 62%. Board size had a minimum value of four (4) and a maximum value of seventeen (17). On the average, the number of board members was about nine (9). Firm size has a mean of 7.02, with a minimum of 4.70 and maximum of 9.26.

Table IV: Summary of Fixed Effect Regression Results

Variables	Coefficients	Std. error	t-stat	Prob.
Cons	0.6541	0.2644	2.47	0.014
FERAT	0.0969	0.2242	0.43	0.666
FECEO	-0.0515	0.0484	-1.06	0.288
FEBLAU	0.4183	0.1979	2.11	0.035
BDC	-0.4538	0.2023	-2.24	0.025
BED	-0.0019	0.1223	0.02	0.987
BSZ	0.0053	0.0071	0.74	0.458
FSZ	0.0434	0.0249	1.74	0.082
R^2	0.2259			
F-statistic	2.59			
Prob.	0.0129			

Source: Generated by the Authors 2022

Table IV revealed that the coefficient value for ratio of female to total board members was 0.0969 with a probability value of 0.666 which is neither significant at 1% nor at 5%.This indicates that the percentage of female director on the board has positive but insignificant impact on intellectual capital disclosure of the firms. Hypothesis one states that female ratio does not have significant impact on intellectual capital disclosure However, based on the results of the

regression which is neither significant at 1% nor at 5%, we therefore fail to reject the nul hypothesis. The finding is in line with that of Rahman *et al* (2019). It is however in contrast wit those of Rasmini *et al* (2014) and Dan *et al* (2017). Similarly, the table revealed that th coefficient value for female CEO was -0.0515 with a probability value of 0.288which is neithe significant at 1% nor at 5%.This indicates that appointing female as the chief executive officer o the firms has positive but insignificant impact on intellectual capital disclosure of the firms Hypothesis two states that female CEO does not have significant impact on intellectual capita disclosure. However, based on the results of the regression which is neither significant at 1% no at 5%, we therefore fail to reject the null hypothesis. The finding is in contrast with those o Giuseppe et al (2021).

The table also revealed that the coefficient value for female Blau was 0.4182 with a probabilit value of 0.035. This signifies that Female Blau had a significant and positive effect on the IC of the firms. This implies that for every increase in the number of women on the board o directors, the intellectual capital of the non-financial services firms will increase by th coefficient value. Hypothesis three states that board female Blau does not have a significa impact on ICD. However, based on the results of the regression which is significant at 5%, w therefore reject the null hypothesis. This finding is in line with those of Tedejo-Romero *et a* (2017), Nadeem (2019).

Similarly, board composition recorded a coefficient value of -0.4538 which is significant at 5 level. This shows that the composition of the board in term of the ratio of non-executive directo to total directors negatively and significantly affected the ICD of the non-financial services firm in Nigeria. Board education as shown on table 4 has a coefficient value of 0.0019 with probability value of 0.987. This indicates that board education has positive but insignifica impact on ICD of the firms. The result in respect of board size as shown in the table has coefficient value of 0.0053 with a probability value of 0.458 which indicates that board size do not have a significant impact on ICD of the firms. Firm size recorded a coefficient value 0.0434 which is significant at 10%. This indicates that large firms disclosed more intellectu capital voluntarily than smaller ones.

Table 4 also reports the fixed effect regression results. Findings from the panel data regressio analysis of model in the table indicated that, $R^2$of the variables was 0.2259. As a measure of th

overall fitness of the models, the R^2 indicated that, the model was capable of explaining about 23% of the systematic variation in the value of dependent variable which could be traced to the explanatory variables. Also, the Hausman specification test reveals the extent with which statistical models explain the data under study. The regression analysis tests for endogeneity which is useful in assessing the adequacy of a model in calculating probability values which serves as the basis for statistical inference (significance or non-significance). In panel data analysis, the Hausman specification test helps to choose between a random effects model or a fixed effects model. The Hausman specification test was conducted in this study, and the result favours the use of fixed effect regression.

Conclusion and Recommendations

Gender diversity has attracted growing research around the world in recent years. The gender diversity studies is attracting researches because of the fact that policy makers are issuing policies on gender equality which is often neglected in some countries. Most empirical researches on gender diversity have been conducted in developed economies. Generalizing the finding of these studies to most developing economies, especially Nigeria may be impossible considering the different economic conditions, the regulatory system and governance mechanisms affecting board diversity in different countries.

In view of the above, the study examines the impact of gender diversity on intellectual capital disclosure in listed non-financial services firms in Nigeria. The study adopted three proxies for gender diversity namely: female ratio to total board members, female CEO and the Blau Index. This study used a sample of 44 firms listed on the Nigerian Exchange Group over the period 2011-2020. The study is based on the assumption of stakeholders' theory that diverse boards, through their experience and professional competencies have strong influence on ICD. The results show that the presence of female directors on the board has no significant impact on the level of intellectual capital disclosure. Similarly, appointing female as the chief executive officer does not have a significant impact on ICD. However, the Blau index proxy revealed gender diversity has a positive and significant impact on ICD of the firms.

This study offers some interesting insight into gender diversity and its effect on ICD in listed non-financial services firms in Nigeria. These findings are useful for management to consider the

inclusion of more women as part of the board of directors of the non-financial services firm
order to influence the decision to increase their ICD.

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