The Impact of Firm Performance on Annual Report Readability: Evidence from Listed Firms in Ghana

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A R T I C L E   I N F O

A B S T R A C T

Annual report readability is necessary to prevent the imbalanced flow of information and enhance stakeholders' view of the firm. For that reason, it is crucial to examine the factors than can affect it. This study attempts to find the impact of firm performance on annual report readability. The study consists of 15 listed firms on the Ghana Stock Exchange within the period 2008 to 2017. By applying the fixed and random effect method, the Hausman test was conducted to select a suitable method, the result based on the random effect method states that firm performance positively relates to annual report readability. In addition, the study finds out that corporate governance exerted a negative influence on the readability of the annual report. Finally, the study adopts F-MOLS to test Robustness which confirms the main result. This result implies that there are other determinants and factors that influence annual report readability rather than firms or managers manipulating financial reports to win investor sentiment.

A B S T R A K

Annual report readability diperlukan untuk mencegah aliran informasi yang tidak seimbang dan meningkatkan pandangan pemangku kepentingan terhadap perusahaan Penelitian ini mencoba untuk menemukan dampak kinerja perusahaan pada annual report readability. Penelitian ini terdiri dari 15 perusahaan yang terdaftar di Bursa Efek Ghana dalam periode 2008 hingga 2017. Dengan menerapkan metode efek tetap dan acak, tes Hausman dilakukan untuk memilih metode yang sesuai, hasilnya berdasarkan fixed and random effect method menyatakan bahwa perusahaan kinerja positif terkait dengan annual report readability. Selain itu, penelitian ini menemukan bahwa tata kelola perusahaan memberikan pengaruh negatif pada keterbacaan laporan tahunan. Akhirnya, penelitian ini mengadopsi F-MOLS untuk menguji Robustness yang mengkonfirmasi hasil utama. Hasil ini menyiratkan bahwa ada faktor penentu lain dan faktor-faktor yang mempengaruhi annual report readability daripada perusahaan atau manajer memanipulasi laporan keuangan untuk memenangkan sentimen investor.

1. INTRODUCTION

The medium by which Public firms communicate their financial position to stakeholders is via the annual report. The annual report contains the Chairman's address, the director's report, vivid discussion of the company's operations, related notes, and audited financial statement (Risa Wahyuni, Febrianto, & Rahman, 2018). The document expresses the previous performance of the firm, future possibilities phrased in simple language for the understanding of interested parties (Gyasi & Owusu-Ansah, 2018).

The detailed information in the annual report is prepared in line with the disclosure requirement of the Securities and Exchange Commission (SEC) in U.S. Analysts and Shareholders scrutinize the report of the firm's end of year financial details, focusing basically on the previous year's developments and incoming projects (Ho & Wong, 2004). Therefore, transparency in the annual reports is very crucial for investors and the capital market as a whole, noticing the adverse opacity effects of financial information on interested parties.

Recent studies have raised concerns about the difficulty in the readability of annual reports over the years (Dyer, Lang, & Stice-Lawrence, 2016;

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Ginesti, Drago, Macchioni, & Sannino, 2018). In agreement to this concern, a growing body of literature states that annual report readability is necessary to prevent the imbalanced flow of information and enhance stakeholders' view of the firm (Bayerlein & Davidson, 2011; Courtis, 2004).

Previous research forgets the possible role of firm's performance on the readability of annual reports but centers mainly on firm-level business strategies Habib and Hasan (2018), and the implications of capital market pricing of firm disclosure opacity (Dempsey, Harrison, Luchtenberg, & Seiler, 2012). This is remarkable, as managers oversee the preparation of the annual report, scholars have the intuition that directors can alter the firm performance to influence the level of readability (Hooghiemstra, Kuang, & Qin, 2017; Kim & Starks, 2016).

Studies from Biddle, Hilary, & Verdi, 2009; Risa Wahyuni et al., (2018) employed different methods in their studies and recorded that firm performance is positively related to annual report readability. Their studies centers on the impact of firm performance, investment efficiency on annual report readability, respectively. Contrary to this, Habib & Hasan, 2018; Li, (2008) focused on the effect of earnings, business strategy on annual report readability individually. Their results revealed a negative relationship with annual report readability.

In the Ghanaian context, there is limited literature relating to textual analysis. Documenting the few, Gyasi and Owusu-Ansah (2018) examined the readability of annual reports within the period 2011 to 2015 of the Social Security and National Insurance Trust (SSNIT). The study demonstrated the readability trend in Ghana. The results were that SSNIT's annual report is difficult to read. The lack of literature has necessitated this investigation. The study primarily addresses the issue of the role firm performance plays in annual report readability.

The main contribution of this study is, it adds to the previous literature on firm performance and annual report readability adopting the diverse perspective of analysis, particularly in the case of Ghana. In addition, the study considered the role of corporate governance in analyzing the impact of corporate governance on annual report readability.

The paper follows in such a way that section two reviews the literature, section three talks about the methodology; section four examines the results and analysis, whereas section five concludes the paper including policy implications and recommendations.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

Readability refers to the level at which a complex article can be read (Yan & Sun, 2002). A readable annual report indicates how well the firm transmits information to its stakeholders. The main objective of the study is to examine the impact of firm performance on annual report readability of firms listed on the Ghana Stock Exchange. It can be said and hypothesized that firm performance has a negative impact and relationship on annual report readability.

Several writers have carried out research on the relationship between firm performance and annual report readability. Nonetheless, findings from these studies may vary, given the readability and firm performance measurement applied in these studies. In a financial reporting context, previous studies imply that annual report readability is likely to vary with firm performance (Hasan, 2018; Li, 2010). The performance of the firm influences managers to publish a readable or complex annual report (Aymen, Sourour, & Badreddine, 2018; Lo, Ramos, & Rogo, 2017). Schrand and Walther (2000) back this statement up by stating that, managers have the incentive to report good or bad news of the firm in a more profitable way relative to the practice of comparing the company's performance to other companies. The annual report readability of the firms reflects the performance of the firm. In other to impress investors, managers write readable reports to show good performance.

Previous literature has discovered that higher readability scores are associated with poor performing firms, and lower readability scores are related to good firm performance. Employing annual reports from 60 U.S companies, Subramanian, Insley, and Blackwell (1993) finds that the annual reports of firms that perform better were not difficult to read other than annual reports of firms that perform poorly. Li (2008) is the first to use a large sample data from the U.S capital market to investigate on the notion that managers can make annual report readability difficult for investors to comprehend and to deduce the forthcoming implications of cash flow in a multivariate regression analysis. The study finds that higher annual report readability (FOG Index) for firms shows lower earnings persistence and profitability in the coming year.

Similarly, results from Asay, Libby, and Rennekamp (2018) show that managers of firms that perform well, report readable annual report. The study records that, for poorly performing firms, managers make an annual report in a favorable way, which focuses on future possibilities, the use of the causality, passive sentences and fewer pronouns. These results are evidently in line with the intuition that managers intentionally choose the linguistic characteristics of their annual report to impact investor decisions. Additionally, Habib and Hasan (2018) investigated the relationship between firm-level business strategies and annual report readability using the ordinary least squares (OLS) regressions and firmly fixed-effect model. From the results, firms with prospector-type business strategies make a complex annual report, whereas those with defender-type business strategies publish readable annual reports.

Dempsey et al. (2012) demonstrated the same results by examining the implications of capital market pricing on the annual report readability as measured by the linguistic readability of real estate investment trusts (REIT) annual reports. After employing the ordinary least squares (OLS) regressions model, the result states that financial opacity had a negative relationship with firm performance. Also in the case of Enron, an investigation carried out showed that, during the final year before subsiding and the firm's performance started diminishing, reports by directors began to be filled with obscure words and sentences (Gonsalves, 2003).

On the contrary, other studies revealed a positive relationship between firm performance and annual report readability. Courtis (1995), using relatively smaller sample size, found a positive influence between the highest profitable firms and annual report readability. Accordingly, Risa Wahyuni et al. (2018) analyzed their data using the multiple linear regression analysis and empirically finds a positive association between firm performance (ROA) and annual report readability of listed firms in the Indonesian Stock Exchange between 2013-2017 with a sample of 1222 firm-years. Biddle et al. (2009) also find a positive association between annual report readability and the investment efficiency of the firm, indicating that firms with readable annual report encounter less issue of overinvestment and underinvestment. In addition to these studies, Ben-Amar and Belgacem (2018) investigate the relationship between social performance and difficulty in annual report readability specifically the MD&A section of the annual reports of 182 Canadian listed firms in the year 2013. Using multivariate regression analysis, the result is that, companies with high CSR scores generate higher FOG scores.

A growing body of literature indicates the influence of corporate governance on the readability of the annual report. Whiles some study records a strong influence on corporate governance; others do not support this result. Ginesti, Sannino, and Drago (2017) applied the ordinary least squares (OLS) regressions model on a sample of 83 Italian listed companies of the English-written MD&A over the period 2008-2012. The result of the study states that corporate governance (CEO duality) relates negatively to the Annual report readability (Flesch reading ease), revealing that, the presence of CEO duality reduces board monitoring and increases complexity in annual report readability. In Ginesti et al. (2018), a number of corporate governance variables were included in the study, and the results revealed a negative association between board size (B_SIZE) and annual report readability. It shows that increasing the number of board member participation improves the level of annual report readability of the firm. Cerbioni and Parbonetti (2007) support these findings by recording that corporate governance (CEO duality) is associated with complex annual report readability. Luo, Li, and Chen (2018) also utilized the ordinary least squares (OLS) regressions model and found a negative relationship between annual report readability and agency cost is more prominent in firms with strong corporate governance systems.

Aymen et al. (2018) contradict these results by finding a positive association between Analyst (Corporate governance) and Annual report readability (Flesch Reading Ease index) by employing the fixed and random effect model on a sample of 163 companies. Luo et al. (2018) contribute that, the execution of new accounting standards in 2007 is the reason for the positive relationship between private firms and annual report readability. Consistent with these findings, Ben-Amar and Belgacem (2018) applied OLS regression of annual report readability measures (FOG and Length) on corporate social performance and control variables. The study recorded a positive connection between a corporate social performance that determines the level of corporate environmental, social and governance (ESG) performance and difficulty in annual report readability.

3. RESEARCH METHOD

Data

There are 42 firms currently listed on the Ghana Stock Exchange (GSE) which consists of both financial and non-financial firms. The study's sample was selected based on the following criteria:

1. Consistency: The selected firms were continuously listed on the Ghana Stock Exchange (GSE) during the period of study.
2. Availability of annual reports: The firms have their audited annual reports regularly published on the Ghana Stock Exchange (GSE) during the study's time frame.
3. Duration: The selected sample/firms meet the study time span in terms of the firm's existence.

Based on the above criteria, the study settled on 15 firms, and that makes the sample of the investigation. Reports of listed firms that were not assessable on the Ghana Stock Exchange (GSE) were directly retrieved from the company's website.

The dependent variable for the study is the annual report readability. The readability measure for the study is FOG Index popularly used by many authors in readability studies (Ajina, Laouiti, & Msolli, 2016; Ginesti et al., 2017; Kumar, 2014; Lang & Stice-Lawrence, 2015). The FOG came about by Gunning (1952) to assist staff in the corporate environment to improve upon their communication by means of writing. Lehavy, Li, and Merkley (2011) stated that the FOG index has a straightforward computation, usable in any narrative disclosure. The formula for Fog Index is below:

$$\text{FOG} = 0.4 \times \frac{Words}{sentence} + \% \text{ (complex words)} \quad (1)$$

Where complex words refer to any word with three or more syllables.

The FOG Index calculates both the average sentence length, by comparing the number of words to a number of sentences and the average number of difficult words with a comparison of a number of words to a number of complex words. A readability score over 18 is complex; below 18-14 means the text cannot be read, below 14-12 means the text is simple, below 12-10 is acceptable and from 10 down to 8 means the text is simple to read.

Concisely, a higher readability score indicates a complex text.

The study further uses two independent variables. They are firm performance (FP) and corporate governance (CG). The primary independent variable of focus is firm performance measured by Return on Assets (Dempsey et al., 2012; Risa Wahyuni et al., 2018). Return of Assets (ROA) is a profitability ratio that measures the ability of a firm to put all its assets to use to produce income for a period of time (Weygandt, Kimmel, Kieso, & Elias, 2010), where Net income denotes income before extraordinary items. The study calculates Return on Assets (ROA) as;

$$\text{ROA} = \frac{Net\ Income}{Total\ Assets} \quad (2)$$

Prior studies have used many corporate governance characteristics as a measure for corporate governance. This study adopts the measurement of ÈšarÈ (2015) to extract the corporate governance index. The mathematical function used to construct the corporate governance index is,

$$F(x) = \left(\sum_{i}^{n} = 1\ C_i \times p_i\right) \times 10 \quad (3)$$

where:

i = (1, 2...n);

x = the firm for which index is calculated, n = 6, for this case, because the criterion is 5.

C_i = rating of each criterion i based on the verification of the degree of fulfilment of the principles of corporate governance.

C_i = 0 is taken if the criterion does not exist and 1 if the criterion is completely fulfilled. Values between 0 and 1 are awarded based on the extent to which the variables included in the criterion comply with corporate governance principles.

p = the level of importance attached to each criteria C_i

The index computation is based on the following criteria as pertains to the corporate governance variables available in the annual report of the firms.

Table 1
Criteria that compose the corporate governance index

No.	Criteria C	Degree of importance (in percentage)
C1	In its annual report, the company includes a separate section with the corporate governance statement, that contains: - a statement that it has voluntarily decided to comply with this Code, or - an explanation of which particular practices it departs from and the reasons	20%
C2	The company publicly disseminates all the main aspects of its corporate governance system	20%
C3	Transparency of information on risk management and internal control	20%
C4	Dissemination of board remuneration by the firm	20%
C5	Publicly making specific reference to the diversity the policy applied by the company in relation to:	10%
C6	Board composition and the percentage of each gender in the composition of the board and senior executive team	10%

Table 2
Criteria that compose C2 section for the index concerning main aspects
of the company's corporate governance system.

No.	Criteria C	Degree of importance (in percentage)
2.1	A short description of how the board operates, including:	
	2.1.1 The frequency of board meetings and individual board members individual attendance;	10%
	2.1.2 The frequency of board committee meetings held and committee members attendance	2.5%
	2.1.3. A brief account of the composition, terms of reference and main subject examined by each board committee	2.5%
	2.1.4 An brief account of how the performance evaluation of the board and its committees has been handled	2.5%
2.2	Information on board members, including:	
	2.2.1 The identification of the chairman, the vice-chairman (if appointed), chief executive, chairmen and members of the Board Committees	10%
	2.2.2 Independent non-executive board members	2%
	2.2.3 short biography of every board member Including company Secretary	2%
	2.2.4 Term of appointment of every board Member	2%
	2.2.5 Other professional commitments of every board member	2%

The study then added the control variable as used by other studies (Ajina et al., 2016; Ginesti et al., 2018; Li, 2008; Rjiba, 2015) firm size (SIZE). SIZE is proxies using the natural logarithm of the total assets of the firm. This was used by Luo et al. (2018) by investigating the association between annual report and corporate agency costs and Rjiba (2015) in examining the effect of annual report readability on the cost of equity capital in French firms between 2002 and 2006. Firm size as well explains annual report readability. Larger firms with more complex operations are expected to have longer and difficult annual report readability.

Table 3
Variable and Data Description

Variables	Unit	Source
Annual Report Readability (ARR)	Number Scale	Ghana Stock Exchange (GSE)
Firm Performance (FP)	Percentage	Ghana Stock Exchange (GSE)
Corporate Governance (CG)	Number Scale	Ghana Stock Exchange (GSE)
Size (Size)	Raw Value	Ghana Stock Exchange (GSE)

Source: Authors Composition

Model
The main objective of the study is to develop a regression model for the estimation of the impact of firm performance on the readability of the annual report. The model developed is as follows:

$$ARR_{it} = \alpha + \beta_1 FP_{it} + \beta_2 CG_{it} + \beta_3 SIZE_{it} + \varepsilon_i \quad (4)$$

Where ARR is Annual report readability (FP) is Firm performance, (CG) is corporate governance and (SIZE) is Firms size, α is the intercept, i and t is the firm and time respectively

$\beta_1 \ldots \beta_3$ are the coefficients, and ε is the error term. The main explanatory variables (firm performance, corporate governance) are expected to have a negative effect on annual report readability.

Method
Panel unit root test. The Im, Pesaran, and Shin (2003) and Levin, Lin, and Chu (2002) tests are being utilized in this panel study. This unit root test

approach is as an average of ADF statistics. The unit root test has the following equation:

$$Y_{it} = \rho i y i_{,t-1} + \sum_{j=1}^{p} \varphi i j \Delta y_{i,t-j} + Z^1_{it} + \varepsilon_{it} \quad (5)$$

The null hypothesis indicates that all series within the panel have unit root H_0: qi = 1 and alternatively part of the series is stationary: H_1: qi < 1.

Fixed and Random effect method specification
In this study, the association between firm performance and annual report readability is empirically tested using the fixed-effects and random-effects model. The assumption underlying the fixed effect model is that, in employing the fixed effects model, the independent variable may be influenced or biased. The fixed-effect model takes away this effect and tabulates the net effect of the independent variable on the dependent variable (Baum & Christopher, 2006; Wooldridge, 2002)

The equation for a fixed effect model is as follows:

$$Y_{it} = \sum \beta_1 X_{it} + \alpha_i + u_{it} \quad (6)$$

Where α_i is the unknown intercept for each entity, Y_{it} is the dependent variable, and β is the coefficient for the independent variable u_{it} is the error term, i = entity and t = time

The fixed effect model is then modified to suit the study in the equation below:

$$ARR_{it} = \beta_1 FP_{it} + \beta_2 CG_{it} + \beta_3 SIZE_{it} + \alpha_i + u_{it} \quad (7)$$

The random effect model assumes that the individual effects are held by the intercept and a random component. The random component is not related to the independent. The fixed effect and random effect is selected based on results from the Hausman test (Hausman, 1978).

The equation for a random effect model is as follows;

$$Y_{it} = \sum \beta_1 X_{it} + \alpha + u_{it} + \varepsilon_i \quad (8)$$

The random effect model is then modified to suit the study in the equation below:

$$ARR_{it} = \beta_1 FP_{it} + \beta_2 CG_{it} + \beta_3 SIZE_{it} + \alpha + u_{it} + \varepsilon_{it} \quad (9)$$

Hausman Test
The study then adopted the Hausman test to determine the suitable method for the study. The Null hypothesis of the Hausman test states that the fixed effect is appropriate as against the alternate. Thus, the researchers use the random effect model for the study.

4. DATA ANALYSIS AND DISCUSSION

Table 4: Descriptive statistics

VARIABLE	ARR	FP	CG	SIZE
Mean	11.3374	0.0052	73.7439	7.4907
Median	10.3698	0.0487	71.7500	7.7207
Maximum	20.3000	0.7656	93.3750	8.8799
Minimum	2.2188	-5.6487	69.0000	5.5093
Std. Dev.	5.6244	0.4948	6.0772	0.8303
Skewness	0.0780	-10.4425	2.2660	-0.4013
Kurtosis	1.5595	120.1053	7.7883	2.0678

Source: Computed by authors

The descriptive statistics indicate the characteristics of the variables by estimating the mean, median, minimum, including measurements like standard deviation, with the highest and lowest mean being 93.3750 and -5.6487, respectively. A standard deviation of the highest value is 6.0772 and a lower value of 0.4948. The variables also recorded a higher value and lower values of skewness at 2.660 and -10.4425, respectively.

Table 5
Correlation Matrix

Variable	ARR	FP	CG	SIZE
ARR	1	0.0848	-0.1060	-0.0110
FP	0.0848	1	0.1318	0.1295
CG	-0.1060	0.1318	1	0.4398
SIZE	-0.0110	0.1295	0.4398	1

Source: Computed by authors

This section reports the empirical results on the relationship between all variables. The data set demonstrates that the Annual report readability positively relates to Firm performance. In addition, a negative relationship is seen between corporate governance (CG), Firm size (SIZE) and Annual report readability.

Table 6
Unit Root Results

Variable	LLC Level Intercept	LLC 1st Difference	IPS Level intercept	IPS 1st Difference
ARR	94.7682	-16.8651***	41.2355	-7.5546***
FP	-7.6741***	-12.2512***	-3.5138***	-.8047***
CG	-3.3173	-1.9539**	-3.1081	-6.1179***
SIZE	-1.85390**	-6.15877***	2.33752	-.52835***

Notes: *, ** and *** denote significance at 10%, 5% and 1%, respectively. Source: Calculations by authors

Table 6 talks of two methods of unit root test, which is Levin, Lin & Chu (LLC) and Im, Pesaran & Shin (IPS). The researcher estimated the variables for unit roots in level intercept and 1st Difference. At LLC level and 1st difference, Unit root test do not hold for Firm performance (FP) and Firm size (SIZE). By using the IPS method, however, all variables are stationary (i.e. no unit root) after the 1st difference.

Table 7
Regression Results

Variable	Fixed Effects	Random Effects
FP	1.7077 (1.0426)	1.1128 (0.9614)
CG	-1.7347 (1.1063)	-0.1245 (0.0864)
SIZE	2.1767* (1.1619)	0.2399 (0.6324)
CONS	122.9457 (82.8185)	18.7130 (6.1076)

Table 7 shows the summaries of the results using the fixed and random effect model. Based on the Hausman test results, the random effect method was adopted (see Table 7). It can be noticed that Firm performance (FP) measured by Return on Assets (ROA) has a positive relationship with Annual report readability (ARR). This can be explained that a 1% increase in firm performance (FP) leads to more than 100% increase in the level the plainness of annual reports on the average. This result does not provide enough support for the hypothesis above; thus, firm performance has a negative impact on annual report readability. The study's result is in line with the findings of (Courtis, 1995; Risa Wahyuni et al., 2018). Courtis (1995) utilized a relatively smaller sample size and discovered a positive connection between the highest profitable firms and annual report readability. Also, Risa Wahyuni et al. (2018) employed Ordinary Least Square(OLS) and found a positive relation between firm performance (ROA) and annual report readability of listed firms in the Indonesian Stock Exchange. Conversely, results from Dempsey et al. (2012) revealed a negative outcome of capital market pricing on the annual report readability. After employing the ordinary least squares (OLS) regressions model, in the same vein, Habib and Hasan (2018) focused on the effect of firm-level business strategy on annual report readability and recorded negative results.

Additionally, in this study, corporate governance (CG) is seen to be negatively related to Annual report readability (ARR) and statistically insignificant. The result indicates that robust corporate governance systems improve the effect of annual report readability helping interested parties to access and understand annual report. Ginesti et al. (2017), after applying the ordinary least squares (OLS) regressions model on a sample of 83 Italian listed companies established that corporate governance (CEO duality) is negatively related to Annual report readability (Flesch reading ease). This means that CEO duality breaks board monitoring which intends increases difficulty annual report readability. Similarly, results from Luo et al. (2018) with the use of the same method showed that agency costs increases in firms with better corporate systems. However, other studies disagreed with these results with positive findings from their investigations. In contrast to the results above, Aymen et al. (2018) by employing the fixed and random effect model on a sample of 163 companies, recorded a positive connection between Corporate governance (Analyst) and Annual report readability (Flesch Reading Ease index).

Firm size (SIZE) is also reported to have a positive but insignificant association with Annual Report Readability (ARR) reflecting that bigger and smaller firms produce a difficult and easier annual report, respectively. An increase in the SIZE of a company shows that the readability result of the annual report exceeds the difficult to read annual report readability score. That is FOG ≥ 18, meaning the text cannot be read. By the use of ordinary least squares (OLS) regressions model, fixed and random effect method, Ginesti et al. (2017); Habib & Hasan (2018) confirms this result, respectively. On the other hand, Li (2008); Luo et al. (2018) does not support this relationship with negative results on firm size and annual report readability.

Table 8
Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f	Prob.
Cross-section random	7.79	3	0.05

Source: Authors Own

The study applied the Hausman test to determine the appropriate method to use. The Hausman test gives a Null Hypothesis that the fixed effect model is appropriate against the alternate. Based on the result from the table above the study rejects the Null Hypothesis at the conventional significance at 5%.

Table 9
Robustness Check Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FP	6.9933	50.3240	0.1389	0.8929
CG	-17.7960	45.2493	-0.3932	0.7044
SIZE	-3.0914	20.3799	-0.1516	0.8832

Source Authors Calculations

The study conducted a further robustness test for the model above employing the Panel Fully Modified Least Squares (FMOLS) estimation method. From the results, none of the variables is noticed to have a significant impact on annual report readability. The F-MOLS result is consistent with the original outcome above, with the exception of firm size (SIZE). The results mean that an increase in firm performance increases annual report readability of firms, whereas an increase in corporate governance (CG) and firm's size (SIZE) reduces annual report readability. It appears that, on the one hand, larger firms with complex operations increases the difficulty in annual report readability. On the other hand, regulatory systems in the disclosure environment necessarily give rise to more transparent reports.

5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

Using the Fixed and Random effect model, the study investigates the impact of firm performance on annual report readability of 15 listed firms in Ghana within the period 2008 – 2017. Some previous findings are not convergent with the study's outcome. Results derived from various contexts are different, given the disparity in country settings. Findings from this study state that the firm's performance (FP) positively relates to annual report readability (ARR). This result does not provide enough support for the study's hypothesis; thus, firm performance has a negative impact on annual report readability. The reason is that the business operations of the firm are not focused on the firm's assets. Therefore, the firm's performance does not affect its annual report readability in any way.

Secondly, the result of corporate governance and annual report readability reveal that corporate governance (CG) has a negative influence on annual report readability. The increase in control systems and regulations of financial documents improves the readability of the annual report of firms. These governance systems aid to improve the firm's annual report readability. Void of these checks gives managers the opportunity to obfuscate information leading to complex annual report readability.

Finally, the result of the study reflects a positive relationship between the firm's size (SIZE) and annual report readability. The result indicates that complex annual report readability is more pronounced in larger firms with complex operations than in smaller firms. In all, the findings of this analysis should be viewed as a relevant move toward a complete understanding of the connection between firm performance and annual report readability.

Implications and recommendations

This result implies that there are other determinants and factors that influence annual report readability rather than firms or managers manipulating financial reports to win investor sentiment. This issue brings to light that, even though there has been general agreement among standard setters and regulators such as U.S Securities and Exchange Commission (SEC) on understandable disclosure, the issue on annual report readability still aggravates from different causes. The effects of this on stakeholders must be highlighted. Regulators must take into consideration writing understandable disclosure into laws when improving corporate information report, to establish a probable switch between honesty and the readability of the annual report.

It can be recommended that the involvement of corporate governance in a firm puts the firm in check. Therefore regulators should also persistently stimulate firms to improve upon corporate governance systems to ensure disclosure quality. Additionally, the study strongly recommends that further research be done on the causes of the positive relationship between Firm performance (ROA) and Annual report readability (FOG Index) by utilizing different forms of variables measurement and methods to check the validity and reliability of results.

The limitations encountered in the study are that the readability measure used in this study is one while others used two for improved results. To add to it, the FOG index used to measure annual report readability identifies complex words. Complex words may be subjective depending on the level of understandability by expert judgments. In a nutshell, the sample size was relatively small.

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