ADFJ ISSN 2522 - 3186.

African Development Finance Journal

VOLUME 8 (V)

Effect of Board Characteristics on Readability of Financial Statements of Kenyan Listed Companies

James N Ndegwa

Date Received: April, 05, 2025

Date Published: June, 05, 2025

Effect of Board Characteristics on Readability of Financial Statements of Kenyan Listed Companies

By: James N Ndegwa[1]

Abstract
Readable information enables users of financial statements make good informed financial decisions. However, if firm financial performance is poor management who are responsible for financial statement preparation may obfuscate financial statements to hide the poor performance. This research set out to investigate whether board and firm characteristics are related readability of financial statements of Kenyan listed firms as measured by Flesch readability ease scores. The population and sample of 59 companies listed in the NSE over a 5 year period between years 2013 to 2018. Panel data regression model was employed and the findings indicated that female directors and board size have a significant and positive effect on the readability of financial statements while file size had a significant and negative effect on the readability of financial statements of Kenyan listed companies. Regulators should thus encourage firms to increase the number of women in boards and also increase the board sizes and reduce the size of financial statements to boost the readability of financial statements.

Keywords: *Readability; Financial Statements; Obfuscation; Board; Firm Characteristics*

1. Introduction

Financial information that is useful to readers and enable them make informed financial decisions, it should fulfill the qualities of good accounting information including being complete, relevant, comparable, reliable and comprehensible and hence readable. Adequate and reliable financial information assists in reduction of information asymmetry or imbalance that is exploited by a party who has more information than the counterparty. Preparers of financial information have more information possess more information than the readers and hence the financial information preparers have an opportunity of exploiting the imbalance at the expense of the readers by the preparers hiding what they would not want readers to know by making the financial information be very verbose, full of jargons and complex to read and comprehend easily (Richard at al, 2015; Xu *et al*., 2018).

Financial scandals globally are characterized by a situation where the management or board of directors acting on behalf of firm owners, have more information than the readers of financial statements who are vulnerable to exploitation for lack of adequate information. The management of a firm that is experiencing financial distress or similar challenges may deliberately obfuscate financial statements in order to hide the financial problems from the numerous readers or stakeholders who are

[1]*Lecturer, School of Business and Economics, Cooperative University of Kenya, E-mail: jndegwa@cuk.ac.ke, ORCID: 0000-0003-4989-6293*

not financial experts and if the financial performance is great the management may deliberately make it easy to read financial statements (Hassan *et al*., 2018). The board of directors performs the key role in the governance of any company which includes the appointment and monitoring of the firm's top managers and the protection of shareholder interests, deployment of resources optimally in order to maximize shareholders' wealth (Sorin *et al*., 2017).

The board also has responsibility of ensuring that financial statements give a truthful and fair view of the state of affairs of the firm which implies that if there is obfuscation of financial statements then the board cannot distance itself from it. Effective communication of the financial performance of firms by management to stakeholders has been a challenging matter and it is important the financial statement preparers understand the background knowledge of the readers for effective communication. The misinterpretation of financial statement text by readers can lead to wrong and costly decisions and can even lead to job losses by management. Wrong interpretation of financial statements can cause the misled the investors to invest in inappropriate and unviable investments or divest or not invest in viable opportunities. It is thus imperative for preparers of financial statements to effectively communicate the truth and fair view of financial statements to the readers in a complete manner and on a timely basis (Satwinder *et al*., 2017).

A text is deemed to be readable if a reader understands the intended message of a text upon reading it for the first time. Readability of financial statements and reports is an application of computational linguistics in finance and accounting. Readability refers to the linguistic characteristics of a text and it impacts on the ease with which a reader can be able to read and understand the text. Readability level of a text is an indicator of the textual difficulty and it is also an indicator of the suitability of the text to characteristics of readers in terms of experience, academic and professional qualifications. Readability is fixed for a given text and is not varied by reader characteristics (Xu *et al*., 2018). Understandability or comprehensibility of the text or financial statements on the other hand refers to a reader's ability to make meaning of the financial statements and is thus affected by the reader's characteristics such as interests, background, prior knowledge and reading ability. Legibility which is different from readability, refers to the actual ease with which a text can be read (Loughran and McDonald, 2014).

As explained in detail in the empirical literature review section, past empirical studies have been inconclusive in their findings and hence have created research gaps to be addressed the current study. In relation to female participation in boards and the readability of financial statements past study findings have conflicted, including studies by: Ginesti *et al*. (2018); Efreteui (2013) and Ezat (2020). Past study findings have not also agreed on the relationship between non-executive directorships and the readability of financial statements. The involved past studies include those by: Xu *et al.* (2018) and Efreteui (2013). Some past study findings have also generated contradicting research findings on the relationship between board size and the readability of financial statements including the studies by: Sorin et al. (2017); Muneeb and Zhou (2019); Mohammadi and Naghshibandi (2019); Ezat (2020) and Luo and Chen (2018). Other past studies have disagreed in terms of findings on the relationship between foreign ownership and the readability of financial statements including: the studies by Hassan et al. (2019); Barako (2006); Ezat (2020) and Efreteui (2013). All these conflicting past studies have created research gaps that the current study sought to fill.

There is also a contextual gap whereby the concept of readability has been studied widely in developed countries in the West but not in the emerging sub-Saharan countries of East Africa. These past studies include those by: Zurel (2014) studied the readability of annual reports and compared American and French annual reports. Badawy and Ibrahim (2018) studied the effect of readability and complex on naïve investor decisions by carrying out experiments in Egypt. Cheung (2014) studied readability of financial reports and IFRS adoption in Australia. Wissing et al. (2016) studied readability, comprehensibility, and lexical coverage in the evaluation of an introductory accountancy text book in South Africa. Loughran and McDonald (2014) studied measuring readability in financial disclosures in the US and studied 10-K 66,707 firm year observations from 1994-2014. Boritz, Hayes and Timoshenko (2016) also studied the determinants of readability of SOX 404 reports in the USA and found that management reports were more readable than audit reports and that longer reports were more readable and that reports of big 6 firms were more readable than reports of non-big 6 firms. Badawy and Ibrahim (2018) studied the effect of readability and complex on naïve investor decisions by carrying out experiments in emerging economies. Cheung (2014) studied readability of financial reports and IFRS adoption in Australia. Methodological research gaps also arose in relevant past studies. Xu *et al*. (2018) studied executive age and readability of financial reports in the US and employed logit regression analysis. While Saadaby and Mohamed (2019) studied readability and understanding of financial reports in Sudan and compared of readability of financial reports by users and auditors using descriptive and inferential statistics.

The current study examined the relationship between board characteristics of board size, age of directors, female directorships and non-executive directorship against the readability of financial statements in East African listed companies. The findings indicated that the age of directors and female directorship had both a significant negative effect on readability of financial statements in East African listed companies. The rest of the study is organized as follows: chapter 2 comprises of literature review, chapter 3 comprises of the research methodology, chapter 4 presents the findings while chapter 5 has the discussions, conclusion and recommendations.

2. Literature Review

The current study is anchored on 3 theories including the incomplete revelation theory, the information asymmetry theory and the Zipf's law.

2.1 The incomplete revelation theory

According to the incomplete revelation or obfuscation theory as proposed by Bloomfield (2002), managers are more satisfied when presenting reports displaying good performance than when presenting reports indicating bad performance and hence have an incentive to manipulate financial statements to deceive readers. Bloomfield (2002) also observed that the high cost of extracting important information from public data can prevent such information from being incorporated immediately in stock prices. The delay in incorporation of information in stock prices then interferes with market efficiency as per the efficient market hypothesis by Eugene Fama (1968). The obfuscation theory supports the readability of financial statements variable in the current research.

2.2 Information asymmetry theory

According to the information asymmetry theory by Stigliz (2000); Connelly et al. (2011) and Spence (1973), if there is imbalance in information possessed by two parties in a transaction, the party with more information is likely to exploit such excess information to the disadvantage of the counter party in the transaction. In the current study if there is an imbalance between in information possessed by management who are the preparers of financial statements and the information possessed by readers, the management can easily take advantage of the excess information and manipulate the financial statements especially during periods of poor performance. The information asymmetry theory also supports the readability of financial statements dependent variable in the current study.

2.3 Zipf's law

As per the Zipf's law which was proposed by Zipf in 1935 to 1950, a small number of words tend to dominate frequency of words used in reports and that the most frequently used word in a report will occur twice as many times as the second mostly used word and three times as much as the third most frequently used. The law further opined that if one of these words is misclassified then the readability of the financial reports may be distorted. Financial statements tend to use certain common words that may be deemed as complex by readability indices for containing 2 or more syllables even though readers of financial statements are used to such industry specific words (Lougran and Mc Donald, 2016).

2.4 Extant literature on Board Characteristics and Readability of Financial Statements

2.4.1 Female board membership and readability of financial statements

There is inconclusive evidence regarding the effect of board characteristics and readability of financial statements and the disclosures therein. Ginesti et al. (2018) in Italy found that the participation of women as directors had a significant and positive effect on readability of financial statements. These findings disagreed with those of Efreteui (2013) in the UK and Ezat (2020) in Egypt who both found that female directorship had a significant and negative effect on readability of financial statements. Given the disagreeing evidence in past research findings on the relationship between female board participation and readability of financial statements and the theories of incomplete revelation which opines that some directors can be more trusted than others and given the information asymmetry theory which addresses the imbalance between readers of financial statements and the preparers, the following hypothesis was generated:

H_{A1}: female board membership proportion has a significantly and positive effect on the readability of financial statements in Kenyan listed companies

2.4.2 Age of directors and readability of financial statements

Directors' age had been associated with readability of financial statements. Xu *et al.* (2018) initially opined that older directors tended to be more honest and truthful and would not engage in acts to mislead users of financial statements though obfuscation strategies but on analyzing data found that directors' age had a significant and negative effect on readability of financial statements in the US. These findings contradicted those of Efreteui (2013) in the UK who found that directors' age had a significant and negative effect on readability of financial statements. Given the inconclusive and disagreeing findings from past related studies and the obfuscation theory that posits that some directors can manipulate financial statements more depending on the financial performance of firms and given the information asymmetry theory which addresses the imbalance between readers of financial statements and the preparers, the following hypothesis was developed:

H_{A2}: *Age of directors has a significantly and positive effect on the readability of financial statements in Kenyan listed companies*

2.4.3 Board size and readability of financial statements

Large boards are associated with being less effective in monitoring management in Romania (Sorin et al, 2017). Also, Mohammadi and Naghshibandi (2019) found that board size had a significant and positive effect on the readability of financial statements Iran which was consistent with the findings by Ezat (2020) in Egypt. Luo and Chen (2018) also found that readability of annual reports had a significant and positive association with board size in China. However, Muneeb and Zhou (2019) in Pakistan who found that board size had a significant and negative effect on the readability of financial statements

The obfuscation theory posits that some directors can be trusted more than others concerning the manipulating financial statements. The information asymmetry theory opines that there is an imbalance between readers of financial statements and the preparers. These theories combined with the past studies that conflicting findings on the relationship between board size and readability of financial statements which created a research gap that caused the development of the following hypothesis:

H_{A3}: *Board size has a significant and positive effect the readability of financial statements in Kenyan listed companies*

2.4.3 Foreign directorships and readability of financial statements

Soepriyanto *et al.* (2021) found that foreign firm ownership and directorships do not have a significant positive effect on the readability of financial statement in Indonesia. Ezat (2020) in Egypt and Efreteui (2013) in the UK both found that local or foreign ownership of firms had a significant and negative effect on readability of financial statements. Based on the obfuscation theory that financial statement readability can be manipulated depending on the performance of firms and given the information asymmetry theory that opines that preparers of financial statements have more information than readers and also based on the disagreement in the past research findings on the relationship between foreign ownership of firms and the readability of financial statements, the following hypothesis was developed:

HA4: *Foreign directorships have a significant and positive effect the readability of financial statements in Kenyan listed companies*

3. Methodology

3.1 Population and Sampling

During the period 2013 – 2018 being studied, Nairobi securities exchange (NSE) had 64 listed firms distributed into 10 sectors of the economy including: agricultural, automobile, banking, commercial and services, construction, energy and petroleum, insurance, investment, manufacturing and telecommunication sectors. The Taro Yamane (1967**)** formula was employed to derive the sample size as follows:

$n = N / 1+ N (e^2) = 64 / 1 + 64 (0.05^2) = 55$ firms……………………….(1)

Where: n = sample size and N = population size

The current research had a sample size comprising of 59 firms from all 10 sectors of the NSE for the 5 year period between years 2013 to 2018 and hence 295 firm years.

3.2 Data Collection

The study was based on secondary data from annual financial reports of the listed companies and from the NSE handbooks are available in the NSE website.

3.3 Data Analysis

3.3.1 Flesch Reading Ease Measurement

The dependent variable that measured readability of financial statements employed the Flesch ease reading which one of the popular measures of measuring readability of texts (Kumar 2014; Xu, Fernando and Tam 2018) and is specified as follows:

FRE =206.835- ((1.015*ASL) – (84.6*ASW))……………………….**(**2)

Where:

FRE = Flesch Readability Ease score

ASL = Average Sentence Length = number of words / the number of sentences

ASW = Average number of syllables per word = the number of syllables / number of words

The Readability Ease ranges from 0-100% the greater the percentage the easier the readability. While the lower the percentage the more difficult it's to read. The interpretation of the Flesch ease readability scores is as follows (Hassan et al, 2018):

Flesch Reading Ease Scores Interpretation

90 – 100 Very easy (Grade 5) such as comics

80 – 89 Easy (Grade 6) such as pulp fiction

70 – 79 Fairly easy (Grade 7) such as slick fiction

60 – 69 Standard (Grades 8 and 9) such as digests

50 – 59 Fairly difficult (Grades 10 to 12) such as quality materials

30 – 49 Difficult (Undergraduate) such as academic materials

0 – 29 Very difficult (Postgraduate) such as scientific materials

3.3.2 Panel data regression model

The current research employed panel data regression model which is a method that able to analyze data that comprised of data from 50 listed firms for a 5 year period (Hair et al, 2014). The dependent variable consisted of readability scores for annual financial statements of companies listed in the NSE that were derived by employing a readability calculator in the internet whose website was www.readabilityformulas.com. Once derived, the readability scores were categorized into 2 groups comprising 50% most readable financial statements and 50% least readable financial statements. This method was previously employed by Checon et al, (2018) when they studied determinant factors of the accounting reports readability levels from BRICS countries. In the current study the basic logistic regression was as follows (Hair et al, 2014):

The following function was estimated to apply the panel data regression model:

$RS_{it} = \beta0+\beta1FO_{it}+\beta2BS_{it}+\beta3FD_{it}+\beta4FCC_{it}+ \beta5NED_{it}\ \beta4\sum Controls_{it} + \alpha i+\mu it + \varepsilon it$…,……..(3)

Where:

RS_{it} = readability score of financial statements of $firm_i$ at time t

FD_{it} = foreign directors proportion of $firm_i$ at time t

BS_{it} = board size in terms of number of directors in the board of $firm_i$ at time t

WD_{it} = proportion of women directors in the board of $firm_i$ at time t

FCC_{it} = female CEO or board chair as measured by a dummy variable of $firm_i$ at time t

NED_{it} = proportion of non-executive directors in the board of $firm_i$ at time t

AUD_{it} = Audit by big four audit firms in $firm_i$ at time t as dummy control variable

FLZ_{it} = file size of $firm_i$ at time t

uit = between entity error and

εit = within entity error

4. Findings and Discussions

4.1 Findings on Descriptive Statistics

The descriptive statistics findings on Table 1 indicated that the average Flesch readability ease score in Kenyan listed firms was 32.11%. This implied that the financial statements of Kenyan listed firms were difficult as is the case in other countries. Hassan et al, (2019) had Flesch ease readability findings in Qatar was 26.28% implying that financial statements in Qatar were very difficult to read. The US listed Asian firms' financial statements were found very difficult to read in a study by Kumar (2014) study who found an average Flesch readability ease score of 12.35%. Australia and New Zealand had average Flesch readability ease score of 29.13% (Richards et al, 2015).

The average board size had 10 directors consisting of 20% women. On average NSE listed firms had a female CEO of board chair 20% of the time. The Hassan et al, (2019) study in Qatar indicated a board size also of 9 directors. The Ginesti et al, (2018) in Italy indicated board size of 11 directors out of which 7% were women. Female CEOs or Chair of board of directors averaged 7% of the time. These results indicated that women are much more empowered in Kenya than other countries including in the developed world. The Kenyan year 2010 constitution advocates for one third gender rule in distribution of positions across the board. Even though NSE listed firms have not attained the one third gender requirement, they are performing relatively well in women empowerment. The average foreign directorship as per Table 4.1 was on average 30%. These findings are not comparable with those of Hassan et al, (2019) who also had foreign directorship on average being only 9.24% in Qatar which is much lower than in Kenya.

4.1 Descriptive Statistics

Table 4.1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Readability score	295	32.11	10.341	6.4	50.9
Foreign directors	295	.3	.305	0	.97
Board size	295	2.211	.304	1.386	2.944
Women directors	295	.238	.141	0	.5
Female CEO / Chair	295	.169	.376	0	1
Non-executive directors	295	.692	.172	.143	.929
File size	295	9.597	2.321	4.796	13.594
Audit firm	295	.881	.324	0	1

Loughran and McDonald (2014) proposed that file size as measured using megabytes can be an alternative measure of readability instead of readability indices which they noted had challenges in measuring the readability of financial statements and reports due to the use on common complex words. They found that the average file size of financial reports in the US when assessed using file size instead of readability indices, had on average 1.43 megabytes. The average file size of Kenyan listed company financial statements was 238 kilobytes or 0.23 megabytes as per Table 4.1 which was much lower than the average file size of financial reports in the US. This implied that based on the financial information in the US is much more complex to read than in Kenya which is a view supported by Kumar (2014) Flesch readability ease score which averaged 12.35% for Asian companies listed in US stocks as compared to Kenyan listed firms whose average Flesch readability ease score of 32.11% as indicated in Table 4.1.

4.2 Correlation Matrix Findings

An assumption required when employing the binary logistic regression model is that there should be no multicollinearity in the data and according to the correlation matrix in Table 4.2 multicollinearity problem did not exist in the data as none of the Spearman Rho correlation coefficients was above 0.8 (Hair et al. 2014).

Table 4.2: Findings on Correlation Matrix

Variable	RS	FO	BS	WD	FCC	NED	FS	AUD
Readability score	1	-0.074	0.088	-0.313***	-0.048	-0.113*	0.005	0.047
Foreign directors		1	0.087	0.017	0.181***	-0.086	-0.067	0.250***
Board size			1	-0.039	0.101*	0.110*	0.494**	0.306**
Women directors				1	0.151***	0.136**	0.081	-0.110*
Female CEO / Chair					1	-0.072	0	0.026
Non-executive directors						1	-0.018	-0.082
File size							1	0.086
Audit firm								1

*** p<0.01, ** p<0.05, * p<0.1

4.3 Regression Analysis Findings

The regression results as per Table 4.3 indicated that female directors had significant and positive effect on readability of financial statements of companies listed in the NSE (coefficient = 0.772, Z value = 4.706) implying that increase in female directors by 1 unit, is associated with increase in readability of financial statements by 0.772 units. This finding agrees with that of Ginesti et al. (2018) in Italy who also found that female directors had a positive effect on the readability of financial statements. However, this finding contradicts the findings of Efreteui (2013) in UK and Ezat (2020) Egypt who found that female directors had a significant and negative effect on the readability of financial statements.

Table 4.3 regression findings also indicated that board size had a significant and positive effect on readability of financial statements of companies listed in the NSE (coefficient = 0.253, Z value = 3.039) implying that increase in board size by 1 unit, is associated with increase in readability of financial statements by 0.253 units. This finding is consistent with that of Sorin et al. (2017) in Romania, Mohammadi and Naghshibandi (2019) in Iran, Ezat (2020) in Egypt and the findings of Luo and Chen (2018) in China who all found that large boards were associated with increased readability of financial statements. However, Muneeb and Zhou (2019) in Pakistan who found that board size had a significant and negative effect on the readability of financial statements.

Table 4.3 regression findings also indicated that file size had significant and negative effect on readability of financial statements of companies listed in the NSE (coefficient = -0.345, Z value = -5.672) implying that increase in file size by 1 unit, is associated with decrease in readability of financial statements by 0.345 units.

Table 4.3: Regression Analysis - Random Effects Findings (using the Flesch readability ease (FRE) index)

Foreign directors	0.053
	(0.692)
LN board size	0.253
	(3.039)
Female directors	0.772
	(4.706)
Female CEO Chair	-0.071
	-1.161
Non-Executive directors	0.088
	(0.668)
Audit_big4	-0.061
	(-0.815)
LN File size	-0.345
	(-5.672)
_cons	4.994
	16.256
Observations	295
R-squared	0.202
Adjusted R-squared	0.183
F-statistic	10.402
Prob(F-statistic)	0.000

Z values are in parentheses
*** p<.01, ** p<.05, * p<.1

4.4 Robustness Test Findings

For robustness test, the dependent variable of Flesch readability ease (FRE) index was changed to Flesch Kincaid grade level (F_KGL) readability index. According to Table 4.4 on robustness test findings female directors had significant and positive effect on readability of financial statements of companies listed in the NSE (coefficient = 0.889, Z value = 1.854) implying that increase in female directors by 1 unit, is associated with increase in readability of financial statements by 0.889 units. This finding thus agrees with that of Ginesti et al. (2018) in Italy but contradicts the findings of Efreteui (2013) in UK and Ezat (2020) Egypt.

Table 4.4: Regression Analysis Fixed Effects (Robustness test using the Flesch Kincaid grade level (F_KGL) readability index)

Foreign directors	0.007
	(0.301)
LN board size	0.260
	(1.311)
Female directors	0.889
	(1.854)
Female CEO Chair	-0.071
	(-1.161)
Non-Executive directors	0.172
	(0.349)
Audit_big4	-0.067
	(-0.375)
LN_Fsize	-0.343
	(-2.345)
_cons	5.001
	6.692
Observations	295
R-squared	0.197
Adjusted R-squared	0.168
F-statistic	6.963
Prob(F-statistic)	0.000

Z values are in parentheses
*** p<.01, ** p<.05, * p<.1

5. Conclusions and Recommendations

This paper provides empirical evidence on the relationships between board and firm characteristics and readability of financial statements in Kenya. The key findings were that female directors and board size have a significant and positive effect on the readability of financial statements of Kenyan listed companies. The findings also indicate that file size has a significant and negative effect on the readability of financial statements of Kenyan listed companies.

Regulators like the Capital Markets Authority and the Institute of Certified Public Accountants of Kenya should thus encourage firms to increase the number of women in boards and to increase the board sizes and reduce the size of financial statements to boost the readability of financial statements. At the same time excessively, lengthy financial statements are associated with a decline in the readability of financial statements. Hence firms should be encouraged to reduce the size of financial statements.

References

Barako, D.,G. (2007) 'Determinants of voluntary disclosure in Kenyan companies annual reports', *African Journal of Business Management*, Vol.1, No.5, pp.113-128.

Banchuenvijit, W. (2012), 'Determinants of Firm Performance of Vietnam Listed Companies', *Academic and Business Research* http://aabri.com/SA12Manuscripts/SA12078.pdf (Accessed 1 May 2020).

Capital Markets Authority, (2017), *Quarterly Statistical Bulletin*, CMA, Nairobi.

Checon, B.,Q., Telles, S., V. and Mucci, D., M. (2018), 'Determinant Factors of the Accounting Reports Readability Levels from BRICS Countries', Paper presented at the XVIII Accounting Moving Forward Conference. 25-27 July 2018. Sao Paulo, Brazil.

Connelly, B., L., Certo, S., T., Ireland, R., D. and Reutzel, C., R. (2011), 'Signaling Theory: A Review and Assessment', *Journal of Management,* Vol. 37 No. 1, pp.39-67.

Efretuei, E., D. (2013), Narrative Disclosures in Corporate Annual Reports: A Syntactical Complexity Perspective, Unpublished PhD thesis, University of Leeds, Leeds, UK.

Gambetta, D., (2009), The Handbook of Analytical Sociology, Oxford University Press, Oxford.

Ginesti, G. and Drago, C. (2018), 'Female board participation and annual report readability in firms with boardroom connections', *An International Journal,* Vol. 33, No. 4, 2018, pp. 296-314.

Gomez, R., C. & Laufente, A.,A.,S. (2019), 'Readability indices for the assessment of textbooks: a feasibility study in the context of EFL', *Vigo International Journal of Applied Linguistics,* No.16, pp.31-52

Hair, J.,F., Anderson, R.,E., Babin B., J. and Black, W.,C. (2014), *Multivariate Statistics and Econometrics,* Pearsons Education, Essex, UK.

Hambrick, D., C. and Mason, P., A. (1984), 'Upper Echelons: The Organization as a Reflection of Its Top Managers', *The Academy of Management Review,* Vol. 9 No. 2, pp.193-206.

Hamid, W. and Rohani, M. (2018), 'Predicting financial distress: Importance of accounting and firm-specific market variables for Pakistan's listed firms', *Cogent Economics & Finance*, pp1-16.

Haniffa, R., M. and Cooke, T., E. (2002), 'Culture Corporate Governance and Disclosure in Malaysian Corporations', Paper Presented at the Asian AAA World Conference in Singapore. 28-30. August 2000, Singapore.

Hassan, M., K., Abbas, B., A. and Garas, N., S. (2019) 'Readability, Governance and Performance: A Test of the Obfuscation Hypothesis in Qatari Listed Firms', *Journal of Corporate Governance* Vol.19 No.2, pp.270-298.

Jullobol, N. and Sartmool, S. (2015) 'The Effect of Firm Performance on Voluntary Disclosure in Annual Reports: A Case Study of Technology Industry in the Stock Exchange of Thailand', *Global Business and Economics Review*, Vol.10 No.2, pp.115-128.

Kumar, G. (2014) 'Determinants of Readability of Financial Reports of U.S.-Listed Asian Companies', *Asian Journal of Finance & Accounting*, Vol.6 No.2, pp.1-18.

Lawrence, B. (1997) 'The Black Box of Organizational Demography', *Organizational Science*, Vol.8, pp1-22.

Loughran, T. and Mcdonald, B. (2014) 'Measuring readability in financial disclosures', *Journal of Finance*, Vol.69 No.4, pp.1643–1671.

Luo, J., H. and Chen, X., L. (2018) 'Annual report readability and corporate agency costs', *China Journal of Accounting Research*, Volume 11, Issue 3, pp 187-212.

Mohamed, A., M. (2014), Financial Literacy and Investment Decisions in Kenya: A Case of Individual Investors in the Nairobi Securities Exchange. Unpublished MBA thesis, United States University in Africa, Nairobi, Kenya.

Nandi, S. and Ghosh, S., K. (2012), 'Corporate governance attributes, firm characteristics and the level of corporate disclosure: Evidence from the Indian listed firms', *Decision Science Letters*, Vol.2, (2), pp. 45-58.

Naran, P., M. (2013), The Effect of Company Size and Voluntary Disclosure on Financial Performance of Commercial Banks in Kenya. Unpublished MBA thesis, University of Nairobi, Nairobi, Kenya.

Richard, G., Fisher, R. and Staden, C. (2015) 'Readability and Thematic Manipulation in Corporate Communications: A Multi-Disclosure Investigation'. Paper Presented at the *AFAANZ Conference*. 5-7 July 2015. Hobart, Australia.

Satwinder, S., Naeem, T., Tamer, K., D and Georgios, B. (2017) 'Corporate Governance and Tobin's Q as a Measure of Organizational Performance', *British Journal of Management*, Vol. 00, pp.1–20.

Sorin, N., B., Monica, V., A. and Codruța, M. (2017), 'Board Characteristics and Firm Performances in Emerging Economies. Lessons from Romania', *Economic Research-Ekonomska Istraživanja*, Vol.30 No.1, pp.55-75.

Spence, M. (1973), 'Job Market Signaling', *Quarterly Journal of Economics*, Vol.87, pp.355-374

Thomas, G., Kincaid, J., P., and Hartley, R., D. (2016), 'Test-Retest and Inter-Analyst Reliability of the Automated Readability Index, Flesch Reading Ease Score, and the Fog Count', *Journal of Literacy Research*, Vol.7 No.2, 149–154.

Tsipouridou, M. and Charalambos, S. (2014), 'Audit Opinion and Earnings Management: Evidence from Greece', *Accounting Forum*, Vol.38, pp.38–54.

Xu, Q., Fernando, G, D. and Tam, K. (2018), 'Executive Age and Readability of Financial Reports', *Advances in Accounting*, pp1-12.

Yamane, T. (1967), *Statistics, an Introductory Analysis*, 2nd ed., Harper and Row, New York.