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*Effect of Corporate Voluntary Disclosure on Firm Value
of Listed Companies at the Nairobi Securities Exchange*

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Effect of Corporate Voluntary disclosure on Firm value of listed Companies at the Nairobi Securities Exchange

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Abstract

The purpose of this study was to examine the effect of corporate voluntary disclosure on firm value of listed companies at the Nairobi Security Exchange (NSE) in Kenya. A census survey was carried and out of the 66 firms that were targeted, 56 were analyzed. The study relied on disclosure index procedures to assess the level of corporate voluntary disclosure in the annual reports (2010-2019) of 56 listed companies. The study also used panel data models to establish the association between the corporate voluntary disclosure and firm value. As of the year 2010, the adoption of CVD was very low at mean score of 34.3 (28.58% disclosure score). Nonetheless, there was a gradual improvement in CVD disclosure particularly from the year 2015. In the year 2019 the CVD mean score was 48.13 (40.1%) an improvement from 34.3 (28.58%) in 2010. The overall CVD mean score for listed company was 40.25 (33.54%) This indicates that adoption of CVD is low in Kenya. The finding shows that CVD affect firm value (using ROA and TQ measure) and are positively related to ROA and negatively related to TQ among listed companies in Kenya. However, the results indicates that CVD is still a challenge for many companies considering the low level of CVD in Kenyan context. There is little empirical evidence establishing whether low adoption of CVD framework is due to lack of awareness of value relevance of CVD in emerging economies. Study findings are important for policymakers and practitioners to establish the challenges of providing additional information in such contexts. The study recommends more research efforts in bridging the knowledge gap by exploring the causality link between CVD and firm's value.

Key Terms: Corporate voluntary disclosure, firm value, information asymmetry

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Introduction

There has been a continual discourse among scholars and practitioners about the benefits of corporate voluntary disclosure (CVD) in recent years. Transparency and accountability has become critical for the company's success and value creation. Corporate disclosure is the prime mean by which corporations can become transparent (Healy & Palepu, 2001). Recent global developments have intensified pressure on managers to improve disclosure of informative information and be more accountable to stakeholders (Islam, 2017; Opanyi, 2019; Coebergh, 2011). Some of these development includes: Transition towards a knowledge economy, Growth of stakeholder's awareness, Technological evolution, Growth of social responsible investment. Not to forget corporate scandals, financial crisis, failure of governance system, gradual falling of the professional and personal integrity of auditing firms and globalization.

These rapid changes in the broader business environments have increased concerns over mandatory disclosure continual fulfillment of its objective and necessitated a rethink of corporate reporting (Juma, Tumwabaze, & Orobia, 2017). Accounting operates in environment and as a service activity, it need to react to changes and developments in the environment (Beattie, Goodacre, & Thomson, 2000). Indeed, accord appears to be building up that mandatory disclosure by itself cannot presents a complete depiction of business's affairs of a company. The interconnection among financial and non-financial aspects of an organization is extensively being recognized (FEE, 2015). A holistic view of organizations' financial and non-financial aspects is essential for business success and support value-creating decisions. Corporate voluntary disclosure reflect intangible and non-financial value drivers unlike mandatory disclosure hence presents complete picture of firms' affairs (IFAC;, 2018; Healy & Palepu, 2001). CVD provides greater transparency, stewardship obligations and effective decision-making process.

Meek, Gray and Roberts (1995), defines CVD as a free choice on part of firms' management to provide accounting and other information deemed relevant to users of financial statements for their economic decision needs. Similarly, (FASB;, 2001) defines CVD as disclosure, primarily outside the annual reports that are not explicitly required by accounting standards or regulations. CVD implies additional information that is subject to management's discretion, the specific regulation, the cultural factor and the external pressures from various stakeholders. There has been inconsistence in the definition of CVD because of its abstract nature, as it does not follow a definite or recognized time pattern (Haller et al., 2017). This results

in different grasp of CVD concept. In general, CVD refers to release of corporate information to the public beyond the level required by legal reporting requirements and accounting standards (FASB;, 2001).

Prior studies have adopted different methodology in determining the CVD levels. The main concern is how to evaluate the extent of CVD, an abstract phenomenon, in quantitative terms. Therefore, presenting difficulties in measuring it directly. Further, it is derived from the use of various methodologies (Hassan & Marston, 2010). Prior studies on CVD used various range of possible proxies that purport to measure the extent of CVD. Scaltrito, (2015), summarized these tools that have been used to assess CVD levels as follows. First, subjective tools which do not depend directly on the examination of the original information source for example disclosure survey; - questionnaire, interviews, analyst opinion and external rating (Hassan & Marston, 2010).

Second, objective tools that depend on direct examination of the original information source for example content analysis, event frequencies, disclosure index (Lang & Lundholm, 2000). The researcher adopted disclosure index procedure to assess the level of CVD. A disclosure index represents the extend of information disclosed by an organization, calculated on the basis of particular elements observed depending on one or more specific sources of information.

Typically, managements have access to more information and decision making rights on financial affairs of the company than other interested parties (Graham , Harvey, & Rajgopal, 2005). The level to which managers releases information on voluntary basis can greatly vary, in terms of extent and type of CVD, resulting in diverse CVD practice (Farvaque, Gainet, Refait-Alexendre, & Saidane, 2009; FASB;, 2001). Prior studies indicate extensive information categories that have been endorsed as impartial part of CVD. For example financial and capital market information (FCMI), forward looking information (FLI), corporate governance information (CGI), corporate and strategic information (CSI), sustainability information (SI), intellectual capital information (ICI) (Latridis and Alexakis 2012; Hassan et al 2009; FASB, 2001).

Given that one of the key purpose of a firm is to maximize shareholders' value, it raises question why organization ought to espouse CVD that might incur additional cost. This study aimed at investigating the relationship between CVD and firm value of listed companies in Kenya. In particular it sought to answer

the following questions; what are the current CVD information category levels for listed companies in Kenya? To what extent are companies providing CVD? Does CVD increases firm value, is it value relevance?

Research Problem

CVD has gradually gained acceptance as part of corporate external reporting. CVD reflect intangible and non-financial value drivers and present a complete picture of firm's affairs. It provides greater transparency, stewardship obligations and effective decision-making process. IFAC, 2018; Scaltrito, 2016; Coles et al., 2012; Hassan et al., 2009; Plumlee et al., 2008; Rikanovic, 2005; Healy and Palepu 2001, found that commitment to greater transparency and accountability provide a rich information environment and reduces information asymmetry that has several desirable outcomes such as increased stock liquidity, better prediction of future cash flow, reduced cost of capital and improved reputation. Kenyan listed companies are of interest to wide and sophisticated investors with about 20% foreign investors' participation outside East Africa (Injeni et al 2019; CMA 2019) and therefore matters of corporate reporting are essential.

Regardless of tremendous increase in non-financial information disclosure, there are conflicting research finding on value relevance of CVD. Empirical studies do not invariably support positive association between CVD and company value and findings are conflicting. For example studies by Waweru, 2018; Leuz and Wysocki 2015; Coebergh 2011; Plumlee et al. 2008 reports statistical significant association between CVD and company value. Studies by M'ithiria et al., 2017; Haggard et al., 2008 document a negative effects of CVD on firm value. Whereas study by Khanna and Chahal 2019; Urquiza et al., 2009; Rikanovic, 2005 and Botosan and Plumlee (2002) report a mixed result.

Indeed, Beattie et al., (2000) argues that growth in the bulk of information released has not produced proportional growth in the value of corporate disclosure and that vital information may well be getting lost in a disclosure forest. Also, Hassan and Marston (2010) state that provision of CVD is not without cost, there are direct cost (cost of disclosing information) and indirect cost (proprietary cost). This study therefore aim to answer the questions; what are the current CVD information category levels for listed companies in Kenya? To what extent are companies providing CVD? Does CVD increases firm value, is it value relevance?

Research Objective

The aim of this study was to determine the relations between CVD and firm value of listed companies at NSE.

Theoretical Review

This section explains the related theories on which the study is based. A number of theories have been hypothesized as explanatory theories endeavoring to explain firms' incentives to disclose extra information voluntarily. The stakeholder theory, agency theory and signaling theory were used to underpin the study.

Stakeholder's Theory

The theory assumes that all stakeholders have "customer-like" power to engage or not to engage with the company and the contribution of every stakeholder to the firm system of value creation affects the total value created (Ansoff 1965). Similarly, Freeman (2004) describes stakeholders as individuals who are vital to the success and survival of the organization. According to stakeholder's theory, contribution of every stakeholder to the firm system of value creation affects the total value created. As such, survival of organization rest on the sustainability of its stakeholder's relations, companies need to consider and engage all stakeholders. CVD is used to serve the company interest to involve with stakeholders and overcome information asymmetries. Resulting in the long-run benefits to the company.

This is achieved by providing CVD, to gain attention, backing and endorsement of all stakeholders. CVD enables firms to build trust of all interested parties. Consequently, companies realize resources driven by all the stakeholders. Company does not have a homogenous set of stakeholders. Stakeholders' theory suggests that company must meet the information needs of diverse set of users with complex set demand and supply. Stakeholder theory view firms' CVD as a reaction to the expectations and demands from different interested parties.

Agency Theory

The theory expresses the relationships and self-interests in business organizations as results of separation of financiers and control of business. According to Jensen and Meckling (1976), managers have advantage of more information than the owner, resulting in information asymmetry problem. The rationale is dissension in the preferred targets of agent and principal, both acts in their own best interest.

Agency theory, posit that CVD is a tool to alleviate the agency problem, by managing agency cost, monitoring cost and lowering information asymmetry (Gray, Kouhy, & Lavers, 1995; Watson, Shrives, & Marston, 2002). Watson et al., (2008) argues that management consider CVD with a view to convince investors that they are acting shareholders best interest to avoid shareholders controlling their decision behavior through monitoring activities.

However, CVD is a responsibility of managers and in utilizing CVD, investment community are likely to detect management incentives in portray a self-serving assessment of the company future outlook and past performance (Kothari et al., 2009). Moreover, because of investor's heterogeneity ability to process disclosed information, may result in even more asymmetric information among investors (Kim and Verrecchia, 1994).

Signaling Theory

The signaling theory deals with asymmetric information and shows how parties with more information if shared with others can reduce asymmetry (Spence, 1973). The theory recognizes that a number of parties to a company transactions may possibly have more superior information than others. Managers have access to company private information than outside stakeholders. Given informational asymmetries, investors face two challenges; lack of trust in management and the doubt in the value of the investment opportunities. Signaling theory posit that, increased demand for information disclosure arises from an information asymmetry problem.

According to the theory, CVD has major influence on firm value by arguing that the value of a firm is a function of how well managers signal corporate information to reflect true value of the firm in the market (Hossain & Taylor, 2007). Consequently, companies signal informative information about the company to investors to show that they have superior investment prospects than other enterprises to boost a positive firm status (Verrecchia, 1983). However, it is possible that the company engage in CVD in a very complex manner, making it hard to interpret the information disclosed. Moreover, for the firms to successfully signal their qualities, the signal must be credible. Watson et al., (2002) states that, credibility is attained once the true quality of a company is eventually confirmed. Jennings (1987), noted that the market moving information is subject to the believability and new information in the disclosed information.

Empirical Review

Empirical studies argue that, reduced information asymmetry and rich information environment have several desired outcomes. Prior studies have followed two streams of research in exploring the benefits of CVD. The first research stream suggests that CVD increases company value through exploring the link among the constituents of company value through reduced cost of capital and/or increased cash flows that accrues to shareholders (see Hassan et al., 2009; Plumlee et al., 2008; Rikanovic, 2005). Accordingly, increasing shareholder values. This proposition is based on the basic assumptions that a rich information environment and reduced information asymmetry have several desired outcomes such as; first, CVD leads to better transparency by releasing informative information to less informed stakeholders thus levelling the “playing field” on security market (Rikanovic 2005; Leuz and Wysocki 2015). This reduces information asymmetries and adverse selection thus prevent volatile share prices on the market, higher volume of trading and reduces the cost of equity (Leuz & Wysocki, 2015).

Second, CVD increases publically available information to the public domain that reduces the perceived investors’ uncertainty about the company’s future prospects, reducing the estimation risk and leads to lower required returns on investment. Investor’s doubt about company prospects suggests an increased expected cost of capital. Consequently, lower firm value. Third, CVD increases informative information that reduces information acquisition and processing costs by financial analysts that enable better coverage and accurate forecast of future cash flows. Improved financial analysts’ coverage and forecasts diminishes informational differences among investment community and eventually lowers the cost of capital (Rikanovic 2005).

Fourth, firms use CVD to identify and attract loyal and dedicated stakeholders such as institutional investors with capital because of long-term stable ownership. Institutional investors are also sophisticated and provide essential firm monitoring (Leuz and Wysocki, 2015). Thus, enable better long-term decision making that increases firm’s cash flows and further contribute to firm value. Finally, CVD enables linking of non-financial to financial results that led to better depiction of firm’s ability to generate value over long-term. With transition towards a knowledge economy, intangibles assets are increasingly forming a major part of firms’ resources that drives firm’s value creation (Juma et al., 2019; IFAC 2018; Coebergh 2011). According to IFAC (2018), CVD leads to better transparency that enable provision of fuller and better depiction of company’s ability to generate value over long-term.

However, other studies have recorded mixed results for example study by Khanna and Chahal (2019) examining the impact of CVD on the value of the company found mixed results. The result showed that CVD does not affect cost of capital but have negative relationship with stock volatility. Botosan and Plumlee (2002), findings shows CVD benefits are sensitive to the disclosure type. The study shows that annual reports negatively relates to the cost capital while quarterly financial report positively relates to cost of capital. Francis et al., (2008) explored the consequence of CVD on cost of capital. The findings showed that CVD was negatively relate to quality of earning, the cost of equity was negatively related to quality of earnings and no relationship between cost of equity capital and CVD, controlling the earning quality. Graham et al., (2005) also document that cost of capital is greater from CVD, surprisingly is greater for companies with high analyst coverage.

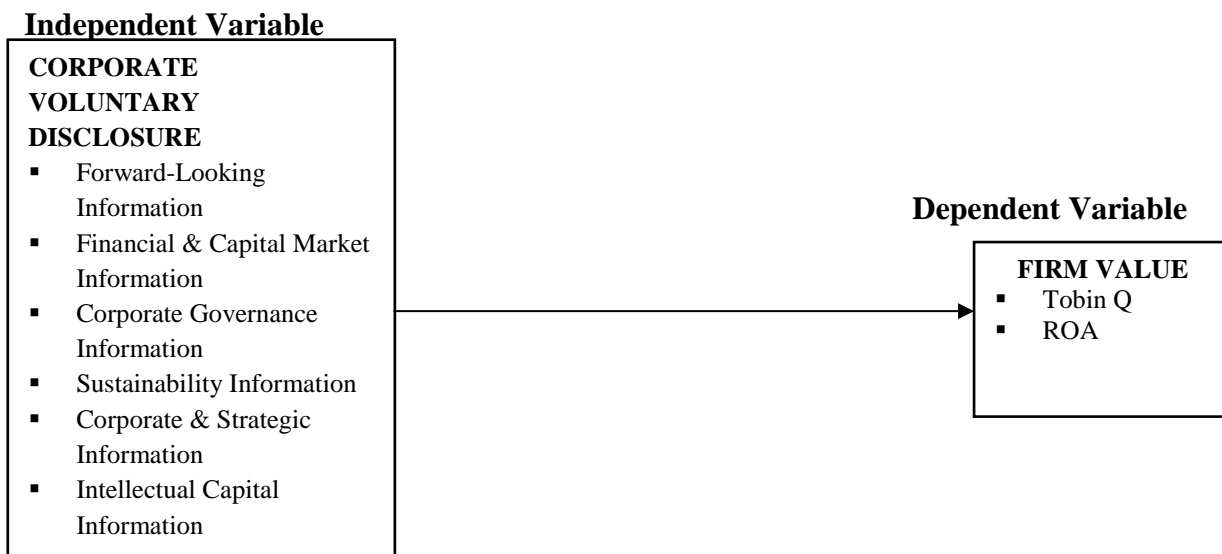
The second research stream demonstrates that CVD increases company value through exploring the effect of enhanced stakeholder engagement that boost firm's reputation. As results enable firm's to have superior business position in the market and increases corporate value (Armitage and Marston, 2008; Eccles et al., 2006; Graham et al., 2005; Hutton et al., 2001). Prior studies have shown that CVD aims to enhance reputation for openness (Graham et al 2005). As results, share price are expected to be high due to reduced investor skepticism (Lundholm & van Winkel, 2006). Moreover, it might be one of the ways by which a company can sustain its overall reputation. Company's reputation status facilitate doing business and therefore brings commercial benefits.

It is therefore regarded as an "intangible assets" with the potency to create value for a firm. According to Elliot and Jacobson (1994), disclosure may be used as a means of investors' relations and a cogent evidence of management creditability. CVD enhances company reputations through getting more attention, legitimacy and support from stakeholders (Armitage and Marston, 2008). Therefore, CVD may enhance trust that result to reduction in transaction costs (through reduced resources needed to create, enforce and monitor contracts to successful execution). A reputable firm has competitive edge over the other firms, as the firm is presented with better business opportunities.

For example, Armitage and Marston (2008), examine CVD, cost of capital and reputation in UK. They urges that the key benefits of CVD are the improvement of firms' reputation status for openness and of shareholders sureness, which brings commercial benefits. Corbergh, (2011) study supports this relation

between CVD and firm's reputation. Hutton et al. (2001) urges that firm reputation is the driving forces behind company public relations. They observed that big organisations are likely to have better corporate image (seemingly resulting from greater visibility). The finding indicates that there are more proactive modes of disclosure that appear to relate stronger with firm's reputes than routine traditional annual financial reports. For example CSR activities, industry relations and advertising are negatively related with firm repute.

Figure 2.1: Conceptual Model



The research hypothesis tested in this study was:

Corporate voluntary disclosure has no significant effect on firm value of listed companies at the NSE.

Research Design

This study employed positivist paradigm. According to Creswell (2009), scientific method or research which reflects a deterministic philosophy where causes possibly determines effects or outcomes are referred to as positivism. This study was based on existing body of knowledge, review of literature from previous related studies, setting of hypotheses based on the existing pertinent theories, from which observations was deduced so as to be confirmed or refuted by quantitative and statistical methods. The positivist approach also relies on taking large samples hence the researcher studied the entire population so as to generalize the findings.

The researcher adopted longitudinal research design. Longitudinal studies follows the same sample over an extended period of time and makes multiple observations (Ployhart & Vandenberg, 2010). It enables exploration of changes over-time and relates them to variables that clarifies why the changes occurs. Longitudinal research design provides a relatively full picture of the events over several time-period.

The study targeted all listed companies whose stocks were actively traded on the Nairobi Security Exchange from 2010 to 2019. There are 66 listed companies on NSE as of December 2019 (CMA, 2019). Census method was selected because listed companies represent a small population and is possible to study the whole population (Kothari, 2004). Also the results based on this method are less biased as each and every unit of population is considered. Out of the 66 firms that were targeted, 56 were analyzed.

Table 3.1: Number of Listed Firms by Sectors

Sector	No. of Listed Companies	No. of Companies to be Studied
Banking	12	11
Commercial and Telecommunication	14	11
Construction	5	5
Manufacturing and Allied	9	7
Insurance	6	6
Agriculture	7	6
Investment and Investment Services	8	6
Energy and Petroleum	5	4
TOTAL	66	56

The study collected secondary data (annual financial statements). The secondary sources (annual financial statements) was selected because it is economical, easy to access and is much reliable because annual financial statement are audited. The financial statements were obtained from CMA websites and specific listed company's websites for ten-year's time period (2010 to 2019). The financial data from published financial reports were compared with data from NSE Hand book, this assisted in the verification of consistency and accuracy.

The study used disclosure index procedures to evaluate extend CVD in the annual financial reports of 56 listed companies for the period 2010-2019. CVD checklist comprises multiple measurement items based on broad literature review of survey instrument from prior studies and established guidelines. Data on firm value was obtained from the Annual reports using secondary data collection sheet.

Operationalization refers to the process of developing indicators or items for measuring these constructs (Bhattacharjee, 2012). This study operationalized the study variables as detailed in the table 3.2.

Table 3.2: Operationalization and Measurement of Study Variables

Variable	Operation Definition	Indicators	measurement	Researchers
Value of Firm	Objectives of shareholders interest	Firm value	TQ = $\frac{\text{Market Capitalization}}{\text{Book Value Total assets}}$ ROA= $\frac{\text{Profit after Tax (Net Income)}}{\text{Book value Total Assets}}$	Waweru, 2018; Hamrouni et al., 2015; Rikanovic 2005; Drobetz et al., 2004
Corporate Voluntary Disclosure	Disclosure beyond regulatory and legal requirement	CVD Attributes	Disclosure Score = $\sum_{t=1} \frac{X_{ij}}{n_{ij}}$ CVD will be measured using 5 point likert scale ranging from “no disclosure” to “very extensive disclosure”.	Khanna and Chahal 2019; Scaltrito 2016; Uyar et al., 2013; Coebergh 2011; Francis et al., 2008; Boesso and Kumar 2007 Striukova et al., 2008; Ticha’ I 2008; Meritum et al., 2002

The effect of CVD ON firm value was established using multiple regression models.

$$FV = \beta_0 + \beta_1 \text{ CVD} + \varepsilon \dots\dots\dots (1)$$

Where: FV= Firm Value

CVD= corporate voluntary disclosure index

β_0 = Constant or intercept

β = Regression model co-efficient (parameters)

ε = Error term

Empirical Results

The empirical results comprise the results of descriptive statistical analysis, correlation analysis and panel data regression analysis.

Descriptive Statistics

Descriptive statistics is usually used at the beginning of the analysis phase in order to provide preliminary analysis of the data and guide the rest of the data analysis process (Cooper & Schindler, 2008). Descriptive statistics are univariate tests which represents the total sample distribution of one variable at a time, which are divided into statistics that measure central tendency and statistics that measure dispersion. Central tendency measures are concerned with locating where values in a distribution tend to concentrate. The dispersion measure is concerned with how wide a distribution is (Bryman and Cramer, 2005).

Corporate Voluntary Disclosure

Previous studies treat CVD as a whole. However, there are differences in disclosure behaviour in each information category that may result from management intentions or a wide variety of demands from stakeholders, and each type of information has different characteristics. According to Khanna and Chahal (2019); Gray et al. (1995) and Meek et al. (1995) empirical evidence shows that different CVD information category result in different disclosure behaviour and can be explained by different factors.

Table 4.1: Corporate Voluntary Disclosure Score by Year

Year	Obs.	Mean	Std. Dev.	Std. Err.	(95% Conf. Interval)		Min	Max
2010	56	34.30	12.14	1.62	31.12	37.49	10.00	63.00
2011	56	34.68	12.53	1.67	31.39	37.97	10.00	69.00
2012	56	35.54	12.82	1.71	32.17	38.90	10.00	69.00
2013	56	36.11	13.32	1.78	32.61	39.60	10.00	69.00
2014	56	37.01	14.22	1.90	33.28	40.74	10.00	69.00
2015	56	38.88	16.18	2.16	34.63	43.12	10.00	74.67
2016	56	43.53	17.40	2.33	38.96	48.10	16.00	83.67
2017	56	47.37	18.71	2.50	42.46	52.28	16.00	82.67
2018	56	46.95	21.39	2.86	41.33	52.56	0.00	79.67
2019	56	48.13	22.26	2.97	42.28	53.97	0.00	84.67

The study adopted a comprehensive disclosure index in terms of items which considered 24 checklist statements using 5 point likert scales. The maximum score that a company was expected to score was 120. The score was categorized into three ranks of low cluster (0-40), middle cluster (41-80) and high cluster (81-120). The results in Table 4.1 indicates the CVD score by year.

The results indicates that the year 2010 had the lowest scores (mean= 34.30, standard deviation= 12.14) and the year 2019 had the highest score (mean= 48.13, standard deviation= 22.26). The results shows that adoption of CVD was low, but increased gradually from 2010 to 2019 with extend of CVD among forthcoming companies and those that are reluctant to embrace CVD also increasing as shown by standard deviation (spread).

Figure 4.1 indicates the CVD trend from 2010 to 2019. As of 2010, the adoption of CVD was very low at mean score of 34.3 (28.58%). Nonetheless, there was a gradual improvement in CVD disclosure particularly from the year 2015. In the year 2019 the CVD mean score was 48.13 (40.1%) an improvement from 34.3 in 2010. The overall CVD mean score for listed company was mean score of 40.25 (33.54%).

Figure 4.1: Corporate Voluntary Disclosure Score by Year

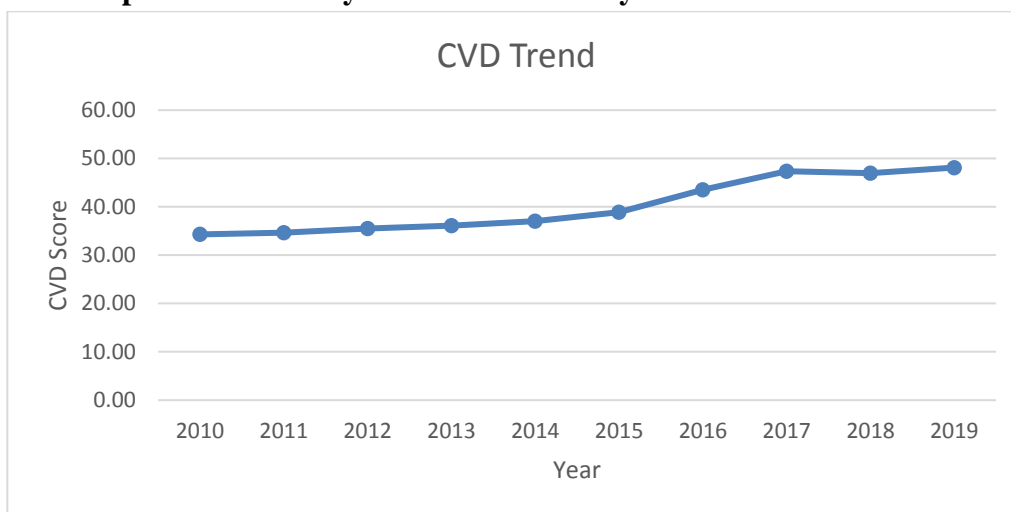


Table 4.2 indicates the results of CVD information category levels. Each CVD information category had a maximum score of 20. The CGI, CSI and SI scored middle cluster rating of 11.22, 8.96 and 7.33 respectively. Whereas, FCMI, FLI, and ICI scored low cluster rating of 4.88, 4.08 and 3.72 respectively. Each CVD information category shows a steady improvement in its disclosure particularly from 2015. With CGI, CSI and SI information being most disclosed raising from 10.02, 7.91 and 6.61 respectively in 2010 to 12.71, 9.77 and 8.05 respectively in 2019.

Overall, CVD scored a low cluster rating of 40.25 (33.54%). With the ICI being least disclosed information category at 3.72.

Table 4.2 Corporate Voluntary Disclosure by information categories

YEAR	FLI	FCMI	CGI	SI	CSI	ICI	CVD
2010	2.84	3.73	10.02	6.61	7.91	3.20	34.30
2011	2.86	3.82	10.07	6.66	8.07	3.20	34.68
2012	2.91	3.89	10.21	6.86	8.36	3.30	35.54
2013	2.98	4.02	10.29	6.96	8.45	3.41	36.11
2014	3.29	4.32	10.40	6.96	8.61	3.43	37.01
2015	3.71	4.71	10.50	7.36	8.89	3.70	38.88
2016	4.57	5.29	12.23	7.77	9.61	4.07	43.53
2017	5.59	6.20	13.03	8.09	10.16	4.30	47.37
2018	5.88	6.32	12.70	7.95	9.80	4.30	46.95
2019	6.13	6.48	12.71	8.05	9.77	4.27	48.13
Total	4.08	4.88	11.22	7.33	8.96	3.72	40.25
%	20.4	24.4	56.1	36.65	44.8	18.6	33.54

Table 4.3 indicates industry wise CVD scores. CVD disclosure score ranged from 0 to 120. From 0 to 40 ranked as low cluster, from 41 to 80 middle cluster and 81 to 120 high cluster score. The Banking, Energy and Petroleum and Insurance sector scored middle cluster rating, the other sectors; Commercial and Telecommunication, Investment and Investment services, Manufacturing, Construction and Agriculture sectors scored low cluster ranking.

Table 4.3: Industry wise Corporate Voluntary Disclosure Score

YEAR	Banking	Commercial & Telecommunication	Manufacturing	Construction	Insurance	Agriculture	Energy & Petroleum	Investment & Investment Services
2010	43.74	33.47	30.75	29.4	34.67	20.64	43.87	32.2
2011	44.29	33.77	30.75	30	34.83	20.97	45.07	32.2
2012	45.01	34.47	30.88	30.4	35	23.31	48.07	32.2
2013	45.11	34.97	33	30.8	35	23.47	48.67	32.8
2014	46.74	38.07	32.75	30.8	35.28	23.64	48.67	33
2015	50.8	39.17	34.94	32.2	39.03	23.47	49.2	33
2016	59.52	42.58	41.61	36.07	41.42	25.56	53.17	35.27
2017	66.56	44.27	42.36	36.67	45.58	28.5	53.77	48.47
2018	67.3	42.32	43.31	30.47	52.03	28.95	46.1	50.07
2019	69.61	43.77	40.29	30.47	51.28	30.45	54.97	50.37
Total	53.87	38.68	36.06	31.73	40.41	24.89	49.15	37.96

Figure 4.2: Industry wise Corporate Voluntary Disclosure Score

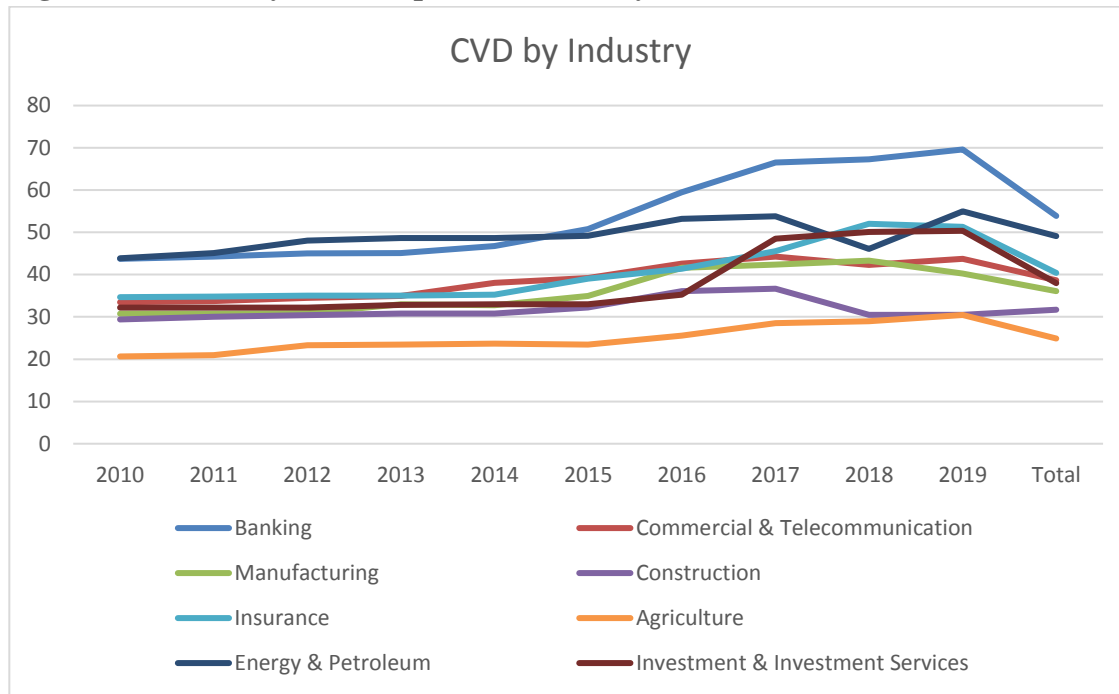
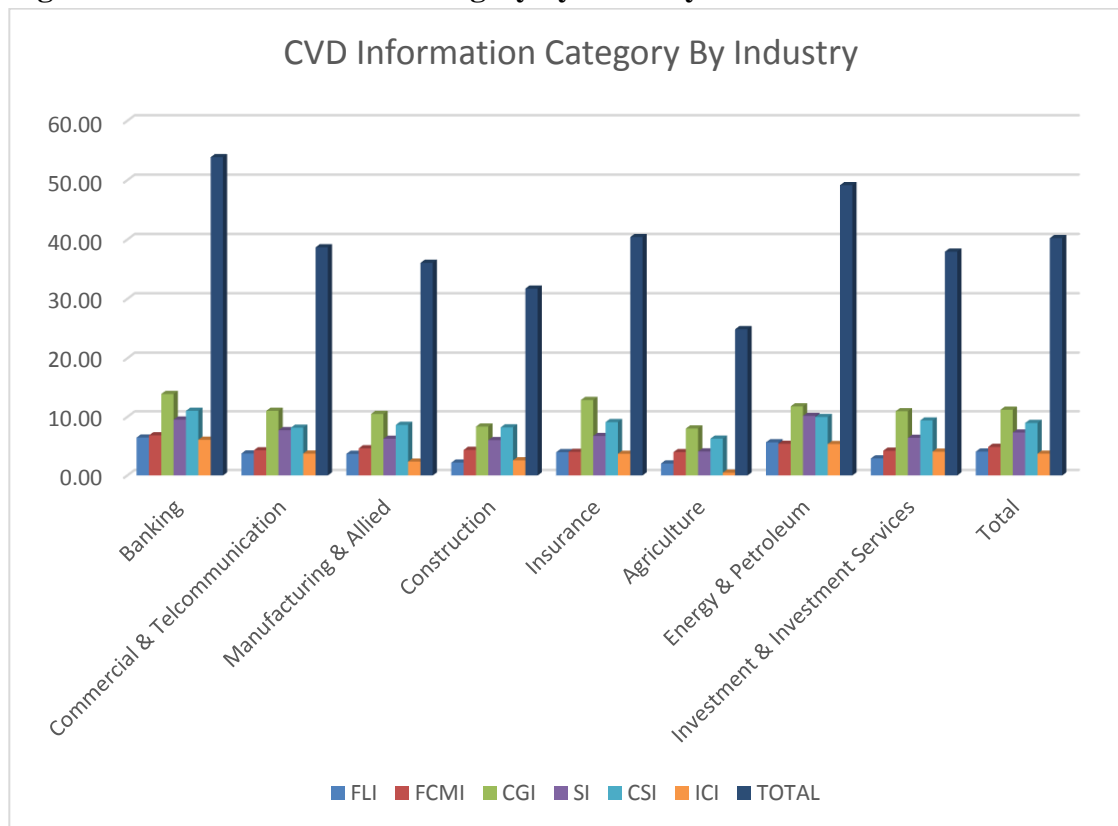


Figure 4.3 indicates CVD information by industry. The Banking industry and Insurance had the highest CVD scores. This is consistent with prior studies which argued that big firm tend to disclosed more than small firm. Banking and Insurance industries are among the biggest in term of firm size. Energy and Petroleum had the highest score in SI, this may be due to the industry is regarded as sensitive on Sustainability issues particularly environmental. Other industry regarded as sensitive or highly regulated on sustainability issues is manufacturing sector. However, it scored poorly coming second last in SI disclosure.

Figure 4.3: CVD information category by Industry



Multivariate Statistical Analysis

First, fixed effect model of panel regression was carried out to examine the effect of CVD on Firm Value. In the second step, random effect model of panel regression using GLS was conducted to establish the effect of CVD on Firm value across time period. In the third step, hausman test was conducted to recognize the applicability of the random effect and the fixed effect model in the data set. If statistically significant P-Value is found then, fixed effect model will be used, otherwise random effect model.

The first objective of the study was to establish the effect of CVD on firm value of listed companies. To test this objective, null hypothesis (H_1); CVD has no effect on firm value with respect to ROA of listed companies was tested.

The fixed-effect model of panel regression was conducted to examine the effect of CVD on ROA. The results in table 4.4 indicates that CVD (p value of 0.002) on an average at an individual level significantly influence ROA of listed companies.

Table 4.4: Fixed Effect Panel Regression Model (Impact of CVD on ROA)

Fixed-effects (within) regression	Number of obs	=	560			
Group variable: YEAR	Number of groups	=	10			
R-sq:	Obs per group:					
within = 0.0170	min =		56			
between = 0.9040	avg =		56.0			
overall = 0.0030	max =		56			
	F(1,549)	=	9.49			
corr(u _i , Xb) = -0.3005	Prob > F	=	0.0022			
ROA	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
CVD	.0971199	.0315274	3.08	0.002	.0351908	.1590489
_cons	.0100908	1.36942	0.01	0.994	-2.679853	2.700034
sigma_u	3.4559397					
sigma_e	12.185394					
rho	.07444815 (fraction of variance due to u _i)					
F test that all u _i =0: F(9, 549) = 4.10				Prob > F = 0.0000		

The random effect model of panel regression using GLS technique of estimation was conducted to understand the effect of CVD on ROA. The results in table 4.5 indicates that CVD (p value of 0.195) on an average at an individual level does not significantly influence ROA of listed companies.

Table 4.5: Random Effect Panel Regression Model (Impact of CVD on ROA)

Random-effects GLS regression	Number of obs	=	560			
Group variable: YEAR	Number of groups	=	10			
R-sq:	Obs per group:					
within = 0.0170	min =		56			
between = 0.9040	avg =		56.0			
overall = 0.0030	max =		56			
	Wald chi2(1)	=	1.68			
corr(u _i , X) = 0 (assumed)	Prob > chi2	=	0.1948			
ROA	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
CVD	.0398041	.0306991	1.30	0.195	-.020365	.0999732
_cons	2.316948	1.343527	1.72	0.085	-.3163172	4.950213
sigma_u	0					
sigma_e	12.185394					
rho	0 (fraction of variance due to u _i)					

The result of Hausman test in table 4.6 shows that the null hypothesis be rejected in this case and hence fixed effect model is suited for the data set to ascertain the impact of CVD, FXstics and IT on ROA. The

p-value of the Chi-square being 0.0001 and the chi-square statistic been 63.74 shows that the null hypothesis of applicability of random effect model be rejected and hence fixed effect is applicable in this data set to understand the impact of CVD on ROA.

Table 4.6: Hausman Test for FE/RE Panel Regression Model (Impact of CVD on ROA)

---- Coefficients ----				
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	fe	re	Difference	S.E.
CVD	.0971199	.0398041	.0573158	.0071792

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\chi^2(1) = (b-B)'[(V_b-V_B)^{-1}](b-B)$$

$$= 63.74$$

$$\text{Prob}>\chi^2 = 0.0000$$

When ROA was regressed with the independent variables CVD using fixed effect panel regression the probability value of CVD is 0.002 which was insignificant at 5% level of significance as shown in table 4.4. The coefficient sign of CVD is positive indicates that an increase in CVD will result in increase of ROA. The coefficient value of CVD is 0.097 indicating that an increase in 1 percentage of CVD will result in an increase in ROA by 0.097 percentage points. The coefficient of determination (R^2) of was 0.0030 implies that CVD explained 0.30 percentage of ROA variation. The remaining 99.70 percentage was explained by other variables not considered in this study.

The overall test of significant using F-value statistics after intervening effect was 9.49 which was statistically significant because P. value (0.0022) was less than 0.05 significance level and the null hypothesis that CVD has no effect on firm value with respect to ROA at 0.05 level of significant was rejected.

Effect of Corporate Voluntary Disclosure on Firms Value (TQ)

The first objective of the study was to establish the effect of CVD on firm value of listed companies. To test this objective, null hypothesis (H_1); CVD has no effect on firm value with respect to TQ of listed companies was tested.

The fixed effect model of panel regression using least square technique of estimation was conducted to understand the effect of CVD on TQ. The results in table 4.7 indicates that CVD (p value of 0.031) on an average at an individual level significantly influence TQ of listed companies.

Table 4.7: Fixed Effect Panel Regression Model (Impact of CVD on TQ)

Fixed-effects (within) regression	Number of obs	=	560		
Group variable: YEAR	Number of groups	=	10		
R-sq:	Obs per group:				
within = 0.0085	min =		56		
between = 0.1092	avg =		56.0		
overall = 0.0096	max =		56		
	F(1,549)	=	4.68		
corr(u_i, Xb) = 0.0194	Prob > F	=	0.0309		
TQ	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
CVD	-.0190017	.0087805	-2.16	0.031	-.0362493 -.0017542
_cons	1.703305	.3813899	4.47	0.000	.9541432 2.452467
sigma_u	.37347546				
sigma_e	3.3936906				
rho	.01196607 (fraction of variance due to u_i)				
F test that all u_i=0:	F(9, 549) = 0.68	Prob > F = 0.7292			

The random effect model of panel regression using GLS technique of estimation was conducted to understand the effect of CVD on TQ. The results in table 4.8 indicate that CVD (p value of 0.02) on an average at an individual level significantly influence TQ of listed companies.

Table 4.8: Random Effect Panel Regression Model (Impact of CVD on TQ)

Random-effects GLS regression	Number of obs	=	560		
Group variable: YEAR	Number of groups	=	10		
R-sq:	Obs per group:				
within = 0.0085	min =		56		
between = 0.1092	avg =		56.0		
overall = 0.0096	max =		56		
	Wald chi2(1)	=	5.44		
corr(u_i, X) = 0 (assumed)	Prob > chi2	=	0.0197		
TQ	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
CVD	-.0194025	.0083222	-2.33	0.020	-.0357138 -.0030912
_cons	1.719434	.3642177	4.72	0.000	1.00558 2.433287
sigma_u		0			
sigma_e		3.3936906			
rho		0			(fraction of variance due to u_i)

The result of Hausman test in table 4.9 shows the chi-square statistic of 14.99 and the probability value of the Chi-square being 0.0001 indicates that the null hypothesis of applicability of Random effect model be rejected and hence fixed effect is applicable in this data set to understand the impact of CVD, on TQ. The null hypothesis be rejected in this case and hence Fixed effect model is suited for the data set to understand the impact of CVD, on TQ.

Table 4.9: Hausman Test for FE/RE Panel Regression Model (Impact of CVD on TQ)

---- Coefficients ----				
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	fe	re	Difference	S.E.
CVD	.0986829	-.0194025	.1180853	.0305022

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\text{chi2}(1) = (b-B)'[(V_b-V_B)^{-1}](b-B)$$

$$= 14.99$$

$$\text{Prob}>\text{chi2} = 0.0001$$

When TQ was regressed with the independent variables CVD using fixed effect panel regression the probability value of CVD is 0.031 which was insignificant at 5% level of significance as shown in table 4.7. The coefficient sign of CVD is negative indicates that an increase in CVD will result in decrease of TQ. The coefficient value of CVD is 0.019 indicating that an increase in 1 percentage of CVD will result in a decrease in TQ by 0.19 percentage points. The coefficient of determination (R^2) of was 0.0096 implies

that CVD explained 0.96 unit points of TQ variation. The remaining 99.04 percentage was explained by other variables not considered in this study.

The overall test of significant using F-value statistics after intervening effect was 4.68 which was statistically significant because P. value (0.0309) was less than 0.05 significance level and the null hypothesis that CVD has no effect on firm value with respect to TQ at 0.05 level of significant was rejected. The findings are consistent with Waweru (2018) who found that there was significant positive effects of CVD and firm market performance measured by Tobin Q ratio. The study investigated the effect of CVD on market performance of non-financial firms listed on NSE in Kenya. Achoki et al., (2016) found that there is strong association between voluntary disclosure and financial performance measured in term of Return on Equity. The study determined the effect of CVD on the financial performance of commercial banks in Rwanda. Other studies which revealed similar results are Rikanovic (2005) who found that CVD increase firm value via cost of capital. Kristandl & Bontis (2007) found that CVD increase firm value via cost of equity capital. Sieber et al (2014) found that CVD increase firm value via cost of equity capital.

Contrarily to study findings Armitage and Marston (2008) found that there was no a clear link among corporate disclosures and the cost of equity. They argued that main benefit of disclosure is seen as promotion of confidence amongst investors, reputation for openness and nothing beyond good-practice level of disclosure.

Firm Value by Corporate Voluntary Disclosure Ranking

To make the findings of this study comparable to prior studies, the study provide results by following the research design of prior studies which split the study sample into two groups of firms (Rikanovic). Since the overall disclosure index has a mean score value 40.25. The study split the sample into middle cluster ranking and low cluster ranking. The middle cluster ranking (Rank 1) included firms whose disclosure level is equal or higher than the average of the overall sample (score ≥ 0) and rank 2 firms (“Low”) whose disclosure level is lower than the average (score < 0).

The null hypothesis (H_0); that mean firm value (with respect to ROA) are same was tested ($\mu_1 = \mu_2$). Table 4.10 shows the difference in mean in terms of ROA. The critical values reject H_0 at 0.05 level if $t < 0.0028$ or $t > 0.9972$. The results indicate that $t = 2.7797$. Reject H_0 and conclude that the data shows difference

in the means of ROA. The result shows that the most forthcoming companies in terms of CVD have superior firm value with respect to ROA with mean scored of 2.923 more compared to less forthcoming companies in term of CVD.

Table 4.10: Difference in Mean ($\mu_1 = \mu_2$). (ROA)

Two-sample t test with equal variances						
Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
1	279	5.378864	.5224392	8.726455	4.350424	6.407303
2	280	2.456177	.9113752	15.25022	.6621319	4.250222
combined	559	3.914906	.5288849	12.50452	2.876057	4.953755
diff		2.922687	1.051453		.8573891	4.987985
diff = mean(1) - mean(2)				t = 2.7797		
Ho: diff = 0				degrees of freedom = 557		
Ha: diff < 0		Ha: diff != 0		Ha: diff > 0		
Pr(T < t) = 0.9972		Pr(T > t) = 0.0056		Pr(T > t) = 0.0028		

The null hypothesis (H_0); that mean firm value (with respect to TQ) are same was tested ($\mu_1 = \mu_2$). Table 4.11 shows difference in means in term of TQ. The critical values reject H_0 at 0.05 level if $t < 0.1175$ or $t > 0.8825$. The results indicate that $t = -1.1886$. Reject H_0 and conclude that the data shows difference in the TQ means. The result shows that the most forthcoming companies in terms of CVD have inferior firm value with respect to TQ with mean scored of 0.3418 less compared to less forthcoming companies in term of CVD.

Table 4.11: Difference in Mean ($\mu_1 = \mu_2$). (TQ)

Two-sample t test with equal variances						
Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
1	279	.7654408	.0742632	1.24044	.6192512	.9116305
2	280	1.107277	.2773746	4.641365	.5612642	1.65329
combined	559	.9366647	.1438481	3.401028	.6541146	1.219215
diff		-.3418361	.2875904		-.9067304	.2230581
diff = mean(1) - mean(2)				t = -1.1886		
Ho: diff = 0				degrees of freedom = 557		
Ha: diff < 0		Ha: diff != 0		Ha: diff > 0		
Pr(T < t) = 0.1175		Pr(T > t) = 0.2351		Pr(T > t) = 0.8825		

Summary of Findings

The objective of study was to establish the effect of corporate voluntary disclosure on firm value of listed companies at the NSE. The relations among CVD and the value of firm is key area in theory and practice and usually, a positive relationship is assumed. Theoretic research supports this assertion by highlighting the influence of greater disclosure on leveling the playing field in the financial markets, reducing cost of capital, increasing stock market liquidity, reducing estimation risk and enhancing firm reputation. However, much has also been written on potential unintended consequences of CVD of crowding out private sensitive information. What type of CVD information are most beneficial. Further, little empirical evidences exists mainly because of: subjective nature of CVD as well as firm value and are difficult to measure. This study provide evidence on the above relationship and try to quantity the effect of firm's CVD on its firm value in Kenya environment.

This study presented a comprehensive examination of how quoted companies embraced CVD. As of 2010, the adoption of CVD was very low at mean score of 34.3 (28.58%). Nonetheless, there was a gradual improvement in CVD disclosure particularly from the year 2015. In the year 2019 the CVD mean score was 48.13 (40.1%) a steady improvement from 34.3 in 2010. The overall CVD mean score for listed company was mean score of 40.25 (33.54%). The outcomes were consistent with Injeni et al., 2019 who establish that there was very low adoption of CVD in particular integrated reporting in Kenya. The finding may be indication of the stage of corporate reporting maturity on CVD practices in Kenya. A general low level of CVD adoption may also indicate some level of challenges in adoption. Indeed, Graham et al., (2005); Healy and Palepu (1995) argues that, organizations are reluctant to incur extra costs from extra information disclosure, except if additional disclosure benefits exceed the estimated costs or is mandated by legislation. Each CVD information category had a maximum score of 20. The CGI, CSI and SI scored middle cluster rating of 11.22, 8.96 and 7.33 respectively. Whereas, FCMI, FLI, and ICI scored low cluster rating of 4.88, 4.08 and 3.72 respectively. With the ICI being least disclosed information category at 3.72. Overall, CVD scored a low cluster rating of 40.25 (33.54%). In most instances, organizations limit their corporate disclosure on with standards and regulatory requirements.

A high level of CVD is visible only in the corporate governance information categories which had a mean score 56.1% middle cluster rating among listed companies in Kenya. This might be because listed firms are required to comply with CMA corporate governance framework based on GRI and IIRC framework. The

framework provide guidelines on the; contents (in term of Economic, Governance, Sustainability and strategic content), material areas of concern and other issues that facilitate publication of a useful report. Using integrated standards or framework can improve the value of information and accurately reports on material issues. The lack of similar framework for ICI, FLI, and FCMI information categories could be the reasons for a low level of disclosure in these areas.

CVD disclosure score ranged from 0 to 120 with 0 to 40 ranked as low cluster, from 41 to 80 middle cluster and 81 to 120 high cluster score. The Banking, Energy and Petroleum and Insurance sector scored middle cluster rating of 53.87, 49.15 and 40.41 respectively. The other sectors; Commercial and Telecommunication, Investment and Investment services, Manufacturing, Construction and Agriculture sectors scored low cluster ranking.

The study also, split the sample into middle cluster ranking and low cluster ranking. The middle cluster ranking (Rank 1) included firms with CVD score of similar or greater than the mean of the overall target population (score ≥ 40.25) and rank 2 companies (“Low”) with CVD score lesser than the mean (score < 40.25). The findings showed that the most forthcoming companies in terms of CVD have superior firm value with respect to ROA with mean scored of 2.923 more compared to less forthcoming companies in term of CVD. However, the result shows that the most forthcoming companies in terms of disclosure have inferior firm value with respect to TQ with mean scored of 0.3418 less compared to less forthcoming companies in term of CVD.

Conclusions

The finding shows that CVD affect firm value (measured using ROA and TQ measure) and are positively related to ROA and negatively related to TQ among listed companies in Kenya. Generally, the findings suggest that CVD induce changes in firm value as widely reported by prior studies which is in line with stakeholder, agency and signaling theories. These findings augments, the role of sufficient, relevant and timely disclosure in enhancing transparency and accountability. Companies must accord priority attention to disclosure by considering the critical role of transparency and accountability in the global marketplace. However, the results indicates that CVD is still a challenge for many companies considering the low level of CVD in Kenyan context.

Implications of the Study

This paper contributes to the existing literature in that this study is a unique analysis of the emerging CVD in Kenya. The empirical evidence in the new context, compared with existing findings from more developed economy, will stimulate further studies. Second, this study contributes to understanding the link between CVD and firm value. Research based on only one firm value measure may not clearly give the true picture about the effect of CVD on firm value. Researchers can involve various measure of firm value. At the same time confirms the findings of previous studies that have found significant link between CVD and firm value.

Limitations of the Study

The research is limited in that the study used disclosure index which largely capture the existence of exact disclosure, but not their quality. Therefore not able to draw conclusions with regard to the quality of the disclosed content. The disclosed information would reflect whether an item is included in the report or not. There is need to develop tools that can depict both level and quality of disclosure to represent a proper proxy for disclosure.

Constructing of CVD index involved assignment of specific weights to various CVD items and selecting of the pertinent disclosure which is subjective. Also, the study focused on annual report to determine the extent of CVD, but companies also uses other media to communicate information (such as press report and interim report). CVD through such media were not empirical investigated, which could increase the inferences on enhanced CVD strategy.

References

- Armitage, S., & Marston, C. (2008). Corporate disclosure, cost of capital and reputation: Evidence from finance directors. *The British Accounting Review*, 40, 314-336.
- Beattie, V., Goodacre, A., & Thomson, S. (2000). Recognition versus disclosure: An investigation of the impact of equity risk using UK operating lease disclosure. *Journal of Business Finance and Accounting*, 27(9 and 10), 306-686.
- Botosan, C., & Plumlee, M. A. (2002). A re-examination of disclosure level and expected cost of equity capital. *Journal of Accounting Research*, 40, 21-40.

- Coebergh, H. (2011). Voluntary disclosure strategy: determinants and outcomes, an empirical study into the risks and payoffs of communicating corporate strategy. *Unplished Ph.D thesis, University of Bradford*.
- Eccles, R. G., Grant, R. M., Riel, C. B., & Van, M. (2006). Reputation and transparency: Lessons from a painful period in public disclosure. *Long range planning, 39*, pp. 353-359.
- Elliott R. K. and Jacobson P. D. (1994) Costs and Benefits of Business Information Disclosure. *Accounting Horizons 8(4)*, 80-96.
- Farvaque, E., Gagnet, C., Refait-Alexandre, C., & Saidane, D. (2009). Is corporate disclosure necessarily desirable? A survey . *Working paper, Economic research network*.
- FASB;. (2001). Improving business reporting: Insights into enhancing voluntary disclosures. *Steering committee report, Business reporting research project*(Norwalk CT: FASB).
- FEE. (2015, October). The future of corporate reporting: Creating the dynamics for change. *Federation of European Accountants*.
- Graham , J. R., Harvey, C. R., & Rajgopal, S. (2005). The economic implications of corporate financial reporting. *Journal of Accounting and Economics, 40(1)*, 3-73.
- Gray, R., Kouhy, R., & Lavers, S. (1995). Constructing a research database of social and environmental reporting by UK companies: A methodological note. *Accounting, Auditing and Accountability Journal, 8(2)*, 78-101.
- Haggard, K. S., Martin, & Periera, R. (2008). Does voluntary disclosure improve stock price informativeness? *Financial Management, 37*, 747-768.
- Hassan, & Marston. (2010). Disclosure measurement in the empirical accounting literature- Review articles.
- Hassan, O. A., Romilly, P., Giorgioni, U., & Power, D. (2009). The value relevance of disclosure: Evidence from the emerging capital market of Egypt. *The International Journal of Accounting, 44(1)*, 79-102.
- Healy, P. M., & Palepu, K. G. (2001). Information Assymetry, Corporate Disclosure and the Capital Market: A review of Emperical Disclosure Literature. *Journal of Accounting and Economics, Iss 31* 405-440.
- Hossain, & Taylor. (2007). The empirical evidence of the voluntary information disclosure in the annual reports of banking companies; the case of Bangladesh. *Corporate ownership and control, 4(4)*, 111-125.
- Hutton, J. G., Goodman, M. B., Alexander , J. B., & Genest, C. M. (2001). Reputation management: the new face of corporate public relations? *Public relations review, 27*, 247-261.

- IFAC;. (2018). *Business reporting; it is time for Africa to accelerate implementation of integrated thinking and reporting.*
- Ingeni, G., Mcfie, J., Mudida, R., & Mangena, M. (2019). Current reporting and relationship with integrated reporting for listed companies in Kenya: disclosure levels and company factors. *African Accounting and Finance Journal*, 2(1 Special Edition), 71-100.
- Islam, S. M. (2017). Corporate reporting concept and the emergence of non-financial information reporting. *Research journal of Financial and Accounting*, 8(8), 49-59.
- Jensen, M., & Meckling, W. (1976). Theory of the firm: managerial behavior, agency costs and capital structure. *Journal of Financial Economics*, 3(4), 305-360.
- Juma, B., Tumwabaze, Z., & Orobia, L. (2017). The adoption of Integrated reporting; a developing country perspective. *Journal of Financial Reporting*, 17(1), 2-23.
- Khanna R. and Chahal B. P.S (2019). Towards the association of voluntary disclosure and value of firms: Evidence revisited in India. *Journal of Modern Accounting and Auditing*, 15 (3) 113-142
- Kothari, C. R. (2004). *Research Methodology: methods and techniques* (2nd ed.). New Delhi: *New Age International Publishers.*
- Kothari, S. P., Li, X., & Short, J. E. (2009). The effect of disclosures by management, analysts and business press on cost of capital, return volatility, and analysts forecasts: A study using content analysis. *The Accounting Review*, 84(5), 1639-1670.
- Lang, M., & Lundholm, R. (2000). Voluntary disclosure and equity offerings: Reducing information asymmetry or hyping the stock. *Contemporary accounting research*, 17(4), 623-662.
- Latridis, G., & Alexakis, P. (2012). Evidence of voluntary accounting disclosures in the Athens stock market. *Review of accounting and finance*, 11(1), 73-92.
- Leuz, C., & Wysocki, P. (2015). The economics of disclosure and financial reporting regulation: evidence and suggestions for future research. *University of Chicago Working paper.*
- Meek, G. K., Gray, S. J., & Roberts, C. B. (1995). Factors influencing voluntary annual report disclosures by US, UK and continental European multinational corporations. *Journal of International business studies*, 26(3), 555-572.
- M'ithiria, E., Musyoki, D., & Shawa, K. (2017). Disclosure practice and firm value: A quantile regression analysis of firms listed on NSE. *International journal of economic, business and management research*, 95.

- Opanyi, R. O. (2019). Corporate voluntary disclosure and the value of firm: A critical literature review. *International Journal of Social Science and Economic Research*, 4(9), 5922 - 5957.
- Ployhart, R. E., & Vandenberg, R. J. (2010). Longitudinal Research; the theory, design and analysis of change. *Journal of Management*, 36, 94-120.
- Plumlee, M., Brown, D., & Marshall, S. (2008). The impact of voluntary environmental disclosure quality on firm value. *Working paper, University of Utah*.
- Rikanovic, M. (2005). Corporate disclosure strategy and the cost of capital: An empirical study of large listed German corporations. *Unpublished Ph.D dissertation of the University of St. Gallen, German*.
- Scaltrito, D. (2015). Assessing disclosure quality: A methodological issue. *Journal of Modern Accounting and Auditing*, 11(9), 466-475.
- Spence, M. (1973). Job Market Signalling. *Quarterly Journal of Economics*, 87(3), 355-374.
- Urquiza, F., Navarro, M., & Trombetta, M. (2010). Disclosure theories and disclosure measures. *Spanish journal of finance and accounting*, XXXIX(147).
- Watson, A., Shrides, P., & Marston, C. (2002). Voluntary disclosure of accounting ratios in the UK. *British accounting review*, 34(2), 289-313.
- Waweru, F. (2018). Voluntary accounting disclosures and market performance of non-financial firms listed in NSE, Kenya. *Unpublished Ph.D thesis JKUAT*.