

Human Capital Disclosure and Firm Value: An Investigation of Kenyan and South African Listed Companies

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Abstract

Original Research Article

Kenyan Listed companies have witnessed volatility in firm values as measured by market -to-book value ratio over time. While, corporate disclosure has long been linked with firm value, integrating non-financial with financial information disclosures in a single report as championed through the <IR> framework has not been extensively examined in the African context, specifically on its influence on company value. While, preceding studies in other settings have reported mixed findings, this comparative investigation was intended to find out how disclosure of human capital being one of the fundamental concepts of <IR> capitals affect the value of listed companies in Kenya and South Africa. On the basis of positivist research philosophy, the researcher employed both exploratory and confirmatory research designs. The study was braced on the stakeholder and Legitimacy theories. 209 listed companies formed the population of the study. Out of this population, a sample of 137 companies was purposefully selected, comprising of 19 firms listed in the NSE, Kenya and 118 companies listed in the JSE, South Africa. Data was collected from secondary sources involving audited annual integrated report and financial statements of the targeted companies. Tobin's Q ratio, was used as a surrogate for Firm Value, as, human capital disclosure was measured using an unweighted disclosure index. Preliminary analyses were conducted, such as descriptive statistics and correlation matrix. To test the hypothesized relationship, regression techniques were employed. The results signify that human capital disclosure has a statistically significant negative effect on firm value for Kenyan listed companies as South Africa affirmed positive and significant results. The study therefore recommends that Kenya listed companies should be obligated to adopt and apply integrated reporting in relation to human capital disclosure aspects as this will not only improve shareholder understanding of financial statements but will also ensure appropriate valuation of the firm.

Keywords: Integrated Reporting, Corporate Disclosures, Human Capital, Firm Value, Kenya, South Africa, Listed Firms.

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INTRODUCTION

The framework of integrated reporting <IR> is a document based on principles containing “fundamental concepts”, “guiding principles” and “content elements”. The multiple capitals, business model and value creation process comprise the building blocks of the fundamental concepts (Cheng *et al.*, 2014). On the other hand, seven guiding principles relating to future orientation and strategic focus, relationships of stakeholders, connectivity of information, conciseness, materiality, reliability and completeness, and consistency and comparability guide on how to prepare and present an integrated report (IIRC, 2013). While, content elements encompass, an overview of the organization's external environment, performance, governance, strategy and

resource allocation, future outlook, risks and opportunities and business model (IIRC, 2013). Corporate disclosures are conveyed by companies with the intention of increasing their firm value. The question to be answered is whether disclosures connected to financial and non-financial details create value for the investors. The response to this issue is twofold; firstly, some of the information disclosed as per <IR> requirements is regarded confidential and provide companies with competitive edge and there are costs attached to a firm's involvement with activities that are considered sustainable thereby causing a reduction of a company's market value (Landau *et al.*, 2020). Conversely, Mervelskemper and Streit (2017) assert that value creation for investors can be attained by a company

through a sustainability report publication irrespective of whether is done independently or integrated.

The concern of this research is on the fundamental concepts of Integrated reporting that exerts emphasis on company resources (or multiple capitals) and their contribution to the firm's value addition. The capitals within <IR> take six forms; financial, manufactured, intellectual, human, natural, social and relationship capital (IIRC Discussion paper, 2011). Accordingly, the capitals form a major component in the value creation process and accounts for both value created for the organization and other audiences. In <IR> firm value is a function of the six capitals in contrast to traditional reporting that takes value as a function of financial capital only. In support of this claim a study by Anifowose *et al.*, (2020) on integrated reporting capitals and company sustainable value, report that in overall disclosure <IR> capitals positively affect a firm's revenue growth. Doni *et al.*, (2019) expound that companies in adherence to the multiple capitals may re-conceptualize, re-categorize and re-measure the capitals or part of the non-financial disclosures of value on the basis of balance sheet approach to bring out visibility in terms of interactions, tensions and trade-offs that are potential among the capitals.

Human capital is regarded as one of the resources that companies value most and now getting recognition by companies in their corporate reports voluntary disclosure. The problem to be addressed is what and how human capital can be displayed in corporate reports. Accordingly, in the integrated reporting framework human capital is viewed as: "...people's competencies, capabilities and experience, and their motivations to innovate, including their alignment with and support for an organization's governance framework, risk management approach, and ethical values, ability to understand, develop and implement an organization's strategy, and loyalties and motivations for improving processes, goods and services, including their ability to lead, manage and collaborate" (IIRC, 2013, p.12). Thus, from the integrated reporting structure human capital is regarded as a resource and not as a cost for corporate performance and can enhance company value. On the basis of this argument, Akindehinde *et al.*, (2015) on their article on accounting for human resource and corporate performance of publicly quoted companies in Nigeria's banking sector, find out that human capital accounting influence organizational performance. Further, significance of human capital and performance has been demonstrated by prior studies (Kapkiyai & Mugo, 2015). Furthermore, Alawi and Belfaqih (2018) study finding suggest a low human capital disclosure in financial statements. This study focused on human capital component of the six capitals and its effect on firm value.

Statement of the Problem

Integrated reporting is based on the six capitals framework and is aimed at fostering reporting a firm's value through a more holistic picture that integrates both financial and non-financial information in a single report. Central to the company's value creation process is the business model which integrates the capital resources of value in the form of financial capital, manufactured capital, intellectual capital, human capital, social and relationship capital, and environmental capital, thus providing a clear communication of the potential of the firms future value creation that will improve firm value of listed firms.

Amid this argument, Kenya, has witnessed a fluctuating trend of firm value as measured by market-to-book value ratio of listed firms over the last 5 years. This has been pronounced by enormous variations between firm market values and book values (NSE, Handbook 2017-2018). Nevertheless, the NSE 20 market performance index has reported a fluctuation from as high as 6161.46 points to as low as 1004.70 percentage points between 1997-2022 (NSE, 2022). According to Cytonn report (2022) on average a declining trend has been witnessed from 3323.88 in 2018 to 1799.52 in 2022. This shows a case of inappropriate valuation and properly valued firms report a market-to-book value equal to 1. This has been reported by earlier research by (Musiega *et al.*, 2013; Dominic & Memba, 2015) in which listed firms in Kenya report a market-to-book ratio values of greater or less than 1 respectively. Overvaluation is inferred when market-to-book ratio value is greater than 1, whereas a value less than 1, means that the firm is undervalued by the capital market.

Notwithstanding the fact that corporate disclosures in form of integrated reports enhance firm value, earlier research on integrated reporting capitals containing human capital disclosure as one of the variables and firm value has remained mixed. For instance, Anifowose *et al.*, (2020) echo positive results, while, negative and insignificant association between human capital reporting and value of listed companies has been found (Suttipun 2017; Adegbe *et al.*, 2019). Whereas, Pillay (2019) failed to consider human capital disclosure in their study. On this basis the researcher is motivated to add additional evidence by evaluating the effect of non-financial information disclosure on company valuation in the context of integrated reporting. Particularly, the inquiry was centered on the effect of human capital disclosure on value of listed companies comparing Kenya and South Africa with voluntary and mandatory setups of <IR> adoption respectively.

Research Objectives: To compare the effect of human capital disclosure on value of listed companies between Kenya and South Africa.

Research Hypothesis

H₀₁: Human capital disclosure has no statistically significant effect on value of listed companies between Kenya and South Africa.

2. LITERATURE REVIEW

Theoretical Review

Stakeholder Theory

This study was grounded on first the stakeholder theory published by Freeman in 1984. The theory identifies the various groups or individuals who hold various interests in the company and how they can be dealt with. From the works of Freeman, the term stakeholder means any individual or group who can impact or can be impacted by the organization in the process of attaining its goals. In this context the IIRC (2013) emphasize that stakeholders are individuals who can be anticipated to be reasonably impacted significantly by the entity's business activities, outputs or outcomes or whose operations can be expected to reasonably impact significantly the entity's short, medium and long-term value creation ability. Thus, through <IR> entities are required to report how they affect and are affected by stakeholders (investors, shareholders, society, suppliers relationship, governments, customers etc.) as part of the annual report. The theory assumes that the organization engages in associations with diverse groups which captivate on or are allured by the company. Further, it assumes equality of interests in the sense that no exclusive overruling category of interests (Bosse & Coughlan, 2016). The theory is important in this evaluation on the premise that the company's accountability to stakeholders is reflected in the stakeholder theory. Each disclosed form of capital can be attached to a specific stakeholder who will be interested in a particular information disclosure in the financial statements.

Legitimacy Theory

Secondly legitimacy theory proposed by Suchman in 1995 was also considered in this study. As the existence of an entity is pegged on its value that is perceived to match with that of the larger society in which it undertakes its operations, legitimacy theory stresses that organizations operations should thrive within the socially constructed system, defined by norms and values in order to be considered legitimate and gain societal acceptance (Linthicum *et al.*, 2010) The theory assumes a social concurrence between the entity and society that it ought to report to, as the organization exerts influence on the society in which it operates and the organization gets influenced socially by the society. Thus, the organizational legitimacy concept, grants an organization the opportunity to undertake its operations in a contract with the interests of the society. Corporations therefore, pursue to function within the aspirations and norms of the respective communities where they are domiciled. The reasoning behind the legitimacy theory is that companies survival is dependent upon them operating within the framework of the

society's norms and values (Deegan, 2014). The relevance of this theory in this study is on the premise that the annual report has been spotted as a salient source of legitimization.

Empirical Review

Mustafa *et al.*, (2015) paper on human capital disclosure and share prices, analyzed the function of human capital disclosure in influencing the price of a firm's share. Guided by the information signaling theory and capital market theory the study focused on a sample of 82 firms selected from the top 100 firms quoted on the main board of Bursa Malaysia of which data relating to the 2013 annual reports was collected. Using content analysis information on intensity of disclosing human capital and the value relevance of disclosing human capital was analyzed by employing an extended form of Ohlson (1995) model. From the study findings employee community involvement and appreciation were revealed as the most disclosed human capital attributes and least disclosure on employee profitability. On value relevance of human capital disclosure overall, there was lack of connection between human capital information and share prices, while, net income and equity book value indicated the greatest influence on share prices. However, human capital disclosure on directors aspect was found to be value relevant compared to human capital information related to employees.

Kapkiyai and Mugo (2015) in their paper concerning corporate social reporting assessed the impact of contribution made by human resources and aspects of environment on performance of the firm. The study pursued to establish whether any association exists between the two variables and quoted companies performance. On the foundation of the stakeholder theory the paper employed explanatory research design and data acquired from annual reports for the period 2005-2010, from a population of 44 companies quoted in the NSE, complimented with data from periodicals and magazines. The results reveal a positive and significant relation of human resource contribution and firm performance.

Bowrin (2018) article on disclosure of human resources by Caribbean and South African firms examined the degree to which it was economically viable. Caribbean and South African companies furnish disclosure on human resources and determinants of their disclosure practices. The intent of the study was to assess how national governance environment, foreign operation, industry affiliation, organization culture, director independence and gender diversity impact on human resource disclosure. Drawing from the signaling, agency, legitimacy and stakeholder theories the study used data extracted from a sample of 117 companies listed on the major layer of the dominant stock exchanges in the six countries by December 2013 identified through purposeful sampling. Data for the study was obtained from the website of each exchange and annual reports

from each company website. Content analysis, descriptive statistics and multiple regression were exercised as tools of analysis. The study results reveal a relatively low human resource disclosure by the Caribbean and South African countries citing the culture of the organization, size of the firm, affiliation of the industry, state governance and foreign impact as the main factors determining disclosure level, with geographical location, diversity in terms of gender and independence of directors were found to be statistically insignificant in relation to human resource disclosure. The study weakness lie on the restricted sum of explanatory variables that were incorporated in the regression model and small sample size. Further, the study failed to provide the specific current human resource disclosure practices exhibited by companies in the two countries with limited attention given to benefits and pay, equal opportunities for all and training and development.

Lio (2018) surveyed medium and large organizations focusing on the usage of the human capital accounting tool by these organizations. The study mainly sought to determine how applicable and assessable accounting for human capital tools as predictors of accounting for human resource capital were practicable in Kenyan medium and large enterprises. Employing the philosophical view of critical realism, research design made up of explanatory- mixed methods was adopted based on a scheme of cross-sectional sampling. 100 best medium and large enterprises from where 165 chief finance officers were picked as respondents. Primary data was amassed using hard copy and web based questionnaires from 116 chief finance officers. The data analysis entailed use of simple linear regression methods. The research findings indicate that human resource accounting practice will lead to improved decisions that will enhance the value of the firm, hence can be undertaken successfully by medium and large organizations in Kenya. However, human capital accounting being a new concept, the chief finance officers who were respondents in this study might have lacked adequate familiarity with the critical human capital accounting tools causing inconsistency in offering the required information in support of the research findings.

Rhoda *et al.*, (2018) while studying on human capital initiatives based their study on value creation in Kenyan public universities. The target of the inquiry was to show how human capital initiatives (i.e. types of intelligence, level of intelligence and creativity) associated with the creation of value (customer satisfaction) in Kenyan public universities. Mixed methods grounded on both qualitative and quantitative approaches were put into use for the study. The study population consisted of all public universities. On the basis of purposeful sampling a sample of 6 universities was selected from where 144 out of 480 respondents were identified from whom primary data was gathered using structured questionnaires. Data analysis was

accomplished by use of correlation analysis, descriptive statistics and regression analysis. The findings in overall elucidate that human capital positively influence business performance and also influence value creation in Kenyan public universities determined by employees intelligence level, intelligence type and extent of creativity.

Rimmel (2019) studied on human capital disclosure by state owned enterprises of Sweden comparing traditional reporting versus integrated reporting. The study investigated the human capital disclosure level in corporate reports by Swedish state owned entities. Basing the study on the legitimacy theory, simple random sampling approach was applied to pick a sample of 8 state owned enterprises consisting 4 entities preparing integrated reports and 4 entities that combines sustainability and traditional annual reports. The study used the global reporting initiative (GRI) guidelines scoreboard for human capital information disclosure quantification as contained in the corporate reports of enterprises under state ownership were examined. The study findings indicate that the magnitude of human capital revelation by integrated reporters is averagely greater than the degree of human capital facts disclosed in conventional corporate reports.

Bonsu *et al.*, (2019) from the Ghanaian context tried to empirically determine the impact of excluding human resource from the statement of financial position on organizational performance. The article sought to examine the factors for the human capital exclusion from financial position beyond valuation and to ascertain the influence of accounting for human resources on organizational performance. Underpinning the paper on the resource-based theory and human capital theory, the study adopted correlation descriptive survey design and the study population constituted of entire firms quoted in the stock exchange of Ghana ranging from 2015-2018. 40 companies were purposefully selected to form the study sample from where 120 respondents were identified to respond to the questionnaire aimed at primary data collection. While, secondary data was acquired from the sampled firms annual reports obtained from the stock exchange or websites. Econometric method of ordinary least squares was applied for dissecting the data. Study findings suggest, lack of human resource model that is appropriate, the recognition of wages and salaries in the comprehensive statement of income and reward for labour as the main determinants of human accounting exclusion for the financial position statement and that difficult in human resource valuation, uncertainty in the period of human resource existence and lack of active market for human resources as the most challenging aspects in human resource accounting. Further, human resource accounting was found to have a positive contribution to organizational performance.

Githaiga (2019) studied on human capital, innovation and performance of Kenyan banks categorized as commercial. The research attempted to investigate the impact of human capital on performance and established the extent to which innovation served the mediation role on the connection between human capital and the banks' performance. Under the tenability of the resource-based theory view, a sample of 31 banks was picked from a population 43 commercial banks. The study made use of a panel data set consisting firm-level data for the 31 sampled banks that were in operation between 2008-2017 period, that resulted to 310 firm year observations. The data analysis techniques used entailed descriptive and inferential statistics and hypothesis tested using hierarchical regression analysis technique. From the findings it is evident that human capital impact on performance is positive and significant, innovation significantly influence firm performance and that innovation significantly mediates the effect of human capital on performance.

Sisodia *et al.*, (2021) study on human capital and firm value of firms in India embarked on establishing if human capital affected firm value, whether a firms future growth was affected by the firm value, how human capital and firm volatility were associated and to ascertain the influence of firm size on the impact of human capital and firm value. Anchoring the study on the tenets of classical economic theory, the study draw secondary data from a population of 1,862 Indian listed firms classified as non-financial attained from the Prowess data bank categorized into 136 industries covering the period 2001-2019 resulting into 14,236 firm year observations. Using a combined cashflow firm valuation and Cobb-Douglas production function models the connection amidst human capital and firm value was established by relating human capital and firm value, with growth level and cash flow volatility. The study findings show that human capital disclosure and firm value were positively and significantly associated, growth volatility is negatively and significantly affected by human capital and a confirmation that human capital and firm value linkage is impacted by the size of the firm.

Ogundajo *et al.*, (2022) conducted an inquiry on the effect of human resource accounting information disclosure on firm value of companies listed on the

Nigerian stock exchange. Particularly, the study focused on disclosure of information related to human resource; employee information, employee training and development and their influence on value of the firm. Resting the study on the stakeholder theory, ax post facto research design was used to examine the after fact effect. Secondary data covering the period 2011-2020 was obtained from annual reports and accounts of selected firms downloaded from company official websites and on the Nigerian exchange group website. Data analysis was conducted by way of correlation, and panel regression analysis the results indicate that disclosure of information related to human resource accounting positively impact firm value. Thus, employee information disclosure had a positive and significant effect on firm value. However, the effect of employee training and development disclosure show significant negative impact on firm value.

Hieu *et al.*, (2022) empirically investigated how human accounting disclosure affected firm value of Vietnamese listed companies. The study basically examined whether disclosing human resources influenced firm value. The study was held on the stakeholder and signaling theories. Secondary data collected from annual reports of 81 sampled companies covering the period 2016-2018 was analyzed multiple regression methods. The study reports a positive association between human accounting disclosure and firm value.

Summary of Literature Gaps

Following the studies reviewed, the findings are mixed. Such findings can be fairly ascribed to methodological variability such as variation in sample sizes, industry type and country specific factors. Differences in adopted reporting frameworks by the studied organisations among others. This has motivated the researcher to carry out a comparative study from a developing country context, Kenya and South Africa with a voluntary and mandatory <IR> setups intentionally to provide additional evidence on the relationship between human capital disclosure and value of listed companies in the <IR> circumstances.

Conceptual Framework

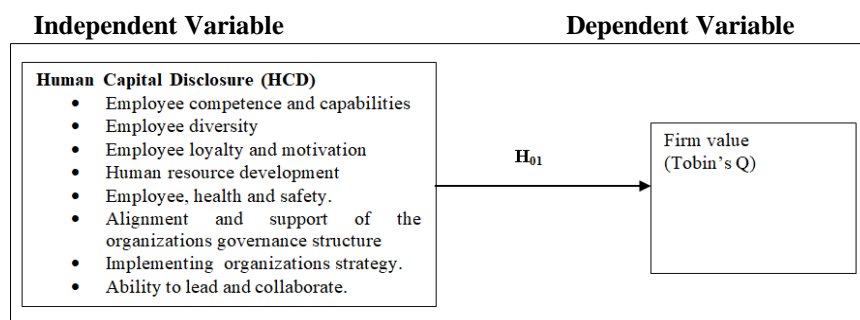


Figure 1: Conceptual model
Source: Researcher, 2024

3. MATERIALS AND METHODS

This study employed exploratory and confirmatory research design.

Population, Sample, and Sampling Technique

As stated by Fraenkel and Wallen (2009) the population of the study entail the whole set of subjects or events that share common features in which the researcher has interest. The study target population was made up of 209 firms comprising of 64 and 145 firms hailing from Kenya and South Africa respectively by December, 2020. Applying purposeful sampling using judgmental method a sample of 137 companies was identified for this study for both the Kenyan and South African case. According to Patton (2002) purposeful sampling as a method is applied in research for the purpose of identification and selection of cases that are rich in certain required information for optimal use of scarce resources. On this basis the sample comprised of

listed firms from the various industry sectors that had adopted integrated reporting for Kenya, and for South Africa firms contained in the IIRC's website, <IR> examples database, as <IR> reporters and listed on the JSE by December, 2020 were considered. Prior studies by (Melloni *et al.*, 2016; Stefan & Branislav, 2016; Kilic & Kuzey, 2018; Yusof, 2018) have applied the same technique include

The companies were categorized using the industry sector classification criteria prescribed by the Global Industry Classification Standard (GICS) that applies to companies globally. The GICS classifies industries into 11 sectors namely; communication services, consumer discretionary, consumer staples, energy, financials, health care, industrials, information technology, materials, real estate and utilities. This comprised of 19 and 118 listed firms from Kenya and South Africa respectively across the various industry sectors as presented in Table 1 below;

Table 1: List of sampled <IR> companies for Kenya and South Africa

Industry sector	Kenya	South Africa	Total
Communication services	-	3	3
Consumer discretionary	1	16	17
Consumer staples	2	10	12
Energy	-	3	3
Financials	14	24	38
Health care	-	4	4
Industrials	1	9	10
Information technology	-	9	9
Materials	-	31	31
Real estate investments	-	9	9
Utilities	1	-	1
Total	19	118	137

Source: Researcher, 2024

3.3 Data and data Collection Method

Secondary data obtained from integrated reports and annual financial statements covering the period 2018-2020 was analyzed. The data was collected from company websites or hard copies.

Variables and Measurement

The study employed a checklist as the main data collection instrument that was structured around the variable of interest containing disclosures of integrated reporting capital (human capital) and the specific items of disclosures required in the published integrated reports and financial statements. The integrated reporting huma capital aspects was subdivided into disclosure indicators based on the IIRC's (2013) framework consisting of 8 items of disclosure. A 4-point likert scale scoring method was employed to provide a reflection of the extent of disclosure of the various aspects. A score of 0 indicates non-disclosure of an item, meaning no information is provided on the aspect, while, a score of 1 indicates limited disclosure, meaning the item is only

mentioned in the report, a score of 2 indicates a mention of the aspect with brief explanation of specific information, and a score of 3 as a reflection of full disclosure involving detailed discussions incorporating the actions of the company and quantification of the aspect in monetary terms. It is a useful tool for evaluating the required information from the published integrated reports and financial statements. The same instrument of employing the likert scale has been employed by prior studies for the purpose of data collection (Zhou *et al.*, 2017; Dyduch, 2017; Smit *et al.*, 2018; Anifowose *et al.*, 2020). The collected data was used to compute an un-weighted disclosure index.

Firm value the dependent variable in this study was proxied using Tobin's Q. Accordingly, Chung and Pruitt (1994) opine that Tobin's Q is the ratio of company's market value as a substitute for the cost of assets. Penman (2013) state that it is the level of company success in managing resources as a form of stakeholder's trust. Previous studies that use Tobin's Q ratio to

measure firm value include (Lee & Yeo, 2016; Nofianti *et al.*, 2018) among others. Market value of shares (MVS) accounts for stock price multiplied by the total outstanding common stocks. Total debt includes both short-term debts, tax payable, and book value of long-

term debts. Total assets is computed from the book value of a company's total assets. Tobin's Q ratio higher than 1 means that company is overvalued, while less than 1 ratio shows that the company is undervalued.

Table 2: Measurement of variables

Variable	Formula	Prior studies applying similar technique
Human capital disclosure (HCD)	<p>Unweighted Disclosure index</p> $DI_{IR} = \frac{\sum d_i \text{effectively disclosed}}{n}$ <p>Where; DI_{IR} = Disclosure index of respective <IR> variable d_i = Disclosure score for various indicators of disclosure in respect to <IR> variable n = Number of indicators that characterize the variable of disclosure based on the IIRC's (2013) framework and CIMA; IFAC; PwC (2013) business model background paper for <IR></p>	Bhuyan <i>et al.</i> , 2017; Hieu <i>et al.</i> , 2022; Simoni <i>et al.</i> , 2022 IIRC's (2013) framework
Firm Value	<p>Tobin's Q = $\frac{\text{Market value of equity} + \text{Total debt}}{\text{Book value of total assets.}}$</p> <p>Where, Market value of equity (market capitalization= market price per share*shares outstanding at the balance sheet date)</p>	Lee & Yeo, 2016; Nofianti <i>et al.</i> , 2018

Source: Researcher compilation, 2024

Data Analysis Method
Descriptive Statistics

The study employed both descriptive statistical analysis and inferential statistics to the test the hypotheses through simple and multiple linear regression model and path analysis. Statistical analysis was conducted on SPSS version 21.0. Descriptive statistic comprised of scores in relation to the minimum, maximum, mean, median, the standard of deviation. This analysis provided the description of the distribution and the behaviour of data. Frequency tables were used for data presentation.

Inferential Statistics

Pearson's correlation coefficient was used to assess the association between human capital disclosure and firm value measured by Tobin's Q. The effect-size of the correlation coefficients was assessed using Cohen's *q* and Fisher's *r* to *Z* transformation methods.

To test for the direct relationship of the effect of <IR> capital of human capital disclosure on firm value as hypothesized in **H₀₁** simple linear regression analysis was conducted. To assess the effect-size of regression models Cohen's *f*² was applied.

The Model

This study has one regression formula.

$$Y = i_1 + cX + \varepsilon_1 \dots\dots\dots (1)$$

Where;
i = constant term
c = regression coefficient relating X to Y
e = random errors (the part of Y that isn't explained by X)

Restated as;

$$FV_{it} = i_1 + c_1HCD_{it} + e_{1t} \dots\dots\dots (2)$$

Where;
FV_{it} is the dependent variable Firm value measured by Tobin's Q, *i* is the Intercept, *c* is the Coefficient of the independent variables comprising, *HCD_{it}* (Human capital disclosure), and *e_{it}* is the error term

4. RESULTS AND DISCUSSIONS

Response Rate

A sample of 137 companies was targeted for data collection from audited annual integrated reports that covered the period 2018-2020. 124 companies of which, 18 (13.13%) were from Kenya and 106 (77.37%) in relation to South Africa formed the final sample. Overall this was 90.5% of the targeted firms. 13 companies were eliminated from the analysis due to either lack of complete data, or suspension from stock exchange, or acquisition 13 companies were dropped from further analysis. The final sample response rate is as presented in Table 3 below.

Table 3: Response rate

Industry sector	Kenya	Percent	South Africa	Percent	Total	Overall Percent
Communication services	-	0.0%	3	2.19%	3	2.19%

Industry sector	Kenya	Percent	South Africa	Percent	Total	Overall Percent
Consumer discretionary	1	.73%	14	10.22%	15	10.95%
Consumer staples	2	1.45%	9	6.57%	11	8.02%
Energy	-	0.0%	2	1.45%	2	1.45%
Financials	13	9.49%	22	16.06%	35	25.55%
Health care	-	0.0%	4	2.92%	4	2.92%
Industrials	1	.73%	8	5.84%	9	6.57%
Information technology	-	0.0%	8	5.84%	8	5.84%
Materials	-	0.0%	27	19.71%	27	19.71%
Real estate investments	-	0.0%	9	6.57%	9	6.57%
Utilities	1	.73%	-	0.0%	1	0.73%
Total	18	13.13%	106	77.37%	124	90.50%
Observation years	3		3		3	
Number of research observations	54		318		372	

Source: Research Data, 2024

Demographic Characteristics of Respondents

A frequency table was generated for the purpose of describing the distribution of the study sample

by Country and Industry sector, as presented in Tables 4 and 5 respectively.

Table 4: List of sampled <IR> companies by Country

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Kenya	54	14.5	14.5	14.5
	South Africa	318	85.5	85.5	100.0
	Total	372	100.0	100.0	

Source: Researcher calculation, 2024

As shown in Table 4 majority of respondents were from South Africa consisting 85.5%, while, Kenya comprises 14.5 % of the total 372 firm year observations.

Table 5: List of sampled <IR> companies across Industry sectors

Industry Sector	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Communication Services	9	2.4	2.4	2.4
Consumer Discretionary	45	12.1	12.1	14.5
Consumer Staples	33	8.9	8.9	23.4
Energy	6	1.6	1.6	25.0
Financials	105	28.2	28.2	53.2
Health Care	12	3.2	3.2	56.5
Industrials	27	7.3	7.3	63.7
Information Technology	24	6.5	6.5	70.2
Materials	81	21.8	21.8	91.9
Real Estate Investments	27	7.3	7.3	99.2
Utilities	3	0.8	0.8	100.0
Total	372	100.0	100.0	

Source: Research data, 2024

As indicated in Table 5, the financial sector made the largest composition of 105 observations (28.2%) of the total observations. The least observations relate to the utilities sector where a total of 3 observations were made accounting for 0.8% of the total observations.

Descriptive Analysis

Descriptive statistics of the various indicators in relation to human capital disclosure across firms listed in the NSE was conducted. The results are as shown in Table 6 below.

Table 6: Descriptive statistics of human capital disclosure

COUNTRY		N	Min.	Max.	Mean	Std. Dev.
Kenya	D1-Employee Competence & capability	54	.00	3.00	1.7407	.91497
	D2-Employee diversity & gender equality	54	.00	3.00	2.6111	.76273
	D3-Employee loyalty & motivation	54	.00	3.00	2.2222	.71814
	D4-Human resource development	54	1.00	3.00	2.6296	.59229
	D5-Employee, health & safety	54	.00	3.00	2.3704	.78419

COUNTRY		N	Min.	Max.	Mean	Std. Dev.
	D6-Support of governance structure	54	.00	3.00	2.0000	.64428
	D7-Implementation of strategy	54	1.00	3.00	2.1667	.54079
	D8-Ability to lead & collaborate	54	1.00	3.00	2.2778	.62696
	Valid N (listwise)	54				
South Africa	D1-Employee Competence & capability	318	.00	3.00	1.9874	.58893
	D2-Employee diversity & gender equality	318	.00	3.00	2.6006	.69309
	D3-Employee loyalty & motivation	318	.00	3.00	1.6541	.65004
	D4-Human resource development	318	.00	3.00	2.6855	.56878
	D5-Employee, health & safety	318	.00	3.00	2.3459	.72353
	D6-Support of governance structure	318	.00	3.00	1.8616	.52662
	D7-Implementation of strategy	318	.00	3.00	1.9403	.46269
	D8-Ability to lead & collaborate	318	.00	3.00	2.0818	.64008
	Valid N (listwise)	318				

Source: Research data, 2024

Consequent to Table 6, Kenyan listed companies disclosed human resource development aspect of human capital most ($N = 54$, $M = 2.6296$, $SD = .59229$). While, least disclosure was reported in relation to employee competencies and capabilities ($N = 54$, $M = 1.7407$, $SD = .91497$). Alternatively, South African firms render human resource development element of human capital as the most disclosed ($N=318$, $M = 2.6855$, $SD = .56878$). Whereas, least disclosures of ($N =318$, $M = 1.6541$, $SD = .65004$) relate to employee loyalty and motivation aspect of human capital. This finding

supports Ogundajo *et al.*, (2022) study which show employee training and development attaining the most disclosure score. However, it contradicts Mustafa *et al.*, (2015) in which employee involvement in the community and employee thanked (motivation) was most disclosed item.

Descriptive Statistics of Human Capital Disclosure and Firm Value Variables

The descriptive statistics of the study variables is as presented in Table 7 below;

Table 7: Descriptive statistics of human capital disclosure and Firm value variables

COUNTRY		N	Minimum	Maximum	Mean	Std. Deviation
Kenya	HCD	54	.88	3.00	2.3171	.45990
	FV	54	.42	2.98	1.3653	.58422
	Valid N (listwise)	54				
South Africa	HCD	318	.75	3.00	2.1506	.36343
	FV	318	.24	3.38	1.1044	.48269
	Valid N (listwise)	318				

Source: Research data, 2024

Table 7 the description indicates that on average, disclosures in relation to human capital is higher for Kenya ($N= 54$, $M = 2.3171$, $SD = .45990$) compared to South Africa ($N= 318$, $M = 2.1506$, $SD = .36343$). The reported firm value was greater for Kenya ($N=54$, $M = 1.3653$, $SD = .58422$) compared to South Africa ($N=318$,

$M = 1.1044$, $SD = .48269$) and indication that South African listed companies are more appropriately valued.

Correlation Analysis

To measure the strength of the association between human capital disclosure and firm value, the researcher employed correlation analysis. The results are as portrayed in Table 8 below;

Table 8: Correlation matrix

COUNTRY			HCD	FV
Kenya	HCD	Pearson Correlation	1	
		Sig. (2-tailed)		
		N	54	
	FV	Pearson Correlation	-.457**	1
		Sig. (2-tailed)	.001	
		N	54	54
South Africa	HCD	Pearson Correlation	1	
		Sig. (2-tailed)		
		N	318	
	FV	Pearson Correlation	.189**	1
		Sig. (2-tailed)	.001	
		N	318	318

** Correlation is significant at the 0.01 level (2-tailed).

Source: Research data, 2024

On the ground of Table 8, human capital disclosure was found to have a negative and significant effect on firm value ($N=54$, $r = -.457$, $P = .001$) for Kenya. This finding contradicts (Sisodia, 2021 and Hieu, 2022) in whose studies a positive and significant association of disclosures relating to human capital information and firm value was reported. However, South Africa, supports the finding by recording a positive and significant association ($N=318$, $r = .189$, $P = .001$).

Further, on the basis of the Pearson correlation analysis as contained in Table 4.22 in relation to Kenya and South Africa respectively, similarities and differences were noted. Following Hopkin's (2002) criteria for interpretation of correlations stated as ($r < .1$,

trivial; $.1 \leq r < .3$, small; $.3 \leq r < .5$, moderate; $.5 \leq r < .7$, large; $.7 \leq r < .9$, very large and $.9 \leq r < 1$, nearly perfect) the resultant correlations were compared. Kenyan NSE listed companies exhibited a moderate negative and significant association between <IR> capitals of human capital disclosure and firm value. Comparably, South Africa, JSE listed firms recorded a small positive and statistically significant association between all of <IR> human capital disclosure and firm value.

Further, the correlation differences between the two data sets was evaluated on the basis of Cohen's q and Fisher's r to Z transformation methods. The estimated effect-sizes and Z_{obs} statistic between the two correlations is as portrayed in table 9 below.

Table 9: Cohen's q effect-size and Fisher's Z_{obs} statistic of difference in correlations of integrated reporting capitals disclosure and firm value between Kenya and South Africa

Variable	Correlation (r_1) Kenya N=54	Correlation (r_2) South Africa N=318	Cohen's q (effect size)	Effect size interpretation	Fisher's Z_{obs} Statistic	P- value
HCD	-.457	.189	.685	Large effect	-4.54	.0000

Source: Researcher calculation, 2024

The interpretation of the different effect-sizes, followed the criteria provided by Cohen (1988) guidelines for social sciences; $q < .1$, no effect; $.1 \leq q < .3$, small effect; $.3 \leq q < .5$, medium effect; $q > .5$, large effect. On the basis of Table 4.24 the effect size was large evidencing a differences in the correlations reported between the two data sets.

Using the Fisher's r to Z -score transformation, the study tested whether the reported correlations differences between Kenya and South Africa were significantly different. Observed Z -score values (Z_{obs}) with P -values $< .05$ confirmed that the correlation human capital disclosure and firm value was significantly different between Kenya and South Africa.

Diagnostic Tests

To ensure applicability of regression analysis techniques diagnostic tests were conducted. To confirm linearity scatter plots were used in which Kenya listed companies exhibited countries data exhibited a negative linear relationship of human capital disclosure and firm

value. Conversely, South Africa indicated a positive association. Using the variance inflation factor (VIF) and Tolerance statistic multicollinearity was checked. The data fall within the required threshold of VIF below 10 and Tolerance statistic above 0.2. Autocorrelation test was done using Durbin Watson statistic in which a score of 1.823 was arrived at. The data was found relatively normal on the basis of the calculated skewness and Kurtosis that fall within the recommended threshold of -2 to +2 and -3 to +3 respectively. The probability plots (P-P plot) were utilized for homoscedasticity check. No specific pattern was attached to the scatter plots.

Regression Analysis: Human capital disclosure and firm value was regressed to examine how its association.

Model Summary of Human Capital Disclosure and Firm Value

Regression analysis was conducted to determine the scope to which firm value was explained by human capital disclosure. The model summary is as provided in Table 10

Table 10: Model summary of human capital disclosure and firm value

COUNTRY	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Kenya	1	.457 ^a	.209	.194	.52457
South Africa	1	.189 ^a	.036	.033	.47472

a. Predictors: (Constant), HCD

Source: Research data, 2024

From Table 10 it is shown that human capital disclosure explains the variation in firm value of NSE

listed firms to the extent of 20.9%, and therefore, 79.1% of the variation can be explained by other factors not contained in the model.

Rather, in respect to South Africa, human capital disclosure annotates the change in firm value of JSE listed firms to the extent of 3.6%, and therefore, 96.4% of the variation is associated with other factors outside this model.

ANOVA of Human Capital Disclosure and Firm Value

To work out how appropriate the model was in anticipating the relationship between human capital disclosure and firm value of listed firms between Kenya and South Africa, ANOVA was exploited. The results are as illustrated in Tables 11 below.

Table 11: ANOVA of human capital disclosure and firm value

COUNTRY	Model	Sum of Squares	df	Mean Square	F	Sig.	
Kenya	1	Regression	3.780	1	3.780	13.738	.001 ^b
		Residual	14.309	52	.275		
		Total	18.089	53			
South Africa	1	Regression	2.642	1	2.642	11.721	.001 ^b
		Residual	71.215	316	.225		
		Total	73.856	317			
a. Dependent Variable: FV							
b. Predictors: (Constant), HCD							

Source: Research data, 2024

Based on the findings in Table 11, the indication is that ($F(1,52) = 13.738, P=.001$), hence, confirming that the model was suitable for predicting the association between human capital disclosure and value of firms listed in NSE. Alternatively, ($F(1,316) = 11.721, P=.001$) was indicated by data for firms listed in JSE. This also approves the fitness of the model in predicting the connection between human capital disclosure and value of firms listed in JSE.

Regression Coefficients of Human Capital Disclosure and Firm Value

In order to unearth the effect of one unit fluctuation in human capital disclosure on the value of listed firms between NSE and JSE, the researcher undertook a regression analysis. The study findings are as expressed in Table 12 below.

Table 12: Regression coefficients of human capital disclosure and firm value

COUNTRY	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		B	Std. Error	Beta			
Kenya	1	(Constant)	2.711	.370		7.327	.000
		HCD	-.581	.157	-.457	-3.706	.001
South Africa	1	(Constant)	.564	.160		3.526	.000
		HCD	.251	.073	.189	3.424	.001
a. Dependent Variable: FV							

Source: Research data, 2024

From Table 12, the results indicate that holding all else constant, the value of NSE, listed firms is 2.711. Whereas, a change in human capital disclosure by one unit will cause a negative and significant change in firm value ($\beta = -.457, P = .001$). Alternatively, the study findings uncover that the value of JSE listed firms is .564 on holding all else constant. A unit deviation in human capital disclosure significantly increases firm value ($\beta = .189, P = .001$).

An assessment of the effect size of the relationship between human capital disclosure and firm value was enhanced using Cohen's f^2 . The worked out f^2 values disclosed ($f^2 = .26$ & $f^2 = .04$) as relating to Kenya and South Africa in that order. Following Cohen's criteria of (.02, .15 & .35) for small, medium and large effects respectively, the results suggest a medium to

large effect-size of human capital disclosure on value of NSE listed firms, while the effect-size is small to medium in respect of South African companies data. The settled at models are;

$$Y_k = 2.711 - .581HCD_k + \alpha$$

$$Y_s = .564 + .251HCD_s + \alpha$$

The fourth objective of the study was to evaluate the effect of human capital disclosure on value of listed companies between Kenya and South Africa. On testing the hypothesis, results provide a negative and statistically significant relationship between human capital and firm value for NSE listed firms. On the other hand, South African listed companies show a positive and statistically significant association. Thus, the study findings reject the null hypothesis that human capital

disclosure has no statistically significant effect on value of listed companies between Kenya and South Africa. The finding in relation to South Africa correspond to the findings of (Rhoda *et al.*, 2018; Bonsu *et al.*, 2019; Sisodia *et al.*, 2021, Hieu *et al.*, 2022), that found a positive and significant relationship between human capital resources reporting and firm performance. While, results in relation to Kenya appear to be contradictory.

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary of Study Findings

The fourth objective of the study was to evaluate the effect of human capital disclosure on value of listed companies between Kenya and South Africa. Effectively the hypothesis was tested. Kenyan listed companies results show a negative and significant effect of human capital disclosure on firm value. While, the relationship between human capital and firm value was positive and statistically significant in case of South African listed companies data. Human capitals as a stock of value that is increased, decreased or transformed through the activities and outputs of the organization. For example, the quality of an entities human capital is improved when employees become better trained. The finding is in line with that of (Rhoda *et al.*, 2018; Bonsu *et al.*, 2019; Sisodia *et al.*, 2021) that documented a positive and significant relationship between human capital resources reporting and firm value and performance. This contradicts the findings of Mustafa *et al.*, (2015) who found a lack of association between human capital disclosure and share prices.

CONCLUSIONS

While <IR> has been advocated as a change to the reporting landscape of corporate entities, it is important to understand how disclosure of different forms of capital affect the value of listed companies and the role played by the business model on these relationships from a voluntary and mandatory setups. The study findings evince an association between human capital disclosure and company value. It is evident that the effect of <IR> capital aspect of human capital disclosure on value of listed companies between Kenya and South Africa suggest similarities and differences. The researcher hypothesized that the effect of human capital disclosure on firm value was not statistically significant. The study findings infer a statistically significant relationship. Whereas, Kenya reported a negative effect, South Africa listed companies posted a positive effect.

6. Implications and Recommendations of the Study

The implications of the study and recommendation is as discussed below.

Implication for Theory

The study relied on stakeholder the findings of this study align with the theory as follows;

The finding of human capital disclosure and firm value is consistent with the precepts of stakeholder theory. While, a company is bound by fulfilling the shareholders need of increasing the value of the firm by maximizing wealth which is their fiduciary obligation, the stakeholder theory opines that the needs of other interested parties have to be considered. Such requirement is partially fulfilled by making disclosures on human capital. Further, entities uphold their image and differentiate themselves through disclosure of human capital information in the annual reports in support of the legitimacy theory.

Implications for Management Policy and Practice

On the practical implication, the results suggest possible impacts on managers and policy makers interested in value of listed companies. Fourth, human capital disclosure and firm value indicated a negative and statistically significant effect on value of listed companies in Kenya, while for South Africa listed companies a positive and significant effect was revealed. This can be ascribed to the fact that information disclosures in relation to human capital is a strategic asset that earn a company a competitive advantage due to its ability to enhance the image of the company positively. However, for Kenya, human capital disclosure by firms may be as a result of poor disclosures of information that does not contain strategic communication, hence resulting into a fall in firm value. Rather, South African firms human capital disclosures entail strategic communication that enhances the value of the firm. As a consequence, the study recommends that managers of firms listed in the NSE should review their <IR> disclosures of human capital and restructure costs related to human capital in a manner that communicates positive benefits, portray the information strategically so as to elevate firm value.

Limitations of the Study

Notwithstanding the achievement of the study objectives, this study findings should be interpreted with the following identified limitations in mind that may also provide direction to future research.

The study sample was small and the period covered was short given the number of companies that had adopted <IR> in Kenya by the year 2020. While, for the case of South Africa the sample was selected from firms whose reports were contained in the IIRC, <IR> Examples data base. Therefore, generalizations of the study findings is restricted.

The scope of the study conceptually covered human capital disclosure and firm value. The factors that dictate why and how organisations adopt disclosure practices were not given consideration.

Furthermore, the study focused only on two countries, Kenya and South Africa. Thus, the study

findings may not be considered as containing other firms outside the study area.

Recommendations for Future Studies

The study specifically examined <IR> firms that are listed in the NSE, Kenya and <IR> firms contained in the IIRC, examples data base as integrated reporters, and listed in JSE, South Africa. Future research to consider an increased sample size covering a longer period and extend the study to firms that are not listed in the stock exchange but have adopted <IR> to compare the results.

Owing to the fact that the scope of the current study did not cover the factors influencing <IR> adoption level by the studied organisations, future research should probe the factors that dictate <IR> disclosure level on the foundation of institutional and contingency theories. This will unmask the cause of the witnessed variation in the level of disclosures of <IR> capitals and business model aspects by different firms.

Finally, as the study utilized data from firms listed in NSE, Kenya and JSE, South Africa, a further study might consider expanding the research to listed firms in other countries hailing from the African continent, so as to assess continental adoption of <IR>, and the effect of <IR> capitals on company value.

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