# Relationship between Human Capital Disclosure and Firm Value of Firms Listed at the NSE, Kenya

Mrs. Jane Muthoni G, Prof. Isaac Naibei (Prof), Dr. Gichuki Kingori (Dr), Dr. Hellen Wothaya Sang (PhD)

Affiliations: PhD Candidate, University of Kabianga, Associate Professor- Accounting- University of Kabianga, Lecturer- Accounting- University of Kabianga, Senior Lecturer – Human Resource Management,

**ABSTRACT:-** The study investigates the impact of human capital disclosure on firm value measured by Tobin Q. The study was based on signaling, legitimacy, and agency theories. The study employed a correlational and longitudinal research design. The target population consisted of sixty-two (62) Nairobi Securities Exchange-listed firms between 2017 and 2021. Census technique was used to select all the eligible firms to participate in the study. Secondary data was collected using a secondary data extraction tool. Experts and supervisors interrogated research instruments to determine their reliability. The reliability of the instrument was achieved through collecting the data from audited company annual reports. Both descriptive and inferential statistics were used for the data analysis. Specifically, correlation analysis was used to examine the relationship between variables, while multiple linear regression analysis was used to test the hypotheses using panel data. The data was presented using tables and graphs. The findings indicated a continuous declining trend in the human capital disclosure index from 2017 to 2021. Human capital disclosure had a significantly positive relationship with Tobin Q ( $\beta$ =3.043722, P<0.05). The study recommends that firms should improve human capital disclosure, to enhance firm value.

**KEYWORDS:** Firm Value, Human capital disclosure, Intellectual capital Disclosure, Tobin Q

## I. INTRODUCTION

Nowadays, globalization is seen through the lens of the information economy, which boosts businesses' capacity to compete and ensures their continued success in the long run (Sudibyo&Basuki, 2017). In today's corporate environment, when success is highly competitive and knowledge and expertise are essential, intellectual capital is crucial (Mondal& Ghosh, 2021; Lotfi, Salehi&Lari, 2021). Farooq and El-Bannan (2016), who studied 32 European markets between 1997 and 2012, found that disclosure of intellectual capital has benefited the labour market, particularly disclosure of human capital.

Hatane*et al.*, (2022) defined human capital as capital that manages and controls other assets owned by a corporation, including intangible and tangible assets. People, not infrastructure or supplies, are a company's greatest resource. The three key components of human capital are special capabilities, work experiences, and skills, according to Usman &Wirawan (2021). According to Rahman and Akhter, 2021, the primary component of intellectual capital is Human capital. This claim is supported by the fact that human beings are high-value commodities (Rahman & Akhter, 2021).

Knowledge, union activity, training programs, executive compensation plans, equal employment opportunities, entrepreneurial innovation, cultural diversity, work-related knowledge, vocational qualifications, and employee education programs are some of the qualities that make up human capital or employee competence. The majority of companies in Nigeria have participated in intellectual capital disclosure, according to a report by Baba & Baba (2021). The study revealed that companies that implemented human resource accounting, HRA disclosure performed better than those that did not. According to Adewumi, Omole, Talabi, and Omula (2021), manufacturing firms in Nigeria who engaged in human resource disclosure were able to achieve 5% above-average financial performance. As a result, regional enterprises in Africa have adopted intellectual capital disclosure to enhance openness, accountability, and performance.

Human capital accounting disclosures, according to Tejedo-Romero & Araujo (2022), play a important role in ensuring the accountability of human capital, which is essential for maximizing financial performance. Human resources have an influence on a company 's bottom line and may shape its future; as a result, it is essential for firms to make investments in their intellectual capital. Human capital disclosure can provide information about the company's workforce, such as their skills, training, and education levels as argued by

Tejedo-Romero & Araujo, (2022). Investors and other stakeholders can use this information to evaluate the company's staff and its capacity to innovate and adapt to changing market conditions.

Human capital disclosure includes information on employee training, employee thanked, innovative skills, information on senior executive performance and results, expert seniority, employee involvement in the community, succession planning, vocational qualification, skills/know how, employee features, employee safety and health, employee development, employee work related competence, equity issues, employee engagement, union activity, and employee education. Hence, it's significant to disclose more information about the human resource that influence the financial performance in order to attract more stakeholders which is one of the main roles of disclosing financial information (FASB, 2021).

# II. OBJECTIVE

The study sought to determine the relationship between human capital disclosure and firm value of firms listed at the NSE, Kenya

#### III. HYPOTHESIS OF THE STUDY

There is no statistically significant relationship between human capital disclosure and firm value of firms listed at the NSE, Kenya.

#### IV. LITERATURE ON HUMAN CAPITAL DISCLOSURE AND FIRM VALUE

Lin, Huang, Du, & Lin (2012) evaluated the relationship between human capital disclosure and company performance as well as the moderating impacts of knowledge intensity and organizational scale. Stakeholder viewpoints and signaling were employed with a one-year lag design. The information was taken from yearly reports using content analysis as the extraction method. In the analysis, hierarchical regression was used. The market to book value ratio and return on assets were used to gauge the organization's performance, and the results showed that human capital disclosure significantly improved performance. Organization size had a negative moderating effect on human capital disclosure and performance, whereas knowledge intensity had a curvilinear positive moderating effect. The current study moderated the disclosure of human capital and business value by the audit committee.

Mariappanadar (2017) examined the influence of human capital disclosure on investors'share investment intention in Australia. The study used a two-stage empirical study conducted in 2010 that had HR disclosure questionnaire and the second stage used Australian banking sector corporation participation. Confirmatory factor and logistic regression analyses were used to analyze collected data. According to the results individual investor's perception was crucial in performance management dimension of HR disclosure had varied impact on investomer decisoin of selling, holding or buying shares. The current study examined the firm value of the firm rather than the investors'intentions.

Kaur, Raman, & Singhania (2016) examined the impact of human capital disclosure on corporate attribute. Human resoruce disclosure index was developed from 200 National Stock Exchange listed firms. The study regressed HRDI against the corporate characteristics. The study found that there was high variation of human capital disclosure among samples firms. Government's participation through ownership and market capitalization had positive significant influence on human resource disclosure. However, HRDI had insignificant relationship with proportion of non-excecutive directors on board, foreign investments, affiliation of industry, employee expense to total operating expense ration, business structure complexity, age, auditor type, concentration of ownership, assets, employee number and leverage. The current study examinedfirm value rather than corporate attributes.

Rahman and Akhter (2021) explored how human capital investments affect Bangladeshi banks. Convenience sampling was examined. A 7-point Likert scale questionnaire collected data. Structural equation modelling validated the model using 261 people's data. They assessed HR investments using 283 respondents' training, education, knowledge, and competences. This study used resource-based premise. The study included hypotheses, a conceptual model, and primary data-based empirical research. Simple sampling and a seven-point Likert scale survey obtained the results. Staff knowledge, talents, and training correlated positively with lower-level bank performance. The study was limited by sample size, target population, and primary data. Primary and secondary data was integrated to collect data from Kenya's NSE-listed firms to address this challenge.

Adewumi, Omole, Talabi, and Omula (2021) examined how human resource disclosures affect shareholder value in Nigeria. 30 Nigerian Stock Exchange-listed industrial firms were studied using ex-post research. 2011–2018 were studied. Data analysis included quantile regression, descriptive statistics, and correlation. Simple random sampling picked the sample, and quintile estimation evaluated the results. Resource-Based Theory guided the study. The dynamics of share price dispersion show that the HRDI affects businesses with above-average financial performance and ordinary or even below-average company value at 5%. The study's conclusions may have been hard to apply to other firms since manufacturing companies are distinctive.

As this study would cover all Kenyan NSE-listed firms in all industries, the restriction was abolished. The study used longitudinal and correlational methods rather than ex-post research.

#### **Conceptual Framework**

In a conceptual framework, the researcher conceptualizes or diagrammatically expresses the link between variables. The conceptual framework's goal is to make it easier for the reader to understand the suggested relationship.

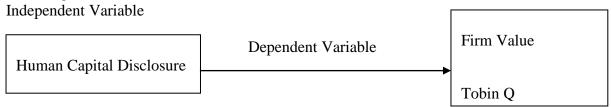


Figure 2.1 represents the conceptual framework as adopted and modified from Muttakin, Khan, and Belal (2017). The independent variable is human capital disclosure.

## V. METHODOLOGY

This study adopted correlational and longitudinal research design. These approaches defined the processes of discovering, analysing, and describing the relationship between human capital disclosure, and firm value of Kenyan NSE-listed firms. The study utilised secondary data. The target population for this study, comprised of 62 firms listed on the NSE from 2017 to 2021 as of December 31, 2021 (NSE, 2021). The study covered the period before COVID-19 (from 2017 to 2019) as well as the period following COVID-19 (from 2019 to 2021). This puts the firms' resiliency to the test, as well as the consequences of COVID 19.

The study adopted a census method; however, four NSE-listed firms were excluded for pilot study making it target population to be 58 NSE-listed firms as unit of analysis from which panel data was taken between 2017 and 2021. Linear regression, Descriptive statistics and correlation analysis was used in the study.

The Pearson correlation coefficient was used in correlation analysis to indicate the degree and direction of relationship between human capital disclosure and firm value. Panel data was evaluated using multiple regression based on a five-year time series.

 $Y_{it} = \beta_0 + \beta_1 X_{1t} + \xi \text{------Model } 1$ 

 $Y_{it}$ = Firm value at time t of firm in terms of Tobin Q

X<sub>1t</sub>= Human capital disclosure at time t

E = Error coefficient

## VI. RESULTS AND DISCUSSION

### **Descriptive statistics**

Human capital disclosure index was evaluated over period of five years as well as overall value. The results were presented in Table 4.1 with mean, standard deviation, minimum and maximum human capital disclosure index.

Table 4.1: Human capital disclosure

Year	Observation	Mean	Std.	Min	Max
2017	53	60.5%	21.9%	13.3%	100.0%
2018	53	58.0%	20.8%	20.0%	93.3%
2019	53	56.4%	21.2%	13.3%	100.0%
2020	53	55.2%	20.6%	13.3%	93.3%
2021	53	54.2%	20.8%	13.3%	100.0%
Overall	265	56.9%	21.0%	13.3%	100.0%

Source: Research Data (2024)

The results in Table 4.1 indicated that the highest human capital disclosure index was 60.5% as represented in 53 listed companies in 2017. The index declined over the five-year period with the lowest of 54.2% in 2021. Hence an overall average of 56.9% human capital disclosure index was obtained in Nairobi Securities Exchange listed companied over the period of five-years. This implies that human capital disclosure index in NSE listed firms are slightly above average. The overall standard deviation was 21.0% which indicated that the co-efficient of variation is 36.9% implying higher dispersion in human capital disclosure based on 20%-30% acceptable range.

The human capital disclosure ranges from 13.3% to 100% among the listed companies over the five years. Further examination of trend showed that human capital disclosure index had continuously declining trend from 2017 to 2021. This could be associated to external business environment which affect the human capital disclosure. The results according to Mariappanadar (2017) revealed that human capital disclosure is related to investor's share investment intention. This concepts can explain the decline in human disclosure index during COVID-19 with related poor firm performance during the same period. External factors that affect the firm human capital disclosure have high impact on investors investment intention

#### **Inferential Statistics**

Human capital disclosure was examined on Tobin Q as the measure of firm value. This was presented in Table 4.9 using random effect geneal least square regression modelling.

Random-effects GLS regression	Number of obs =	265		
Group variable: Company	Number of groups =	53		
R-sq:	Obs per group:			
within $= 0.3553$	min =	5		
between = $0.2270$	avg =	5.0		
overall = 0.2404	max =	5		
	Wald chi2(1) =	27.54		
$corr(u_i, X) = 0 $ (assumed)	Prob > chi2 =	0.0000		

(Std. Err. adjusted for 53 clusters in Company)

Q	Coef.	Robust Std. Err.	Z	P> z	[95% Conf.	Interval]
HCD _cons	3.043722 60482	.5800374 .2559184	5.25 -2.36	0.000	1.90687 -1.106411	4.180575 1032291
sigma_u sigma_e rho	.81219423 .33727801 .85291684	(fraction	of varia	nce due t	co u_i)	

Source: Research Data (2024)

Firm value as measured using Tobin Q revealed that human capital disclosure (HCD) had positive significant relationship with Tobin Q ( $\beta$ =3.043722, P<0.05). A variation of 24.04% in Tobin Q is associated with HCD while other variable not examined in this model contribute 75.96% ( $R^2$  = 0.2404). The regression model was given as;

Q = -0.60482 + 3.043722 HCD

This indicated that a unit increase in HCD lead to 3.043722-unit increase in Tobin Q. This implies that an increase human capital disclosure would significant increase the Tobin Q measure of firm value.

The results were similar to Salvi, *et al*, (2020) who found a positive relationship between human capital disclosure and firms' value measured using Tobin Q. However, the current study found that there existed a positive relation with Tobin Q. On the contrary, Lin, Huang, Du & Lin (2012) found that human capital disclosure had positive significant relationship with return on assets. Therefore, the human capital disclosure had positive significant firm value as measures using Tobin Q.

## VI. DISCUSSION

The study revealed that human capital disclosure (HCD) positively and significantly impacts firm value as measured by Tobin Q, with a coefficient of 3.043722 (P<0.05). This relationship explains 24.04% of the variance in Tobin Q (R<sup>2</sup>=0.2404), indicating that a unit increase in HCD leads to a 3.043722-unit increase in Tobin Q. These findings align with Salvi et al. (2020), who also found a positive relationship between HCD and firm value, although Lin *et al.* (2012) linked HCD more strongly with return on assets.

#### VII. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

In summary ,the analysis of human capital disclosure in Nairobi Security Exchange (NSE) listed companies over a five-year period from 2017 to 2021 revealed a fluctuating trend, with the highest disclosure index recorded at 60.5% in 2017 and the lowest at 54.2% in 2021. This indicates a downward trajectory in human capital disclosure over the years, potentially influenced by external factors such as the onset of COVID-19 between 2019 and 2021, impacting both human capital resources and economic performance. Despite the decline, the overall average human capital disclosure index remained at 56.9%, slightly above average for NSE listed firms. However, the wide standard deviation of 21.0% suggests a considerable dispersion in disclosure levels among companies, surpassing the acceptable range of 20%-30%. The range of disclosure varied significantly, spanning from 13.3% to 100% across the listed companies during the specified period.

The results indicated that firm value through Tobin Q, it was found that HCD exhibits a positive and significant relationship with Tobin Q ( $\beta$ =3.043722, P<0.05). Approximately 24.04% of the variation in Tobin Q can be attributed to HCD, while the remaining 75.96% is influenced by other variables not examined in this model ( $R^2$  = 0.2404). This suggests that a unit increase in HCD leads to a 3.043722-unit increase in Tobin Q, implying that higher levels of human capital disclosure could significantly enhance the Tobin Q measure of firm value.

In conclusion, human capital disclosure demonstrated had a positive and significant relationship with Tobin Q, suggesting that higher levels of disclosure could enhance the measure of firm value represented by Tobin Q. This underscores the importance of transparency in disclosing human capital information for investors and stakeholders, potentially leading to improved firm valuation and market performance.

From the study, it is recommended that the manager of listed firms to should prioritize efforts to identify and address factors influencing human capital disclosure, including both external influences like COVID-19 and internal governance practices, to optimize firm performance. Similarly, investors should have a deeper understanding of how human capital disclosure impacts various financial metrics beyond Tobin Q can inform investment decisions, leading to more informed and potentially lucrative investment strategies. Collaborative efforts among stakeholders to support research in this area can contribute to improved transparency, decision-making and overall market efficiency within the NSE.

## REFERENCES

- [1]. Adewumi, A. A., Omole, I. I., Talabi, A. O., & Omula, G. G. (2021). Human capital reporting (HCR) and shareholder value maximization in listed manufacturing firms in Nigeria. *International Journal of Financial Research*, 12(4), 168-178. doi:10.5430/ijfr.v12n4p168
- [2]. Baba, B., & Baba, U. (2021). The effect of ownership structure on social and environmental reporting in Nigeria: the moderating role of intellectual capital disclosure. *Journal of Global Responsibility*, 1-12.
- [3]. FASB. (2021, January 29). *News release 01/29/21*. Retrieved from Financial Accounting Standards Board (FASB): https://www.fasb.org/page/getarticle?uid=fasb\_NEWS\_RELEASE\_01\_29\_01Body\_0228221200
- [4]. Hatane, S. E., Nathania, F., Lamuel, J., & Darusman, F. (2020). Intellectual capital disclosures and corporate governance in gaining the firms' non-discretionary profits and market value in ASEAN-5. *Organizations and Markets in Emerging Economies*, 11(2), 276-304. doi:10.15388/omee.2020.11.20
- [5]. Kaur, S., Raman, V., & Singhania, M. (2016). Impact of corporate characteristics on human resource disclosure. *Asian Review of Accounting*, 24(4), 390-425.
- [6]. Lin, L., Huang, I., Du, P., & Lin, T. (2012). Human Capital Disclosure and Organizational Performance: The Moderating Effects of Knowledge Intensity and Organizational Size. *Management Decision*, 50(10), 1790-1799.
- [7]. Lotfi, A., Salehi, M., & Lari, D. M. (2021). The effect of intellectual capital on fraud in financial statements. *The TQM Journal*, 34(4), 651-674. doi:10.1108/TQM-11-2020-0257
- [8]. Mariappanadar, S. (2017). Influence of Human Resource Capital Information Disclosure on Investors' Share Investment Intentions. *Personnel Review*, 46(3), 551-571.
- [9]. Mondal, A., & Ghosh, C. (2021). Effect of intellectual capital disclosure on cost of equity capital: A study on Indian companies. *Asian Journal of Accounting Research*, 6(2), 165-179. doi:10.1108/AJAR-08-2020-0069
- [10]. Rahman, M., & Akhter, B. (2021). The impact of investment in human capital on bank performance: Evidence from Bangladesh. *Future Business Journal*, 7(1), 1-13. doi:10.1186/s43093-021-00105-5
- [11]. Sudibyo, A. A., & Basuki, B. (2017). Intellectual capital disclosure determinants and its effects on the market capitalization: Evidence from Indonesian listed companies. *SHS Web of Conferences*, *34*, 1-7. doi:10.1051/shsconf/20173407001

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- [12]. Tejedo-Romero, F., & Araujo, J. (2022). The influence of corporate governance characteristics on human capital disclosure: the moderating role of managerial ownership. *Journal of Intellectual Capital*, 23(2), 342-374.
- [13]. Usman, A., & Wirawan, H. (2021). The effect of human capital and physical capital on regional financial condition: the moderating effect of management control system. *Heliyon*, 7(5), 1-10. doi:10.1016/j.heliyon.2021.e06945

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Affiliations: PhD Candidate, University of Kabianga, Associate Professor- Accounting- University of Kabianga, Lecturer - Accounting- University of Kabianga, Senior Lecturer - Human Resource Management,