



Impact of Intellectual Capital on Financial Performance of Banks in Tanzania

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ABSTRACT

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Since the financial sector reforms took place in the last two decades, Banks in Tanzania have continued to play the major role in reshaping the economy of the nation. With the emergence of knowledge based economy many firm have changed their way of doing business instead of relying more on physical capital they have shifted to intellectual capital. This is no exception for the banks operating in developing counties Tanzania included. Many studies have been done in the area of intellectual capital and its contribution to the value of the firm. This study sets out to extend the evidence by investigating the intellectual capital of banks operating in Tanzania for the period of four years from 2010 to 2013. Annual reports, especially the profit and loss accounts and balance sheets of the selected banks have been used to obtain the data. The study uses Value Added Intellectual Capital model (VAICTM) in determining intellectual capital and its three major components like Human Capital Efficiency (HCE) Structural capital efficiency (SCE) and Capital Employed Efficiency (CEE). The results revealed that Intellectual capital has a positive relationship with financial performance of banks operating in Tanzania and also when the VAICTM was divided into its three components it was discovered that the financial performance is positively related to Human capital efficiency and Capital employed efficiency but is negatively related to Structural capital efficiency.

1. Introduction

The 21st century is more dominated by knowledge economy, many firms are shifting from using physical capital and embrace intellectual capital, as more and more firms are trying to find better ways to use their resources efficiently in order to sustain in the dynamic changing business environment, hence there is a drastic move by many firms from production era to knowledge era and from production labor to knowledge worker (Lipunga, 2014). It is no secret that the organization that continues to invest in new skill and technology will continue to be successful. Thus being said intangible assets especially Knowledge are gaining prominence than ever before as a matter of survival and of achieving competitive advantage for the firm to compete strategically (Latif et al. ,2012).In today's fast moving economy with the rapid growth of knowledge and technology innovation, the growth of organization has changed to cope with the changing environment. With amounting competitions in the global economy intellectual capital has become the main ingredient and vital for the organization to sustain the competitive world in which they operate and to create more values. Thus it can be put as an established fact by (Bontis, 2001) that intellectual capital has become the critical driver for sustainability.

While the grounded framework of intellectual capital have been in place and Intellectual capital being studied in many countries to give their firms competitive advantage over rivals still, there is still a gap in understanding if to invest and use intellectual capital is viewed as a critical asset. Therefore there is a need to measure intellectual capital of the firm and its impact on financial performance, in order to create more awareness.

Furthermore, many studies have focused the research of intellectual capital in the developed world, there have been very few studies that have used emerging developing worlds especially in Sub-Saharan Africa as a case for evaluating the implications of intellectual capital for specific industries like banks (Kamath, 2007). This has created a gap that needs to be addressed because, with rapidly changing environment filled with innovation, information and technology, firms [both in developed and developing economies] are increasingly threatened with global competition (Muhammad and Ismail, 2009), which is making intellectual capital more important to all of them for sustainability and competitive advantages. Thus being stated there is still a need to promote more studies in developing countries.

This study uses the bank sector to find the impact of intellectual capital and financial performance since the bank is one of the high knowledge-intensive sector and, therefore it provides a rich environment for the research and the availability of the reliable data from the audited annual reports of banks. The study uses VAICTM model to analyze if the intellectual capital has an impact on financial performance of Tanzanian banks.

2. Literature review

2.1 Intellectual capital definition

Intellectual capital although is the critical value driver for the firm to succeed in the fiercely competitive world; it still has many issues remain to be clear regarding its definition. Up to now the definition of intellectual capital is not uniform among different sectors.

Itami (1987) was the early contributor of intellectual capital definition sees as intangible asset that comprises of technology, customer loyalty, brand name loyalty, and goodwill etc. Stewart (1997) also contributed to the definition of intellectual capital by defining as a concept that involves human capital, structural capital and customer capital. He further defines human capital as the package which includes of innovations, knowledge, experiences, and learning capabilities; structural capital as the existing knowledge which can be found within the organization it can be collected, tested, organized, integrated, and the important part can be available for distribution; customer capital is the relationships a firm establish when doing business includes customer ,suppliers, it has mainly to do with satisfaction retention, and loyalty. At the same time, Edvinsson and Malone (1997) defined intellectual capital as the sum of human, structural, and customer capitals.

On the other study Sveiby (1998), divided the components of intellectual capital into three parts individual competence, internal structure and external structure, with the individual competence the this includes employees capability it involves experience knowledge and social interactions; internal structure includes computer programs, patents , concepts, patterns, designs; external structure being the relations with customer, suppliers and shareholders, which involves the brand, reputation, loyalty and trademarks.

Johnson (1999) tries to define as intellect, or wisdom, as the combination of human capital, structural capital and relationship capital, where human capital means the idea capital (i.e., the human skills ,knowledge, team work and talents) combined with leadership capital (i.e., problem solving and creativity); structural capital means the innovation capital (i.e., patents, trademarks, technology, copyrights knowledge database, designs) combined with process capital (i.e., work procedures and trade secrets); relationship capital means the sum of relationships with customers, suppliers, shareholders and other group in the network society.

In a simplified definition, Edvinsson (2003) expressed intellectual capital as what helps any company to be sustainable and have competitive advantage in the future as well as an indicator of whether that company will be maximizing value. It is impossible for a company to gain momentum for reforms unless it invests in intangible assets (Tsen and Hu, 2010). Meanwhile, Cabrita and Vaz (2006) simply stated that intellectual capital is a matter of creating and supporting connectivity between all sets of expertise, experience and competences inside and outside the organization.

The latest definition of intellectual capital Mondal and Ghosh (2012) described intellectual capital as “intangible assets or intangible business factors of the company, which have a significant impact on its performance and overall business success, although they are not explicitly listed in the balance sheet (if so, then under the term goodwill).”

There are many researchers who divided the intellectual capital into three main components of human capital, structural capital and relation capital Edvinsson and Malone (1997); Kaplan and Norton,(1992) Sveiby,(1997); human capital is the personal combined, knowledge, technologies, and experiences of employees are linked with company capabilities, that includes the creativity and innovation to enhance value creation. The structural capital, is a supportive infrastructure that assist human capital to perform well, it is an important link between human

capital and relational capital. customer capital, they refer to the relational value between people and firm, it includes customer satisfaction, retention, durability, reputation and the financial soundness of suppliers, government, investors and business network and other stakeholders including competitors

2.2 Intellectual capital and firm performance

There have been prior studies around the world which show the intellectual; capita; and firm performance. Among these studies Goh (2005) investigated the intellectual capital of Malaysian commercial banks based on VAIC™ model and found that there is significant relationship between VAIC™ performance and Human Capital Efficiency (HCE) and also the study shows that HCE has relatively larger contribution in measuring VAIC™ performance as compared to SCE and CEE. Same findings are revealed by Joshi et al (2010) also in the same manner the empirical results examined while exploring the Intellectual Capital and banks performance of Australian owned Banks for the period of 2005-2007 through VAIC™ model. They showed same findings that. Human Capital Efficiency (HCE) is positive and significant to VAIC the evidence also indicate Human Capital has higher explanatory power to enhance the IC performance of Australian banks as compared to other determinant of VAIC™.

Studying the relationship of intellectual capital to firm performance, in recently study Joshi et al., (2013) investigated relationship between intellectual capital and their components and financial performance in Australia context for the time of 2006-2008. The results show human capital efficiency, capital utilized efficiency and structural efficiency were all important, but they differ in utilization. It was found that intellectual capital was critical in connection with human efficiency and worth expansion of Australian banks. Human capital efficiency is higher than capital utilized efficiency and structural efficiency on Australian claimed banks.

In other study Mention and Bontis (2013) performed a study using data from 200 banks from Belgium and Luxembourg the empirical results confirms that human capital was both a direct and an indirect impact on business performance. Structural and relational capitals were found to be strong and positively related to business performance; however results failed to establish significant impact on relationship. Similar results were found by Mohiuddin et al. (2006) in the study of 17 sampled commercial banks operating in Bangladesh for the period from 2002 to 2004. In another study Mavridis (2004) found that Japanese banks with the greatest performance were those who were most efficient in the use of their Human capital, whereas efficiency in physical assets utilization was less important. Yolama and Coskun (2007) conducted a study on the effect of intellectual capital profitability of Turkish banks and found out the VAIC™ model could be used as a benchmark for level of intellectual efficiency.

In other study, Jalilian, et .al (2013) examined a case study to investigate the impact of intellectual capital on the financial and non-financial performance of West Cement Company of Kermanshah, Iran. The variable integrated were intellectual capital as measured by human capital, structural capital and relational capital, organizational learning capability and firm performance; which were measured through financial and non-financial performance. The study found an inter-relation between all three components of intellectual capital. And they also had a direct correlation with organizational learning capability, financial and non-financial performance.

In the study involving different financial sectors, Muhammad and Ismail (2009) examined the impact of intellectual capital efficiency on the performance of financial sector firm of Malaysia (i.e., banking, insurance and brokerage firms). By using VAICTM to measure intellectual capital efficiency and ROA along with profitability to measure performance, the study found a strong and positive impact of intellectual capital efficiency on the financial performance of the financial sector of Malaysia. Moreover, it was also found that within financial sector banking in Malaysia relies more heavily on the intellectual capital efficiency, which was followed by insurance and brokerage firms.

Zehri, et.al(2012) investigated a study in Tunisia to measure the intellectual capital and financial performance. The study used VAIC model to measure intellectual capital efficiency while performance of the organization was measure in three ways financial performance (return on assets), economic performance (operating margin) and market performance (Market to book ratio).The results of the study trace a direct impact on the financial and economic performance of the company. However the direct relationship between intellectual capital and market performance was not established.

Ahangar (2011) examined intellectual capital and firm performance in Iranian corporate sector. The study used VAICTM model to measure intellectual capital efficiency and used profitability, sales growth, and employee productivity as performance proxies. The study indicated that human capital is most important component of intellectual capital and all three dimensions as proposed by VAICTM are significant explanatory variables for profitability as measured by return on asset (ROA).

Kamal et al. (2012) on another hand using 18 commercial banks in Malaysia investigated the relationship between the level of intellectual capital efficiency regarding human capital, capital employed and structural capital with the commercial banks performance ,the study combined traditional accounting that comprised return on assets(ROA) and return on equity(ROE). The overall results discovered the relationship between intellectual capitals and performance of banks. Additionally, the results revealed significance impact of intellectual capital variables namely capital employed efficiency, human capital efficiency towards bank performance. Thus, the study concluded that intellectual capital matters and should be linked to firm productivity.

Ting and Lean (2009) furthermore in Malaysia conducted the study on the financial sector to investigate the relationship between intellectual capital and financial performance for the period 1999 to 2007. They also used VAICTM the results confirmed that Intellectual capital and return on assets are positively related. The result concluded that the three components of intellectual capital had positive influence on profitability.

Tan et al. (2007) using data from 150 publicly listed companies in Singapore conducted a similar kind of study to assess the relationship between the intellectual capital of firms and their financial performance. They used VAICTM methodology The results proved that intellectual capital and firm performance were positively associated in particular, intellectual capital was found to be correlated to future company performance, and the rate of growth of a company's intellectual capital was positively associated to the performance. However it

was discovered the contribution of intellectual capital to company performance differs by industry.

Chan (2009) using a sample of all companies listed on Hang Seng stock exchange for the period 2001 to 2005, investigated the relationship between the efficiency of the Intellectual Capital of these companies and integrating its components (human and structural) with measures used for firm performance: market valuation, return on assets, and return on equity and productivity measurement. The results confirmed that only structural capital has a significant and positive relationship with profitability measures (ROA and ROE).

Phusavat et al., (2011) targeted manufacturing firms in Thailand conducted a study on the effects of intellectual capital and integrated it components (e.g. human capital, structural capital, and innovation capital) and performance using VAICTM . The study provides empirical evidence that intellectual capital has positively and significantly affects a manufacturing firm's performance, having direct impacts on the all four performance indicators under study, i.e. return on equity, return on assets, revenue growth, and employee productivity.

On another perspective, some used to measure the interrelationship between intellectual capital elements. Empirical evidence indicates the existence of interrelationships. For instance, Maditinos et al. (2009) found out the relationship between structural capital and business performance using data from Athens Stock Exchange (ASE) and the companies operating in service and non service industries the case involved four components of intellectual capital namely human capital, customer capital, structural capital and innovation capital and their relationship with business however is more stronger in non-service industries. Furthermore it was revealed that human capital was important and positively associated to customer capital; customer capital had an influence on structural capital and innovation capital had an important and positive relationship to structural capital.

In addition to the interrelations, literature documented the relative dominance of human capital in influencing other intellectual capital components and the overall value added intellectual coefficient. For instance, Wang and Chang (2005) found that even though human capital did not have a direct impact on business performance, but it had on the other intellectual capital elements, which in turn affected performance. Furthermore, a study done by Joshi et al., (2010) revealed that VAICTM has a significant relation with human costs and that all Australian owned banks had relatively higher human capital efficiency than capital employed efficiency and structural capital efficiency.

The finding of these studies still yield mixed results for example firer and Williams(2003) studied the intellectual capital of South Africans the results only supported intellectual capital and capital employed further more he examined the relationship between IC and traditional measures of firm performance (ROA, ROE) and failed to find any relationship, The opposite research result also, studied by Iswati (2007) show that no influence between intellectual capital to bank's performance in Jakarta Stock Exchange.

The studies highlighted above were mostly related to the developing economies which show still there is a need to study intellectual capital and financial performance of banks in other countries, especially in African local context. The studies show

the concepts using various definitions of intellectual capital methods, and proxies of performance. Most of the studies indicated towards a direct impact of various dimensions of intellectual capital on internal as well as market performance of the firms.

2.3 Proposed Model and Hypothesis

The model for the study can be presented based on the review of literature on intellectual capital and performance of banks the framework is shown below.

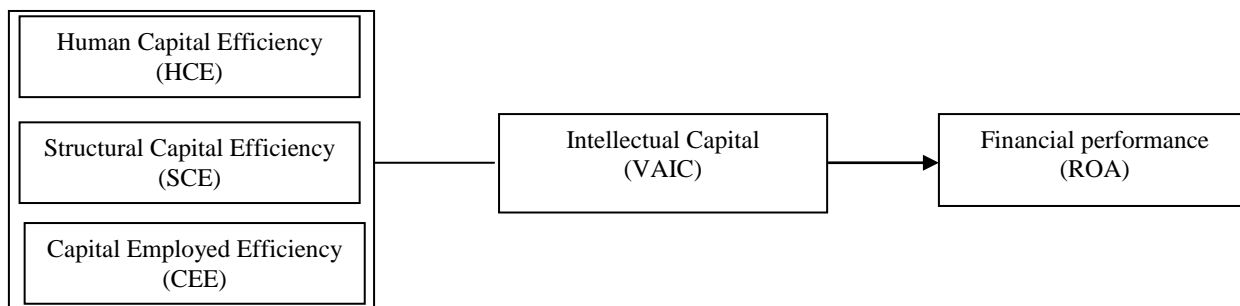


Figure 1: Proposed model

This study proposed the following hypothesis

H1: There is a significant positive relationship between the VAIC and financial performance of banks

H2: There is a significant positive relationship between the HCE and financial performance of banks

H3: There is significant positive relationship between the SCE and financial performance of banks

H4: There is significant positive relationship between the CEE and financial performance of banks

3. Research methodology

3.1 Sample and data collection

The sample of the present study consists of 31 banks and is based on secondary data collected from annual report of the mentioned banks. Banks were selected on the basis of availability of information necessary for conducting the study and the readiness of Annual Reports for the financial year 2010-2013. Hence the applied sampling procedure could be defined as convenience sampling. Data was collected from the annual reports of the banks consistent with other related studies (Goh, 2005; Mavridis, 2005; Tan et al., 2007; Joshi et al., 2010; Joshi et al., 2013; Lipunga, 2014).

3.2. Variables and empirical models

Firm Performance = f (Intellectual Capital)

Or

$$FP_{it} = \beta_0 + \beta_1 IC_{it} + \mu$$

Where,

FP = Firm performance

IC = Intellectual Capital

The regression model used

$$ROA = \alpha + \beta_1 VAIC + \varepsilon \quad (1)$$

$$ROA = \alpha + \beta_1 HCE + \beta_2 SCE + \beta_3 CEE + \varepsilon \quad (2)$$

VAICTM Method

Although the measurement of intellectual capital is still a debatable issue, numerous methods have been developed to measure it. In this study, the Value Added Intellectual Capital (VAICTM) method, developed by Public (1997, 1998, 2001, 2002a, 2002b, 2004), was used.

VAICTM method is formulated as follows:

Equation (1) formalizes the VAICTM

$$VAIC = HCE + SCE + CEE$$

where:

VAICTM = value added intellectual coefficient for bank i,

CEE = capital employed efficiency coefficient for bank i,

HCE = human capital efficiency coefficient for bank i,

SCE = structural capital efficiency for company i.

The first step is calculating CEE, HCE and SCE. These three components of VAIC are calculated as follows:

$$HCE = VA / HC$$

$$SCE = SC / VA$$

$$CEE = VA / CE$$

Where

VA = Value added

HC = Human capital

SC = Structural capital

CE = Capital employed

The above variables of the model are calculated by following procedure:

$$VA = \text{OUTPUT} - \text{INPUT}$$

Output it is the total income generated by the firm from all products and services sold during the period t, and Input it represents all the expenses incurred by the firm during the period t except cost of labor, tax, interest, dividends and depreciation.

Although there are many ways to measure the performance of intellectual capital such as market value asset turnover employee productivity and Return on equity but for this study the ROA is picked as compared to ROE the ROA variable does take financial risk of banks into consideration.

Return on Asset (ROA)

Return on Asset is a profitability ratio that measures the firm's ability to generate profit using its asset. The greater the ROA, a firm is more efficiency in using its assets. This is one of the commonly used ratios to measure firm's financial performance, which is calculated by ROA

$$\text{Return on Asset} = \text{Net Income} / \text{Total Asset}$$

4. Findings and Discussion

The data collected has been analyzed using different statistical tests. First of all descriptive statistics relating to the variables of the study are presented. After that correlation analysis if provided

and in the end regression analysis is provided in order to establish relationships between the variables.

Descriptive statistics in the study are used to compare the means and standard deviation of the variables which are being

considered in the study. The variables considered in the study are return on assets (ROA), and value added intellectual capital coefficient (VAIC) and its components

Table 1: Descriptive Statistics for studies variables

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	117	-.25	.23	.0116	.04093
HCE	117	-1.6778	13.6373	2.058312	1.7019372
CEE	117	-.1419	.1058	.043591	.0301394
SCE	117	-1.5669	11.8036	.636440	1.5866086
VAIC	117	-1.1704	14.6063	2.738343	2.2109172

Table 1 above provides descriptive statistics of the variables considered in the study of banks operating in Tanzania. The minimum of the first dependent variable i.e. ROA is -.25 along with a maximum of .23. The mean and standard deviations of the variable are .0116 and .04093 respectively. The minimum and maximum for HCE, on the other hand are -1.6778 and 13.6373 respectively and mean for the variable is 2.0583 along with a standard deviation 1.7019. The next variable of the study is CEE which has minimum of -.1419 and maximum of .1058 along with a mean of .0435 and standard deviation of .03013. SCE has a

minimum of -1.5669 and a maximum of 11.80. The mean of the variable on the other hand is .6364 and a standard deviation of 1.5866. VAIC is the last variable has a minimum of -1.1704 and maximum of 14.6063. The mean average for this variable is 2.7383 and with a standard deviation of 2.21. To conclude it shows HCE has the highest mean among all the components of VAICTM. The mean of SCE and the one for CEE respectively, the CEE has the lowest mean among all the variables.

Table 2: Correlations Matrix of banks

		ROA	HCE	CEE	SCE	VAIC
ROA	Pearson Correlation	1	.477**	.685**	-.228*	.213*
	Sig. (2-tailed)		.000	.000	.014	.021
	N	117	117	117	117	117
HCE	Pearson Correlation	.477**	1	.295**	-.098	.703**
	Sig. (2-tailed)	.000		.001	.292	.000
	N	117	117	117	117	117
CEE	Pearson Correlation	.685**	.295**	1	-.271**	.046
	Sig. (2-tailed)	.000	.001		.003	.622
	N	117	117	117	117	117
SCE	Pearson Correlation	-.228*	-.098	-.271**	1	.638**
	Sig. (2-tailed)	.014	.292	.003		.000
	N	117	117	117	117	117
VAIC	Pearson Correlation	.213*	.703**	.046	.638**	1
	Sig. (2-tailed)	.021	.000	.622	.000	
	N	117	117	117	117	117

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

* . Correlation is significant at the 0.05 level (2-tailed).

The table 2 above, shows that ROA and HCE have moderate positive relation. So the ROA and HCE have correlation of 0.477 and are significant to each other. ROA and CEE also keep competitive strong correlation of 0.685 and are significant for both of them. The correlation between Structural Capital Efficiency (SCE) and ROA is -0.228 which is weak and negative. These two variables are also significant in relation to them. The correlation between ROA and VAIC is also positive and significant but weak at 0.213. This is lower compared to Human capital efficiency and capital employed efficiency.

The result describes that the CEE and HCE values are more significant to ROA than Structural Capital Employed Efficiency (SCE) and on the other hand SCE and HCE are more significant to VAICTM of Banks in operating in Tanzania. Regression analysis in the study is the final step of analysis which provides the estimation of the variables by considering performance related variables dependent variables and VAIC as independent variable.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.213 ^a	.046	.037	.04016

a. Predictors: (Constant), VAIC

Table 3 above provides model summary for the regression estimates relating to the model 1 which sought to establish the impact of VAIC on return on assets (ROA) for banks operating in Tanzania. The R square of the model is .213 which is quite low as it associates only 21% explanation of variation in ROA with VAIC. The adjusted R square of the model on the other hand is

4.6%. along with a standard error of .0401. This shows the model has no good explanatory power.

Table 4 provides the ANOVA results of the model 1 which considers ROA as dependent variable and VAIC as independent variable. The F statistics of the model is 5.484 which is quite low and indicates that the model is not a good fit.

Table 4: ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	.009	1	.009	5.484	.021 ^b
Residual	.185	115	.002		
Total	.194	116			

a. Dependent Variable: ROA

b. Predictors: (Constant), VAIC

Table 5 above provides the regression coefficient of the regression model 1 which assumes ROA dependent variable and VAIC as independent variable. The beta coefficient of VAIC is found to be .004 along with a t statistics of 2.342 which confirms that VAIC has a positive and significant impact on return on assets of banks in Tanzania. That leads us to accept our first

hypothesis H1 There is a significant positive relationship between the VAIC and financial performance of banks.

The results of the present study are in confirmation with the other studies by Chen *et al.* (2005), Tan *et al.* (2007), Ting and Lean (2009), Sharabat *et al.* (2010) in which it is clearly revealed that there was a significant positive relationship between VAIC and ROA.

Table 5: Coefficients^a

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	.001	.006		.128	.898
	VAIC	.004	.002	.213	2.342	.021

a. Dependent Variable: ROA

Table 6 on provides the model summary of the model 2 which estimates the impact of VAIC components on Return on Asset. R square for the model is .744% which indicates that independent variable i.e. VAIC components i.e. (CEE, SCE, HCE) causes

almost 74% variation in the dependent variable i.e. Return on Asset. The adjusted R square and standard error of the model are .554 and 2.7702 respectively.

Table 6: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
2	.744 ^a	.554	.542	2.7702	.554	46.746	3	113	.000

a. Predictors: (Constant), CEE, SCE, HCE

Table 7 provides the ANOVA results of the model 2. The F statistics of the model 2 is found to be 46.74 which indicate that

model is a good fit at the significance level of 5%.

Table 7: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	.108	3	.036	46.746	.000 ^b
	Residual	.087	113	.001		
	Total	.194	116			

a. Dependent Variable: ROA

b. Predictors: (Constant), SCE, HCE, CEE

The table 8 above shows Human capital and capital employed they are significant and positively with financial performance but the structural capital is not significant and is negatively influence with financial performance this may be because bank may fail to utilize full their structural capital. That leads us to accept our hypothesis H2 and H4 and reject hypothesis H3

H2: There is a significant positive relationship between the HCE and financial performance of banks

H3: There is significant positive relationship between the SCE and financial performance of banks

H4: There is significant positive relationship between the CEE and financial performance of banks

This can be summarized in table below:

Table 8: Coefficients^a

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	-.037	.005		-6.873	.000
	HCE	.007	.002	.300	4.567	.000
	CEE	.796	.092	.586	8.614	.000
	SCE	-.001	.002	-.039	-.598	.551

a. Dependent Variable: ROA

The table 8 above shows Human capital and capital employed they are significant and positive with the financial performance, but the structural capital is not significant and is negatively influenced with financial performance this may be due to bank may fail to utilize fully their structural capital. That leads us to accept our hypothesis H2 and H4 and reject hypothesis H3

H2: There is a significant positive relationship between the HCE and financial performance of banks.

H3: There is significant positive relationship between the SCE and financial performance of banks

H4: There is significant positive relationship between the CEE and financial performance of banks

The results were summarized in table below

Table 9: Results summary

Model	Hypothesis	Relation	Expected sign	Results	Accept/Reject
Financial Performance 1	H1	VAIC/ROA	+	+	Accept
Financial performance 2	H2	HCE/ROA	+	+	Accept
	H3	SCE/ROA	+	-	Reject
	H4	CEE/ROA	+	+	Accept

5. Conclusion

The present study attempted to investigate the relationship between intellectual capital (IC), and financial performance of the banks operating in Tanzania. The methodology adopted is the one of "Value Added Intellectual Coefficient" (VAICTM) and its components described into HCE SCE and CEE that has been previously utilized by similar studies (Chen et al., 2005; Firer and Williams, 2003; Williams, 2001). Despite the fact that Intellectual Capital is increasingly recognized as an important strategic asset for sustainable competitive advantage, the results of the present study fail to support such a claim in all the when the components are tested separately. Empirical results failed to support one of the proposed, Hypothesis three. Only verifying the relationship between Human capital efficiency and capital

employed efficiency. The finding shows there is still higher emphasis on physical asset than intellectual capital.

The results reveals the banks can get benefit by investing in more intellectual capital, as it shows the value added and Intellectual capital components were able to increase firm profitability. Investing in human capital is essential to achieve banks goals. The capital employed is found as the most important variable it shows the use of physical and financial assets must be effective and efficiency. The banks should put greater efforts in investing in Structural capital by being more innovative with high technology and supportive infrastructures.

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