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General Information

The journal is produced by the Faculty of Business Management at The Open University of Tanzania. It will accept theoretical, conceptual and research-based papers on a wide range of topics on business management in Africa and the world at large. It also accepts cases, book reviews and summaries of dissertations.

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Editorial Note

Dear Readers,
On behalf of the Board of the Journal of Pan African Business Management and my co-editor, I am glad to present Volume 7, Issue 1 of the journal. This is a bi-annual journal of the Faculty of Business Management (FBM) of the Open University of Tanzania (OUT). The journal encourages the submission of high quality and original research papers that matches the scope of the journal.

I am pleased to announce to our esteemed readers that the journal is now indexed in African Journals Online (AJOL). This is a promising sign for the performance of our journal. This would not have been possible without the constant support of board members and the intellectual generosity of readers and contributors (authors and reviewers).

May I take this opportunity to acknowledge the contribution of Dr. Henry L. Mambo for the grammar and content editing. Special thanks should go to Mr. Augustine Kitulo (our webmaster) for engineering the posting of the journal articles on our website. Furthermore, I would like to thank Ms. Josephine Temu for her tireless effort in typesetting all the articles to meet the journals' acceptable standards. Additionally, I would like to express my gratitude to my fellow editor, Dr. Nasra Kara, for all the hard work she has put into make this issue possible. Last but not least, I would also like to express my sincere vote of thanks to all the authors, reviewers, the publisher, the advisory board, and the editorial board of PAJBM for their support in bringing out yet another volume of PAJBM. We look forward to their unrelenting support in bringing out Volume 7 Issue 1 at the scheduled time.

The current issue will have ten scholarly articles in a range of different disciplines other than business management. The current issue addresses matters pertaining to unraveling the relationship between governance indicators and FDI in Tanzania: An empirical analysis on the impact of management efficiency and watch loans on the bankruptcy rate of commercial banks in Tanzania: a random effect model approach, exploring the causal links of public spending on bank-based financial development in African economies, not only adventurous but also leisure: Re-defining tourism in Tanzanian Mount Kilimanjaro national parks; influence of monitoring and evaluation practices on performance of Tobacco contract farming projects in Katavi Region, Tanzania. Others include; firms specific determinants of profitability of listed commercial services companies in Kenya and Tanzania, decision making practices on the implementation of curriculum icommunity-baseded secondary schools in Tabora Region, Tanzania, design of strategic

planning in improving public sector organizations performance at Tanesco, Tanzania, factors for pricing decision of food production in Mbeya City, Tanzania and the comparison between hospital brand images of public versus that of private hospitals in Kinondoni, Dar es Salaam, Tanzania.

Needless to say, any scholarly papers that you wish to submit, either individually or collaboratively, are much appreciated and will make a substantial contribution to the early development and success of the journal. Best wishes, and thank you in advance for your contribution to our journal.

Dr. Bukaza Chachage
Chief Editor: Pan African Journal of Business Management

Unravelling the Relationship between Governance Indicators and Foreign Direct Investment in Tanzania: An Empirical Analysis

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ABSTRACT

Foreign Direct investment (FDI) is recognized as a significant source of capital inflows that can stimulate economic growth in developing countries. In order to attract and benefit from FDI, governments have implemented various economic reforms and focused on improving governance indicators. This study investigated the causality effect of governance indicators on FDI inflows in Tanzania. The governance indicators examined in this study include; rule of law, regulatory quality, government effectiveness, control of corruption, voice and Accountability, political stability and absence of violence. Before measuring the causality effect between the variables, a stationarity, test was conducted using the Augmented Dickey-Fuller (ADF) test. Then the Granger Causality Test was used to address two-way linkages between variables. The data used in the study was secondary quantitative time series data obtained from the World Bank Worldwide Governance Indicators and the Bank of Tanzania from 1996 to 2021. The findings suggested a long-run causality running from governance indicators to FDI inflows in Tanzania. In the short run, voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption individually influence FDI inflows. Furthermore, the Granger causality test indicates that voice and accountability and political stability and absence of violence Granger cause FDI inflows. The other governance indicators also exhibited significant causality with FDI inflows. These results call for policy makers in Tanzania to focus on strengthening governance framework, ensure accountability, enhance investor protection, ensure political stability, promote the rule of law and prevent corruption in achieving increased FDI for sustained economic growth.

Keywords: *Governance Indicators, Granger Causality, Augmented Dickey-Fuller, FDI*

INTRODUCTION

Foreign Direct Investment (FDI) has been acknowledged as a reliable source of capital inflows that can spur economic growth in developing economies. Esew & Yaroson, (2014); Mugambi & Murunga, (2017), provided that FDIs typically make long-term commitments to their host nations. It is regarded as an outside source of funding that could be used to implement private sector growth and sustainable development goals (Alla *et al*., 2015; Hassan, 2017). Accordingly, the majority of developing nations have put in place a variety of economic reforms to boost FDI inflow and capitalize on it (Vinesh *et al*., 2014). Majority of governments from developed and developing countries agree that FDI can help them get through stagnation and even circumvent the poverty trap (Brooks *et al*., 2010). FDI is an establishment of production facilities in overseas countries representing a more direct involvement in the local economy with a longer-term relationship. FDI inflows are measured as a percentage of FDI inflows to the Gross Domestic Product (GDP) of a country (Khushnood *et al*., 2020). FDI inflows could be affected by various economic and non-economic factors. The non-economic determinants of FDI can be considered under the governance indicators i.e. regulatory quality, political stability, rule of law, etc. According to World Bank, "Governance consists of the traditions and institutions by which authority in a country is exercised" (World Bank, 2018).

A well-established government plays an active role in defining its investment environment, hence enabling favorable conditions for economic growth (Semenas, 2020). The World Bank (2020) provides six indicator measures for good governance including Rule of law, Government effectiveness, Regulatory Quality, Control of Corruption, Political stability and non-violenceand Voice and Accountability that are used to rank countries based on governance performance. These play an important role in shaping behavior of economic actors and stakeholders when assessing the risk of investments. Tanzania is the 33rd country in sub-Saharan Africa and receives the 4th greatest net inflow of foreign direct investment (FDI) as a percentage of GDP in East Africa, trailing behind the Democratic Republic of the Congo, Rwanda, and Uganda. Governance concerns like regulatory environments, corruption, and legal frameworks have been associated among the reasons Tanzania's FDI inflows have performed poorly in comparison to other nations. For instance, Mfalamagoha & Gwahula (2019) revealed that, corruption had a negative influence on FDI inflows, whereas rule of law (RL), regulatory quality, government effectiveness, and voice and Accountability posed no influence in the period 1996-2015. Recent data indicates that FDI inflows to Tanzania have experienced a positive trend, reaching USD 922 million in 2021, which represents an increase from the previous year's inflow of USD 685 million (Data Invest Tanzania, 2023). Furthermore, the total stock of FDI

in the country reached USD 17.1 billion, equivalent to approximately 24.4% of Tanzania's GDP. These figures highlight the growing significance of FDI in Tanzania's economy. Given this recent development, it becomes crucial to examine the role of governance indicators in contributing to the performance of FDI in Tanzania. The period from 2015 to 2023 has witnessed notable changes in governance, and it is essential to explore whether these indicators have had a causal effect on FDI inflows. Several studies have attempted to investigate the role of governance indicators on FDI in various parts of the world (Kurul & Yalta, 2017; Quaresima & Fiorillo, 2020; Blazys, 2020; Staats & Biglaiser, 2012). Some studies have attempted to focus in Tanzania but limited to few governance indicators mostly corruption and regulatory quality (Mramba, 2015; Paudel, 2016 & Mfalamagoha & Gwahula 2019). Hence, there are insufficient studies covering the role of broad aspects of governance indicators on FDI in Tanzania.

This study will attempt to fill the gap by specifically focusingon Tanzania, coveringa broad range of governance indicators, including rule of law, regulatory quality, government effectiveness, control of corruption, voice and accountability, political stability and violence. With such a comprehensive coverage, the study seeks to achieve a greater level of validity and robustness while offering a holistic view of governance areas that require attention to promote FDI in the country. This study is based on Dunning's (2006) theory of institutional factors, which posits that the inflow of foreign direct investment (FDI) into a foreign market is influenced by attractive institutional factors in the host country. The variables derived from this theory include; control of corruption (CC), government effectiveness (GE), regulatory quality (RQ), rule of law (RL), Voice and Accountability (VA), and political stability and absence of violence (PS) (Kaufmann, 2010; Wernick et al., 2014; Erkekoglu & Kilicarslan, 2016; Kurul & Yalta, 2017) One potential weakness of basing the study on Dunning's (2006) theory of institutional factors is that the theory may not fully capture the complexity and nuances of the relationship between institutional factors and FDI inflows (Stoian, 2013).While Dunning's theory provides a useful framework for understanding the general influence of institutional factors on FDI, it may not account for all the specific contextual factors that could impact FDI inflows in a particular host country.Additionally, the theory was developed in 2006, and since then, there may have been changes in the global economic landscape and the understanding of institutional factors. Newer theories or frameworks may have emerged that provide a more comprehensive and up-to-date understanding of the relationship between institutions and FDI (Stoian, 2013). A theory that is similar to Dunning's (2006) theory of institutional factors is the "New Institutional Economics" (NIE) theory. It is a theoretical framework that has been developed and expanded upon by multiple scholars over time. Some of

the prominent contributors to the NIE theory include Williamson, 2007; North, 1999; Coase, 1937, and Ostrom, 1990. The NIE theory also emphasizes on the role of institutions in shaping economic outcomes, including foreign direct investment (FDI). It focuses on the impact of formal and informal rules, property rights, and governance structures on economic behavior and performance.

Like Dunning's theory, the NIE theory recognizes that the quality of institutions in a host country can influence the attractiveness of FDI. It emphasizes on the importance of property rights protection, rule of law, contract enforcement, and regulatory frameworks in facilitating or hindering FDI inflows. The NIE theory provides a broader understanding of institutions by considering both formal e.g., laws, regulations and informal (e.g., social norms, cultural values) institutions and their interactions. It recognizes that institutions shape the incentives and behavior of economic actors, including foreign investors, and can have a significant impact on investment decisions(Quaresima & Fiorillo, 2020; Blazys, 2020; Zhang et. al (2021; Byaro et. al (2022; Saidi et al., 2013; Lucke & Eichler, 2016; Jadhar, 2012).

Empirical Literature Review

Foreign Direct Investment (FDI) inflows are influenced by various governance indicators, including Rule of Law (RL), Regulatory Quality (RQ), Government Effectiveness (GE), Control of Corruption (CC), Voice and Accountability (VA), and political stability(PS) and absence of violence (Kurul & Yalta, 2017; Bouchoucha, 2022; Saha et al, 2022). Extensive theoretical and empirical research has consistently demonstrated the significant role of FDI inflows in promoting economic progress in countries. For instance, McGrattan and Waddle (2020) employed the neoclassical growth model in their study and underscored the substantial impact of foreign investment on the economic growth of the United Kingdom. In a case study on Romania, Nistor (2014) established a strong association between FDI inflows and the country's GDP growth rate. Quaresima and Fiorillo (2020) and Blazys (2020) explored the significance of good governance as a crucial driver of economic development. Their research studies highlighted the positive and influential role of institutional reforms in fostering economic growth within a nation. Epstein and Gang (2019) investigated the relationship between fundamental socio-economic challenges (such as poverty, corruption, and underutilization of resources) and good governance. Their findings emphasized that effective and efficient government policies are essential prerequisites for the economic development of a country. Staats and Biglaiser

(2012) and Zhang et. al (2021) emphasize on the importance of the rule of law and judicial strength as key determinants of FDI inflows in 17 Latin American countries.

Similarly, Henisz (2000) and Henisz and Williamson (2007) argue that weak protection of property rights exposes multinational companies (MNCs) to the risk of expropriation, thereby affecting their investment decisions.Kapuria-Foreman (2007) and Dussaux et.al (2022) finds that providing greater assurances for contract compliance and respect for property rights are crucial factors in attracting FDI. Daude and Stein (2007) and Saha et al, 2022)found out that governance factors significantly influence inward FDI, while Mauro (1995) and Spyromitros and Panagiotidis (2022) highlights the adverse impact of corruption on investment inflows and subsequent economic growth. Beavan et al. (2004) and Bouchoucha, (2022) also find that governance indicators play a significant role in determining FDI inflows, particularly in relation to the development of the rule of law. Contrary to expectations, Kersan-Skabic (2013) found out that among governance factors, only corruption has a significant negative impact on FDI inflows. Despite their anticipated importance, government effectiveness, rule of law, and political stability do not significantly influence FDI inflows. Maric and Kristina (2017) and Onody et. al (2022) suggest that in countries with rigid regulations and high levels of bureaucracy, corruption can paradoxically help to remove barriers and expedite investment processes. Erkekoglu and Kilicarslan (2016) and Byaro et. al (2022) discover that an increase in government effectiveness reduces FDI inflows. Similarly, a study by Daude and Stein (2004) concludes that unpredictable policies threaten FDI inflows. Siddica & Angkur (2017) found out that the rule of law positively affects FDI, while government effectiveness has a negative and statistically significant impact. Amal et al. (2010) and Chen et al. (2022) also find a negative relationship between government effectiveness and FDI inflows in eight Latin American countries. Sedik & Seoudy (2012) examined 20 MENA countries between 1999 and 2010 and found out that regulatory quality has a positive and significant effect on FDI inflows in the region. Saidi et al. (2013) investigated the relationship between governance variables and FDI inflows in 20 developed and developing countries from 1998 to 2011, and found that regulatory quality positively impacts FDI inflows. Yonis, Ochi, and Ghadri (2013) & Brkovic (2021) also find a positive and statistically significant impact of regulatory quality on FDI inflows. Lucke and Eichler (2016) study institutional determinants of FDI in

94 countries from 1995 to 2009 and find a positive impact of regulatory quality on FDI inflows. However, Mramba (2015) finds no significant relationship between regulatory quality and FDI inflows in Tanzania. Salem and Baum (2016) reveal that political stability and absence of violence (PSV) positively and significantly impact FDI, particularly in the real estate sector.

Summary of Empirical Literatures

Author(s)	Area	Methodology	Findings
Kurul & Yalta (2017)	Relationship between institutional factors and foreign direct investment (FDI) inflows in developing countries	Two step system GMM	Control of corruption, government effectiveness and voice and accountability have significant positive impacts on FDI flows
Bouchoucha, 2022	Governance and foreign direct investment: is the low and middle income Africa region different?	Two step system GMM	Overall governance indicators attract FDI inflows in African and its sub-regions
Saha et al, 2022	Effects of institutional quality on foreign direct investment inflow in lower-middle income countries	Two step system GMM	Control of corruption and regulatory quality accelerate foreign investment Better rule of law, and voice and accountability impede it foreign investment. No significant effect on other institutional factors
Quaresima and Fiorillo (2020)	Impact of Good Governance Indicators on the Inflow of Foreign Direct Investment (FDI) In Pakistan	Auto Regressive Distributed Lag	There is a significant effect of Political Instability, Regulatory Quality and Government Effectiveness on FDI. Rule of Law and Corruption have insignificant effect on FDI
Maric and Kristina (2017)	**The Role of Institutions in Attracting Foreign Direct Investments**	Comparative statistics	Institutional quality in the host country play significant role in attracting Foreign Direct Investment.
Onody et. al (2022)	**The impacts of corruption and environmental degradation on foreign direct investment: new evidence from the ASEAN+3 countries**	The panel Autoregressive Distributed Lag (ARDL) approach	There is a negative relationship between corruption and FDI
Erkekoglu and	**Do political risks affect the**	Driscoll-Kraay fixed effects	Political stability and Government

Kilicarslan (2016)	**foreign direct investment inflows to host countries?**	model	effectiveness, decreases foreign investment
Byaro et. al (2022)	**Does Institutional Development attract Foreign Direct Investments in Sub-Saharan Africa?**	Two step system GMM	Among the six institutional factors only the rule of law and government effectiveness have positive and statistically significant effects in attracting FDI inflows in sub-Saharan Africa.
Siddica and Angkur (2017	**Does Institution Affect the Inflow of FDI?**	Random Effects (RE) and Fixed Effects (FE) panel data models	Investment profile and law and order have positive effect on FDI Bureaucratic quality has negative effect
Saidi et al. (2013)	**The effects of good governance on foreign direct investment inflows in Arab countries**	Panel regression based on an augmented gravity model	FDI is affected significantly by all governance indicators, except the rule of law and control of corruption.
Lucke and Eichler (2016)	**Foreign direct investment: the role of institutional and cultural determinants**	Two step system GMM	Institutional and cultural quality is important for FDI
Salem and Baum (2016)	**Pooled OLS regression**	Pooled OLS regression	Political stability and absence of violence positively and significantly impact FDI in the real estate sector.

Studies above collectively highlight the varying impacts of governance indicators on FDI inflows, emphasizing the importance of factors such as the rule of law, property rights protection, corruption, government effectiveness, and regulatory quality in attracting foreign investment. That is, while some studies acknowledge all the six governance indicators as important drivers in accelerating FDI (Lucke & Eichler, 2016; Salem & Baum, 2016), others find that contribution to be limited to only few indicators, with the rest offering no significant contribution (Kurul & Yalta, 2017; Bouchoucha, 2022; Saha et al, 2022, Quaresima & Fiorillo, 2020; Byaro et. al, 2022). On the other hand, there are also studies proposing the possibility of rigid regulations, high levels of bureaucracy and corruption to be helpful in smoothening the investment processes. Hence it is evident that, literatures provide conflicting results on the relationship between governance indicators and FDI inflows across countries.

Additionally, most of the available studies focus on the relationship between governance indicators and FDI to a group of countries like developing countries (Kurul & Yalta, 2017; Bouchoucha, 2022; Saha et al, 2022) and sub-Saharan Africa (Byaro et. Al, 2022; Ofori et. al, 2021; Ajide et. al, 2014). Although there are other studies focusing on individual countries (Quaresima and Fiorillo, 2020; Khan et. al, 2019), to the best of author's understanding there are insufficient studies focusing on the relationship between the broad range of all six governance indicators and FDI, despite of the dynamics taking place in Tanzania. Hence, this study will not only fill the gap of the conflicting results on the relationship between governance indicators and FDI, but also focus on the broad range of all the six governance indicators in Tanzania so as to provide insights for policymakers and stakeholders seeking to promote FDI inflows in Tanzania for economic development through increased understanding of the relationship between governance indicators and FDI.

Methodology

Data and Variables

This study utilized data from the Worldwide Governance Indicators (WGI) project, which provides comprehensive information on aggregate and individual governance indicators. The variables examined in this study included; Rule of Law, Regulatory Quality, Government Effectiveness, Control of Corruption, Voice and Accountability, and Political Stability and absence of Violence. These indicators were measured on a scale ranging from -2.5 to +2.5, with higher values denoting enhanced governance quality for more than 200 countries and territories. The dataset covers the period from 1996 to 2021.The indicators used in the analysis were as follows. These aggregate indicators combine the views of a large number of enterprises, citizen and expert survey respondents in industrial and developing countries.

They are based on over 30 individual data sources produced by various survey institutes, think tanks, non-governmental organizations, international

organizations, and private sector firms. The Foreign Direct Investment (FDI) data were obtained from the Bank of Tanzania (BOT) and cover the period from 1996 to 2021.The BOT and TIR datasets are accessible at www.bot-tz.org.

Estimation Strategies and Techniques

Stationary Tests

The stationarity of a series is a significant phenomenon with implications for its behaviour. Time-series stationarity refers to the statistical characteristics of a series over time, such as its mean and variance. If these characteristics remain constant over time, the series is considered stationary; otherwise, it is classified as non-stationary. A series is denoted as I(0) if it is stationary without differencing, whereas a series that requires differencing to achieve stationarity is represented as I(1). In order to analyze multivariate time series and determine the integration of variables, the augmented Dickey-Fuller (ADF) test was proposed and employed. This test, as described by Dritsaki (2004) and Ahmad et. al (2021), provides evidence regarding the variables' integration status.

Model Specification and Estimation of OLS Framework

This study employed an econometric model with "FDI" as the dependent variable and Governance indicators as independent variables, with subscription representing the respective variables at time "t," as demonstrated in the equation below.

$$FDI_{i,t} = \propto_0 + \beta_1 CC_{it} + \beta_2 RL_{it} + \beta_3 RQ_{it} + \beta_3 GE_{it} + \beta_4 pPSV_{it} + \beta_5 VA_{it} + \varepsilon_t \ldots 1$$

Where;
CC=Control of Corruption,
RL=Rule of Law,
RQ=Regulatory Quality
GE=Government Effectiveness
PSV=Political Stability
VA=Voice and Accountability
T=Time period,
ε= Errorterm
$\beta 1, \beta 2, \beta 3 \ldots . \beta n$=Coefficients of independent variables.

Johansen Tests for Co-integration

The Johansen test is utilized to analyze co-integration, which refers to a long-term relationship among multiple variables. This statistical method employs the trace test to compare the null hypothesis of "r" co-integrating relationships with the alternative hypothesis of "n" co-integrating relationships. In this

context, "r" represents the trace test and "n" represents the number of variables in the formula, for r = 0, 1, 2,... n-1. Its equation was calculated using the following formula:

$$RL_{tr}(r/n) = -T * \sum_{i=r+1}^{n} \log(1 - a_1) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 2$$

This study employed Granger Causality Test to measure the causality effect between the variables. According to Granger (1969), Granger Causality test, which was first proposed in 1969, is a statistical hypothesis test for determining whether one time series variable is useful in forecasting the behavior of another variable. In time series analysis, statistical tools and techniques such as; Augmented Dickey–Fuller (ADF) occupy a very important role in having more authentic statistical outcomes (Chen et al., 2019). In this study, all variables are in time series, so Augmented Dickey–Fuller (ADF) is applied to ensure each variable's stationarity. The study conducted the pairwise Granger causality test at level and at different lag order (lag 2 and lag 4).

Granger Causality Test Model

Granger model equations were constructed based on the null and alternative hypotheses as follows;

Ho: governance indicator (x) does not Granger-cause FDI inflows (y)

Ha: governance indicator (x) Granger-cause FDI inflows (y)

$$y_t = \alpha_0 + \alpha_1 y_{t-1} + \ldots + \alpha_l y_{t-l} + \ldots\ldots + \beta_1 x_{t-1} + \cdots + \beta_l x_{t-l} + \varepsilon_t$$

$$y_t = \alpha_0 + \alpha_1 x_{t-1} + \ldots + \alpha_l x_{t-l} + \ldots\ldots + \beta_1 y_{t-1} + \cdots + \beta_l y_{t-l} + \mu_t$$

Model Specification

Pair wise Granger Causality Models

Based on Atmadja (2005) approach as applied byKumo (2012), we define pair wise Granger causality models as follows:

$$FDI_t = \alpha_{10} + \sum_{i=1}^{m} \alpha_{1i} FDI_{t-i} + \sum_{j=1}^{n} \beta_{1j} CC_{t-j} + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad 1$$

$$CC_t = \alpha_{20} + \sum_{j=1}^{n} \beta_{2j} CC_{t-j} + \sum_{i=1}^{m} \alpha_{2i} FDI_{t-i} + \mu_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad 2$$

$$FDI_t = \alpha_{30} + \sum_{i=1}^{m} \alpha_{3i} FDI_{t-i} + \sum_{j=1}^{n} \beta_{3j} RL_{t-j} + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad 3$$

$$RL_t = \alpha_{40} + \sum_{j=1}^{n} \beta_{4j} RL_{t-j} + \sum_{i=1}^{m} \alpha_{4i} FDI_{t-i} + \mu_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad 4$$

$$FDI_t = \alpha_{50} + \sum_{i=1}^{m} \alpha_{5i} FDI_{t-i} + \sum_{j=1}^{n} \beta_{5j} GE_{t-j} + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad 5$$

$$GE_t = \alpha_{60} + \sum_{j=1}^{n} \beta_{6j} GE_{t-j} + \sum_{i=1}^{m} \alpha_{6i} FDI_{t-i} + \mu_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad 6$$

$$FDI_t = \alpha_{70} + \sum_{i=1}^{m} \alpha_{7i} FDI_{t-i} + \sum_{j=1}^{n} \beta_{7j} PS_{t-j} + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad 7$$

$$PS_t = \alpha_{80} + \sum_{j=1}^{n} \beta_{8j} PS_{t-j} + \sum_{i=1}^{m} \alpha_{8i} FDI_{t-i} + \mu_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad 8$$

$$FDI_t = \alpha_{90} + \sum_{i=1}^{m} \alpha_{9i} FDI_{t-i} + \sum_{j=1}^{n} \beta_{9j} RQ_{t-j} + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad 9$$

$$RQ_t = \alpha_{100} + \sum_{j=1}^{n} \beta_{10j} RQ_{t-j} + \sum_{i=1}^{m} \alpha_{10i} FDI_{t-i} + \mu_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad 10$$

$$FDI_t = \alpha_{110} + \sum_{i=1}^{m} \alpha_{11i} FDI_{t-i} + \sum_{j=1}^{n} \beta_{11j} VA_{t-j} + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad 11$$

$$VA_t = \alpha_{120} + \sum_{j=1}^{n} \beta_{12j} VA_{t-j} + \sum_{i=1}^{m} \alpha_{12i} FDI_{t-i} + \mu_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad 12$$

Where:

FDI is Foreign Direct Investment, ***RL*** is Rule of law, ***GE*** is Government effectiveness, ***RQ*** is Regulatory Quality, ***CC*** **is** Control of Corruption**, PS** **is** Political stability and non- violence**, VA** **is** Voice and Accountability**, t** is time series, ***β*** is coefficient for all variables we want to explain their behaviour ,**α** is a constant term or vertical intercept which represents the value of the selected variable when other variables are set equals to zero, ***ε and*** μare the error terms.

Vector Error Correction Model

When two series exhibit co-integration, they indicate a long-term equilibrium relationship. Consequently, employing the "VECM" (Vector Error Correction Model) to assess the short-run changes and deviations from equilibrium in the co-integrated series becomes meaningful. Presented below is a depiction of the "VECM" linear regression model.

$$\nabla Y_t = \propto_1 + p_1 e_1 + \sum_{i=0}^{n} \beta i \Delta Y_{t-i} \sum_{i=0}^{n} \delta i \Delta X_{t-i} + \sum_{i=0}^{n} yiZ_{t-i} \ldots\ldots\ldots 4$$

$$\Delta Y_t = \propto_2 + p_2 e_{i-1} + \sum_{i=0}^{n} \beta i \Delta Y_{t-i} \sum_{i=0}^{n} \delta i \Delta X_{t-i} + \sum_{i=0}^{n} yiZ_{t-i} \ldots\ldots\ldots 5$$

The "VECM" co-integration test provides information about the number of co-integrating vectors. For example, if there are two linearly independent non-stationary variable combinations with a rank of two, they will be considered stationary. In the previous equations, if the "ECM" (Error Correction Model) coefficient is both negative and large (i.e., e i-1), any short-run fluctuations between the independent variables and the dependent variable will lead to a stable long-run relationship among the variables.

Results and Discussion

Descriptive Statistics

Descriptive statistics were calculated to provide insights into the average levels and variations of FDI inflows and governance indicators. The results indicated an average FDI inflow of approximately 20.20, with moderate levels observed for Voice and Accountability, Political Stability and absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. This suggests that, on average, the country experienced a moderate level of foreign direct investment. The minimum value of 13.17 indicated a relatively lower FDI inflow, while the maximum value of 21.47 represents a higher level of FDI. VA had the mean value of -0.34 which indicated that, on average, there might be some challenges related to the voice and Accountability of institutions in the country. The indicator ranges from -0.73 (lower Accountability) to -0.13 (relatively better Accountability).

PSV had the average value of -0.391 suggests a moderate level of political stability and absence of violence. The indicator ranges from -0.856 (lower stability) to 0.089 (relatively higher stability). GE had the meanvalue of -0.605 implies that, on average, there might be some inefficiencies or limitations in the government's effectiveness. The indicator ranges from -0.832 (lower effectiveness) to -0.424 (relatively better effectiveness).RQ hadthe average value of -0.501 suggests that, on average, there may be room for improvement in regulatory practices and quality. Rule of Law (RL): The mean RL value of -0.417 implies that, on average, the country may face challenges in upholding the rule of law. The indicator ranges from -0.588 (lower adherence to the rule of law) to -0.166 (relatively better adherence).CC had the average value of -0.576 suggests that, on average, there may be issues with controlling corruption within the country. The indicator ranges from -0.841 (lower control of corruption) to -0.229 (relatively better control). Table 1 illustrates the findings.

Table 1: Descriptive Statistics for the Study Variables

Variable	Mean	Std. Dev.	Min	Max
FDI	20.19618	1.644767	13.17496	21.4652
VA	-0.34	0.19	-0.73	-0.13
PSV	-0.3911929	0.2488318	-0.8555472	0.0891812
GE	-0.6046297	0.1057034	-0.8322633	-0.4235085
RQ	-0.500545	0.0996613	-0.6738675	-0.3532739
RL	-0.4174671	0.1119136	-0.587953	-0.1662878
CC	-0.5760494	0.1801729	-0.8409316	-0.2285772

Source: Researcher (2023)

Unit Root Test

The Augmented Dickey Fuller (ADF) test for unit root is reported for the impact of the growth enhancing factors in Table 4.2. The results for constant and no time trend and for constant and time trend are reported for both levels and differenced of the variables. For the ADF test, the null Hypothesis states that the variable has unit root or is not stationary whereas the Alternative Hypothesis states that the variable does not have unit root meaning it is stationary. The ADF test for unit root was applied to the variables at level and after log transformation. Since for both cases the absolute values computed of the Test statistics-Z (t) do not exceed the critical values of 1% and 5% and 10%, following Gujarat (2003) we conclude that all variables are non-stationary at lag 0. One solution for making the data stationary is to difference the variables. After differencing the log values of all variables, as indicated in Table 5, it was found that that, they all become stationary. That is, the

computed absolute values of the test exceed the critical values at 1%, 5% and 10% and therefore the null hypothesis is rejected. All the above tests were performed with constant and trend.

Table 5: ADF Test Result for Difference Natural Logs of Variables trend RegressatLag 0

Variables	Test Statistics Z (t)	Critical Values (lag 0) With trend			MacKinnon approximate p-value for Z(t)
		1%	5%	10%	
DLNFDI	-4.335	-4.380	-3.600	-3.240	0.0028
DLNVA	-4.384	-4.380	-3.600	-3.240	0.0023
DLNPSV	-4.935	-4.380	-3.600	-3.240	0.0003
DLNGE	-4.224	-4.380	-3.600	-3.240	0.0041
DLNRQ	-5.148	-4.380	-3.600	-3.240	0.0000
DLNRL	-5.595	-4.380	-3.600	-3.240	0.0001
DLNCC	-4.902	-4.380	-3.600	-3.240	0.0003

Source: Researcher (2023)

Johansen Co-integration Test

The Johansen test for cointegration was conducted to establish relationships amongst the key study variables and is reported in Table 6. The results indicate that the variables in this study have a long term relationship. In this test, the null hypothesis indicates no cointegration amongst the variables against the alternative that there is cointegration. The null hypothesis is rejected because the trace statistic exceeds the 5% critical value.This is indicated in Table 4.11 where the trace statistic for rank 0 is 116.8515 which is greater than the critical value given as 94.15 meaning there is no cointegration. The variables reveal 1 cointegration amongst the variables because at rank 1, the trace statistics of 68.5104* is less than the critical value of 68.52 at 5%. The subsequent rank values indicate rejection of the null hypothesis, so they are all cointegrated. Therefore, as shown in Table 6 the variables are moving together in the long run or have a long-term relationship. The 1 co-integration means the VECM test can now be run.

Table 6: Johansen Cointegration Test

Rank	Parameters	Log Likelihood	Eigenvalue	Trace Statistic	Critical Value (5% level)
0	6	121.02345	-	116.8515	94.15
1	17	145.19398	0.89994	68.5104	68.52
2	26	158.90259	0.72899	41.0932	47.21
3	33	168.84494	0.61205	21.2085	29.68
4	38	175.53323	0.47111	7.8319	15.41
5	41	178.6741	0.25854	1.5501	3.76
6	42	179.44917	0.07116	-	-

Source: Researcher (2023)

Vector Error Correction Model

Following the Johansen cointegration test the **Vector Error Correction**

Model

(VECM) test was run after confirming the variables were cointegrated. The Vector Error Correction Model addresses both the issues of Long Run causality and Short Run Causality. The results are presented in Table 7. The target model is the model having the dependent variable, FDI Inflow. Since VECM converts the variables into first difference the time series variables are a stationary data. The Error term Cointegrating equation 1 in the VECM model has a negative coefficient (-1.411656) and it is significant as its p value is 0.000 which is less than 5%. This means there is long run causality between the variables. The value of the speed of adjustment indicates the model is adjusting fast at the rate of 146% towards the long run equilibrium. Also, the negative sign of the coefficient of the error correction term means there is a long run Causality running from Voice and Accountability, Political stability and absence of violence, Government effectiveness, Regulatory quality, Rule of law and control of corruption to Foreign Direct Investment. Secondly, the short run causality of the individual variable is given by the coefficient of the first difference of the independent variables. Voice and Accountability is significant at Lag and with a positive slope, political stability and violence is significant at lag 2 with negative coefficients, government effectiveness have a positive coefficient at lag 1 and 2 meaning they have short run causality on FDI inflow but significant at lag 2, Regulatory quality is significant at lag 1 and 2 but with a negative slope at lag 2, Rule of Law is significant at lag 1 with a positive coefficient not significant at lag 2 with a negative coefficient, control of corruption is significant in both lag 1 and 2 with a negative coefficient in lag 1. All the above explanatory variables individually influence dependent variable.

Table 7: Vector Error Correction Model

Variable	Coef.	Std. Err.	z-value	P-value	95% Conf.	Interval
D_LNFDI						
_ce1 L1.	-1.411656	0.3611116	-3.91	0.000	-2.119422	-0.7038903
LNFDI						
LD.	-0.4939065	0.1503599	-3.28	0.001	-0.7886064	-0.1992066
L2D.	-0.5628576	0.1345532	-4.18	0.000	-0.826577,	-0.2991382
VA						
LD.	12.16234	3.102478	3.92	0.000	6.081599	18.24309
L2D.	-26.1623	4.140437	-6.32	0.000	-34.2774,	-18.04719
PSV						
LD.	-1.363231	1.026279	-1.33	0.184	-3.374701	0.6482385
L2D.	-2.443298	1.106549	-2.21	0.027	-4.612095	-0.2745018
GE						
LD.	3.143135	4.431277	0.71	0.478	-5.542007	11.828
L2D.	22.63215	6.878019	3.29	0.001	9.151483,	36.11282
RQ						
LD.	24.82244	5.306487	4.68	0.000	14.42191	35.22296
L2D.	-16.44489	7.61866	-2.16	0.031	-31.37719	-1.512593
RL						
LD.	10.62948	3.698479	2.87	0.004	3.380597	17.87837
L2D.	-5.154501	4.880969	-1.06	0.291	-14.7210	4.412023
CC						
LD.	-12.1097	2.697145	-4.49	0.000	-17.396	-6.82339
L2D.	4.269985	1.566633	2.73	0.006	1.199441	7.340529
_cons	0.0176917	0.1625765	0.11	0.913	-0.3009524	0.3363357

Source: Researcher (2023)

Granger Causality Test

The Granger Causality Test shows the direction of causal links between the variables as bi-directional, uni-directional and no causality. Using the granger causality test the results between FDI inflows, VA (Voice and Accountability) PSV Political Stability and Violence), GE (Government Effectiveness), RQ (Regulatory Quality), RL (Rule of Law) and CC (Control of Corruption) performed at lag 2 of all the variables are presented in Table 8.Pair wise granger causality test results are presented in appendix 1. With LNFDI as the dependent variable the null hypothesis is that Lagged VA variable does not Granger cause FDI INFLOW and the Alternative hypothesis is that Lagged VA variable does cause FDI INFLOW. The ganger causality test was conducted at lag 2 and the null hypothesis is rejected because the p value for VA causing FDI INFLOW at 0.013 is less than 5%. Therefore, lagged VA Granger causes FDI INFLOW also LNPSV does Granger cause FDI INFLOW because its p value at 0.0452 is less than 5%. Thus, p value for all the independent variables is significant and hence the Null Hypothesis is rejected because their p value is less than 0.05%, meaning that they jointly Granger cause FDI INFLOW.

Table 8: Granger Causality Wald Test

Equation	Excluded	chi2	df	Prob > chi2
LNFDI	LNVA	8.6308	2	0.013
LNFDI	LNPSV	1.2917	2	0.045
LNFDI	LNGE	68.973	2	0.000
LNFDI	LNRQ	18.106	2	0.000
LNFDI	LNRL	21.18	2	0.000
LNFDI	LNCC	86.38	2	0.000
	ALL	288.95	12	0.000

Source: Researcher (2023)

Discussion of Findings

The Granger causality test results provide valuable insights into the relationships between FDI inflows and the various governance indicators, namely VA (Voice and Accountability), PSV (Political Stability and Violence), GE (Government Effectiveness), RQ (Regulatory Quality), RL (Rule of Law), and CC (Control of Corruption). Similar to the predictions of Dunning's theory and as was found by Zhang et. al (2021) Kurul & Yalta, 2017; Bouchoucha, 2022; the findings of the study reveals that lagged VA and LNPSV variables significantly affected FDI inflows, indicating that improvements in voice and accountability and political stability could contribute to increased FDI inflows. Additionally, the governance indicators of GE, RQ, RL, and CC exhibit a significant Granger causality relationship with FDI inflows, emphasizing the importance of government effectiveness,

regulatory quality, rule of law, and control of corruption in attracting foreign investment.This is consistent with previous studies emphasising the positive relationship between voice and accountability, political stability, and FDI inflows (Kurul & Yalta, 2017). These findings suggest that improvements in governance indicators can enhance the attractiveness of a country for foreign investment. Furthermore, the significant Granger causality relationships of GE, RQ, RL, and CC with FDI inflows underscore the importance of government effectiveness, regulatory quality, rule of law, and control of corruption in attracting foreign investment. These results were aligned with the empirical literature that has highlighted the role of these governance indicators in influencing FDI decisions (Beavan *et al*., 2004; Salem & Baum, 2016).

The Vector Auto Regression (VAR) model results further support the relationship between governance indicators and FDI inflows. The high R-squared values indicate that the governance indicators collectively explain a substantial portion of the variation in FDI inflows. The finding was aligned with previous studies that have emphasized the significant impact of governance indicators on FDI inflows (Maric & Kristina, 2017; Saidi et al., 2013). In the same vein, referring empirical study conducted by Mfalamagoha and Gwahula (2019) using data from 1996 to 2015, it was found out that political stability and absence of violence (PS) in Tanzania granger-caused FDI inflows, indicating a positive influence of political stability on FDI but FDI did not granger-cause political stability, suggesting that FDI had no influence on political stability. Additionally, corruption (CC) was found to granger-cause FDI, implying a negative influence of corruption on FDI inflows. However, current study expands on these findings by demonstrating significant causal relationships between all governance indicators and FDI inflows, both in the short run and the long run in the period of 1996-2021.

Conclusion, Recommendations and Research Implications

This study examined the effect of governance indicators on FDI inflows in Tanzania from 1996 to 2021. The findings provided robust evidence of the relationship between governance indicators and FDI inflows in the country. The findings revealed a moderate level of FDI inflows in Tanzania during the study period. However, there is room for improvement in governance indicators such as voice and Accountability, government effectiveness, regulatory quality, rule of law, and control of corruption. These calls for policy makers in Tanzania to focus on strengthening governance framework, ensure accountability, enhance investor protection, ensure political stability, promote the rule of law and prevent corruption in achieving increased FDI for sustained economic growth. The unit root tests indicated that the variables were initially non-stationary but became stationary after first differencing or taking the natural logs. This suggests that changes in governance indicators can have a

long-term impact on FDI inflows. The Johansen cointegration test confirmed the existence of long-term relationships among the variables, indicating that changes in governance indicators can influence FDI inflows in Tanzania over the long run. The findings analysis also demonstrated both long-run and short-run causality between governance indicators and FDI inflows.

This implies that improvements in voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption can lead to increased FDI inflows in the short term and sustain them in the long term. The study provided evidence of the causal impact of governance indicators on FDI inflows. Lagged voice and Accountability, as well as political stability and absence of violence, were found to have a significant causal relationship with FDI inflows. Additionally, government effectiveness, regulatory quality, rule of law, and control of corruption were also found to be significant determinants of FDI inflows in Tanzania. This study's findings have theoretical implications related to Dunning's (2006) theory of institutional factors and his framework of Ownership, Location, and Internalization (OLI) advantages. Firstly, the study identified governance indicators such as; voice and accountability, government effectiveness, regulatory quality, rule of law, and control of corruption as significant determinants of FDI inflows aligns with Dunning's theory. According to Dunning, the ownership advantage of a multinational enterprise (MNE) includes intangible assets such as; managerial skills, technology, and brand reputation. Good governance indicators reflect a conducive institutional environment that supports foreign investors' effective utilization of these ownership advantages. Therefore, the study's findings reinforce the importance of institutional factors in attracting FDI, as highlighted by Dunning's theory. Secondly, the study's focus on the long-term impact of governance indicators on FDI inflows is consistent with Dunning's Ownership, Location, and Internalization (OLI) framework. Dunning argues that location advantages, including institutional factors, create a favorable environment for foreign investment. The evidence of cointegration between governance indicators and FDI inflows supports the notion that changes in governance can influence FDI inflows in Tanzania over the long run. This implies that improvements in governance indicators enhance the location advantage of Tanzania as an investment destination, making it more attractive for foreign investors. It is recommended that policymakers continuously monitor and evaluate the impact of governance reforms on FDI inflows, making necessary adjustments to ensure their effectiveness. This will ensure Tanzania posit itself as an attractive destination for foreign investment and harness the potential benefits of FDI for its economic development.

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Appendix: 1

Granger Causality Wald tests

. Equation	Excluded	chi2	df	Prob > chi2
LNFDI	LNVA	8.6308	2	0.013
LNFDI	LNPSV	1.2917	2	0.045
LNFDI	LNGE	68.973	2	0.000
LNFDI	LNRQ	18.106	2	0.000
LNFDI	LNRL	21.18	2	0.000
LNFDI	LNCC	86.38	2	0.000
	ALL	288.95	12	0.000
LnVA	LNFDI	75.427	2	0.000
LnVA	LNPSV	14.378	2	0.001
LnVA	LNGE	22.574	2	0.000
LnVA	LNRQ	146.2	2	0.000
LnVA	LNRL	77.442	2	0.000
LnVA	LNCC	30.447	2	0.000
LnVA	ALL	688.16	12	0.000
LnVA	LNFDI	.30717	2	0.858
LnPSV	LnVA	6.7005	2	0.035
LnPSV	LnGE	5.0551	2	0.080
LnPSV	LnRQ	.44575	2	0.800
LnPSV	LnRL	2.8346	2	0.242
LnPSV	LnCC	13.644	2	0.001
LnPSV	ALL	39.261	12	0.000
LnGE	LNFDI	5.5526	2	0.062
LnGE	LnVA	13.697	2	0.001
LnGE	LnPSV	20.571	2	0.000
LnGE	LnRQ	17.609	2	0.000
LnGE	LnRL	1.8193	2	0.403
LnGE	LnCC	4.6427	2	0.103
LnGE	ALL	207.46	12	0.000
LnRL	LNFDI	4.662	2	0.097
LnRL	LnVA	12.072	2	0.002
LnRL	LnPSV	3.1671	2	0.205
LnRL	LnGE	28.349	2	0.000
LnRL	LnRQ	19.371	2	0.000
LnRL	LnCC	8.6967	2	0.013
LnRL	ALL	138.34	12	0.000

. Equation	Excluded	chi2	df	Prob > chi2
LnCC	LNFDI	14.325	2	0.001
LnCC	LnVA	3.7082	2	0.157
LnCC	LnPSV	18.141	2	0.000
LnCC	LnGE	9.1665	2	0.010
LnCC	LnRQ	28.829	2	0.000
LnCC	LnRL	25.097	2	0.000
LnCC	ALL	215.95	12	0.000

Empirical Analysis on the Impact of Management Efficiency and Watch Loans on the Bankruptcy Rate of Community Banks in Tanzania: A Random Effect Model Approach

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ABSTRACT

This paper analyses the impact of management efficiency and watch loans on the bankruptcy rate of community banks in Tanzania, for the period ranging from 2006 to 2021. In Tanzania, for the period starting from 2017 to 2019, seven community banks were closed by the Regulator while others were being merged to increase their operational efficiency and going concern. The failure of these banks raised a lot of concerns among banks' stakeholders including private sector, the government and the general public. The study used archival reviews as one of the tools for secondary data collection in quantitative research where panel data were collected from community banks and the Bank of Tanzania publications. The employed sample size was 11 community banks, with a total of 176 observations. The panel data analysis has been conducted using statistical software (Stata) with the random effect model being used to generate regression results as one of the statistical models for panel data analysis. The research findings indicated significant negative correlations between the explanatory variables, namely, management efficiency and watch loan ratios with bankruptcy rates as computed using the Altman's model approach specific for developing countries. This paper contributes to the contagion theory by arguing that not only bank runs that causes bank failure, but also there are other factors such as; management inefficiency and high level of watch loans as justified by the theory of market structure and asymmetric information theory. Further, for the purpose of diminishing bankruptcy rate of community banks, the study recommends adequate credit management policy in terms of proper credit appraisal systems and strong corporate governance policy, which reduce level of watch loans and operational costs.

Keywords: *Management Efficiency, Watch Loans, Community Banks, Bankruptcy Rate and Altman's Model*

INTRODUCTION

The magnitude of the global financial crisis in 2007 and 2008 demonstrated how banks are inextricably linked to the global economy. The crisis identified

some of the causes as supported by Buthiena (2019) and Veitch (2019), which include poor management, weak bank stability, and a high level of non-performing loans as escalated by high level of watch loans. Researchers in Africa had identified some challenges facing community banks in many countries with diverse financial systems. In Kenya, Kipkirui (2018) indicated that effective risk management increases the performance of microfinance banks due to fact that good management enhance efficiency in terms of low operational cost and watch loans that eventually reduce the bankruptcy rate. In the same perspective, Mugo (2018) pointed out non-performing loans resulting from increased level of watch loans as a major determinants of credit risk upturns that finally affects the bankruptcy rate of microfinance banks. Further, Akani and Uzah (2018) indicated that Nigeria has also experienced rises of banks' distress and bankruptcy rate, which elevated unanswered questions, which justifies the necessity to investigate factors behind the bankruptcy of banks and reduce contagion effect on good operating banks.

In Tanzania, for the period from 2017 to 2019, seven (7) community banks went bankrupt, and some of them merged to increase their operational efficiency. The Tanzania banking sector is characterized by an anomalous increase in the level of watch loans, which are termed as a signal for bad loans at an average rate of above 5.5 percent. In same perspective, BOT (2021), Asima (2021), Nyagol and Otieno (2016) pointed out that high level of watch loans affects other loan categories, which include substandard, doubtful, and loss. Further, the banking sector in Tanzania is characterized by having different banks with unique physiologies in terms of management efficiency, that is why some of community banks fail in their operations due to this challenge.

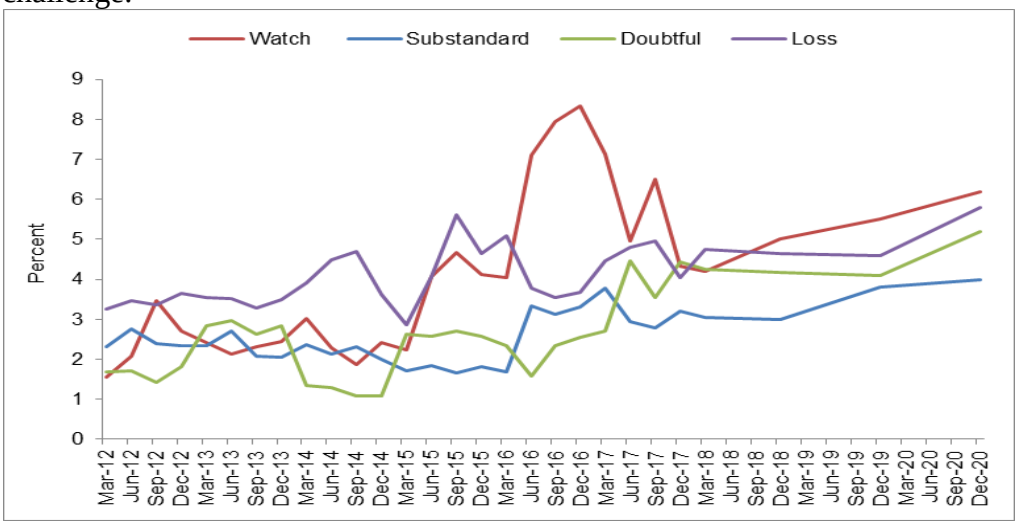

Figure 1.0: Trends of Watch Loan Ratios in Tanzania Banking Sector
Source: BOT, (2021)

However, some studies ended with inconclusive results. For instance, BOT (2021), IMF (2019), Lucas (2019), Amr (2019), Josephat (2019), Asongu & Odhiambo (2019). pointed out negative relationship between watch loans and banks' failure implying that when watch loans increases, the bankruptcy rate decreases while other reports such as that produced by National Bank of Rwanda (2018) explained positive relationship, which means that when watch loans increases, the bank failure also rises. In different thought, Kartika, Sulistyowati, Septiawan and Indriastuti (2022) portrayed no impact of watch loans and management efficiency against bank failure due to reason that watch loans are just indicator of non-performing loans, thus not directly related with bankruptcy rate.

Further, other referenced studies such as; Lotto (2019) did not focus on community banks sub-sector but mainly focused on all commercial banks, the individual bank, whole banking sector and based on certain region, thus creating a contextual gap. In addition, there is no any researcher who has computed the proxy of the bankruptcy rate of community banks as a dependent variable in Tanzania, hence creating a methodological gap. In addition, some studies such as; Asongu & Odhiambo (2019). used a case study strategy, key informant interviews and questionnaires as methods to collect primary data from the purposively selected respondents while Lucas (2019) used to bit regression and triangulation methods to analyze the collected secondary data, thus creating a methodological gap. Theoretical gap exists as constructed with facts from contagion theory. Muriithi (2017) supports the theory by explaining that good banks may fail due to fail of another bank caused by bank run (massive deposits withdrawal) as the effect of public panic. This theory is also supported by the view of the theory of lemons that evidenced a massive deposits withdrawal by customers (bank runs) when one bank fails in the market as a result of public panic (Sutton, 2006 & Ezenekwe, 2019). However, the theory is being challenged by not taking into consideration of other individual specific factors that absorb shocks exerted from the failed banks or have great influence on bank's failure rather than focusing only on the failure of a bank due to spillover effect of bank runs. In that regard, the ultimate intention of the study is also to address the key identified gaps. The primary objective is to assess the impact of explanatory factors, specifically management efficiency and watch loans ratio, which affecting the bankruptcy rates of community banks in Tanzania banking sector. In that manner, this study has decomposed the general objective into specific objectives for effective assessment of correlations between the variables. The first objective was to analyze the effect of management efficiency on the bankruptcy rate (Altman's Z-Score) of community banks in Tanzania banking sector while the second objective was to analyze the effect

of watch loan ratio on the bankruptcy rate (Altman's Z-Score) of community banks in Tanzania's banking sector.

The study used some assumptions as a combination of the underlying study variables for effective and successful completion of the study. The first assumption is that the financial intermediation is the main activity of community banks in Tanzania, which gather deposits and lend to deficit borrowers as evidenced by the financial intermediation theory of banking. The Second assumption was that an information gap exists between lenders and borrowers that leads to adverse borrower selection and, thus, results in increase of non-performing loans that may further increase the bankruptcy rate for community banks. Lastly, the third assumption is that there is a significant level of interconnectedness among banks, which may expose the sector into bankruptcy vulnerabilities via contagion and systemic risks. The study was based on four theories, namely; contagion theory, theory of market structure, asymmetric information theory and financial intermediation theory of banking. According to Schoenmaker (1996) and Diamond & Dybvig (1983), the contagion theory explained that if one bank fails due to the internal factors that are only in that one bank such as fraud and reported losses then other banks could be adversely affected in the long run. The theory further stated that banks are interconnected to each other by virtue of their linked and heterogeneity assets (Muriithi, 2017). Thus, in banking context, the theory concluded that good banks may fail due to fail of another bank caused by bank run as the effect of public panic. However, the theory is being challenged by other studies such as; Muriithi (2017), Mohamed and Magdy (2020) by not take into consideration individual specific factors that may absorb shocks exerted from the failed banks or have great influence on bank's failure rather than focusing only on the failure of a bank due to spillover effect of bank runs emanated from other failed banks. Sutton (2006) and Ezenekwe (2019) in their study about Market Structure, explained main variables in the theory of market structure, which include competition, market concentration (market share) and economies of scale (barrier to entry) as a result of good management. This implying that the bank with good management than other banks, tends to dominate the market (Ezenekwe, 2019; Basharat, 2020) and increase its going concern.

However, the theory of market structure is being challenged by not considering other factors that may increase barriers for a new entrant firm such as political influence and poor management of the respective firm (Basharat, 2020). The asymmetric information theory was first introduced by Arkelof (1970), which deals with the study of decisions in transactions where one party has more or better information than the others. Asymmetry of information occurs when lenders have little information about borrowers, which increases

the level of non-performing loans via watch loans and therefore intensifies the bankruptcy rates (Michael, 2021). This asymmetry happens through creation of an imbalance of power in transactions, which can sometimes cause the transaction to go away or a kind of market failure in the worst case. He first introduced the concept of asymmetric information in the paper "The Market for Lemons." Asima (2021), Buthiena (2019) and Werner (2016) supported the view of the study, which normally explains that information gap leads to adverse selection of the borrower, thus increase level of watch loans, which subsequently rise bankruptcy rates of community banks. Different theoretical review on failure of community banks indicated significant linkage between bankruptcy rate and the explanatory variables, namely, management efficiency and watch loans generated as a result of information gap. Some of these review such as; Ahmet and Harun (2019), Buthiena (2019) and Lucas (2019) pointed out that poor management efficiency and a high level of watch loans, negatively contribute abundantly to the upsurges in the bankruptcy rate of community banks. This is due to fact that when there is poor management of banks, the respective bank fails to expand business and compete with others in terms of lending portfolio and deposits, thus exposed to the vulnerability of bankruptcy. In that regard, community banks' management is responsible for creating fundamental centricity for increasing performance, thus helping to raise strength to withstand external shocks emanating from the macroeconomic environment (Ahmet & Harun, 2019). In the current banking sector with high network intensity among commercial and community banks, banks tend to increase the efficiency of management in order to strengthen their survival rate (Peter, 2018 & Ghislain, 2018) and therefore reduce their bankruptcy rate. In same argument, Josephat (2019) and Faqera (2019) argued that the effect of organization's management efficiency has great influence on the trends of bankruptcy rates when this pillar moves adversely because different stakeholders will be less interested in investing their funds, such as deposits. For the case of watch loans, Bank of Tanzania(BOT) (2021) justified that when these loans category increases, the possibility of bankruptcy rate also rises accordingly. This stance is based on further reasons that some of these loans normally migrate to other loan categories like substandard, doubtful and loss.

For instance, some literature reviews have argued that watch loans seemed to have a negative relationship with the bankruptcy rate, implying that when the level of watch loans is higher, it affects non-performing loans and therefore escalates credit risk for the respective bank, which then rise possibility of bankruptcy of community banks. In the same perspective, most reviews such as NBR (2018) indicates negative relationships between watch loans and bank failure based on same ground that when watch loans increases, the bankruptcy rates also decrease implying upturns of bankruptcy of community banks. Other

studies such as Peter (2018) and IMF (2019) shown that Tanzania's banking sector, has high level of watch loans, as evidenced by the high level of credit risk in the sector. In other context, watch loans are considered as non-performing loan indicators as being experienced by even big countries with different banking systems and economies like Italy and Greece. Therefore, some reviews explained watch loans as non-performing loans indicators rather that being a straight factor that may cause bankruptcy of community banks. Through various experience in the world, a lot of non-performing loans have been observed as a result of high level of non-performing loans. For instance, in Russian economy experienced a similar trend when the average level of watch loans impacted the non-performing loan ratio in the 1990s, which was about 15% but decreased significantly to about 3% in the early to mid-2000s before going back up (Nyagol & Otieno, 2016). In same manner, it has been stated that Regulator has the role to intervene when the banks indicate signals of bankruptcy. However, this risk remains high, as evidenced by the continuation of increases in the level of non-performing loans caused by an excessive level of watch loans. The review of empirical literature indicated presence of significant relationships between the explanatory variables, namely, management efficiency and watch loans against the bankruptcy rates of community banks. For instance, Faqera et al. (2019) he investigated the influence of management efficiency in banks' bankruptcy through a study titled "Bankruptcy and Corporate Governance: the Impact of Firm Performance and Macroeconomic Factors".

The study employed Z-Score bankruptcy model and management efficiency i.e., return on assets and return on equity as explanatory variables against banks' performance as dependent variable for the period of five years ranging from 2006 to 2010. The data analysis was conducted using the SPSS program while the selected sample consists of the Northern rock's bank. Based on the statistical results, the descriptive statistics illustrated that management efficiency of the company (the bank) has a negative correlation with a score of -17 percent. On the other hand, it was also observed that there is a significant positive influence between Altman Z score and performance in terms of return on equity. Generally, it was concluded that the lower the score, the higher the risk of bankruptcy for firms, including other financial institutions such as banks. For instance, the study suggested that if a Z-Score is above 0.001 shows financial soundness while underneath 0.10 recommends a high probability of failure. In different perspective, Lucas (2019) in the study of micro and macro-economic drivers of inefficiencies in community banks in Tanzania, stated that over a span of years, efficiency in Tanzanian Community Banks (CBs) had been at a low level. The study covered the period from 2002 to 2017. The dependent variable was inefficiency scores, while the explanatory variables used were management efficiency (net interest margin),

gross loan to total deposit (Gltd) ratio, return on average assets (RoaA), capital adequacy ratio (Car1), bank size (logAssts), gross domestic product (loggdp) and market lending rates (lrates). Using tobit regression and triangulation methods, the study analysed the drivers of inefficiency at community banks. The results indicated that management efficiency is statistically significant and positively related to bank inefficiency operations. Faqera et al. (2019) ended with negative correlation while Lucas (2019) ended with positive correlation between Management efficiency with banks' performance (survival of banks). Further, the study conducted by Lotto (2019) titled "Evaluation of Factors Influencing Bank Operating Efficiency in Tanzania's Banking Sector," using 36 commercial banks for the period between 2000 and 2017. The included variables were liquidity and capital adequacy as explanatory variables while management efficiency (operating efficiency) was used as dependent variable. The paper employed a robust random-effects regression model to estimate the relationship between bank's management efficiency and its determinants. The results shown that bank liquidity and capital adequacy have a positive relationship with bank management efficiency, implying that when management efficiency increases, level of liquidity and capital adequacy also increases, thus reduce bankruptcy rate of the respective bank. In addition, Dzomira (2014) in the study titled "Analysis of Bank Failures During Financial Tumult in Africa-Zimbabwe. A Historical Review". The paper described analysis of the bank failures phenomenon in Africa with major consideration in Zimbabwe banking sector, based on historical research design. The explanatory variables were management efficiency i.e. flawed corporate governance standards, liquidity and capital position while dependent variable was bank failure. From this study, it was discovered that the failing of banks was attributed to poor management efficiency, which caused drainage of liquidity and capital position of banks. In same perspective, Ariemba et al. (2016) in the study titled "The Effect of Bank Specific Factors on Financial Performance of Commercial Banks in Kenya. The main purpose of this study was to determine the effects of bank specific factors on the financial performance of commercial banks in Kenya for a period of 5 years, starting from the year 2011 to 2015. The dependent variable under investigation was return on assets (ROA). The independent variables were capital adequacy, asset quality, management efficiency, earnings ability and liquidity. The specific objectives of this research were to determine the effects of capital adequacy, asset quality, management efficiency, earnings ability on the financial performance of commercial banks in Kenya. In this research, the scope was all the 11 banks listed in the Nairobi securities exchange. This study adopted an explanatory approach by using panel data research design to fulfil the objectives. The researcher collected data on published financial statements of the 11 commercial banks listed in the Nairobi securities exchange for five years from 2011 to 2015. The collected data was analysed using multiple

linear regression models to show the effect of bank specific factors on financial performance of commercial banks. The results indicated that there was positive and significant association between ROA and all the independent factors. This imply that management efficiency has negative relationship with bankruptcy rate of banks while watch loans (as main indicator of non-performing loans) also has negative relationship with bankruptcy rate of banks. Further, the study explained that the asset quality of banks has been deteriorated due to high level of watch loans and low efficient of management of those banks, thus recommended mitigation for watch loans levels and having in place strong management in order to ensure that banks do not become insolvent.

Furthermore, the study conducted by Catherine (2020) with research title **"**Credit Risk Management and Financial Performance: A case of Bank of Africa (U) Limited" explained that adequate strategies to minimize watch loans (as the main indicator of non-performing loans) and high management efficiency play major role in improving credit risk management, which then reduce bankruptcy rates of a specific bank. In different view, Dzomira (2014) in his study titled "Analysis of Bank Failures During Financial Tumult in Africa-Zimbabwe: A Historical Review" described analysis of the bank failures phenomenon in Africa with major consideration in Zimbabwe banking sector, based on historical research design (qualitative design), which used analytical and comparative research approaches to study the bank failures phenomenon. From the study, Dzomira (2014) discovered that the failing of banks was attributed, among others, to high level of watch loans (non-performing loans), which caused drainage of liquidity and capital position of banks. Also, Munangi (2020) in his study titled "An Empirical Analysis of the Impact of Credit Risk on the Financial Performance of South African Banks" concluded that watch loans were negatively related with financial performance and positively related with bankruptcy rate of banks. This implies that the higher the incidence of watch loans (non-performing loans), the lower the profitability of the bank, thus increases bankruptcy rate of a specific bank. In addition, Emenike et al. (2014) in the study titled "Poor Management and Failed Banks: A Study of Banks with State Governments Participation in Nigeria" explained that banks fail when they become unable to meet demands from depositors and shareholders' funds being eroded due to poor management characterized by creation of bad loans (watch loans), insider abuses, and bad corporate governance culture among others. Other regulatory reports such as the financial stability report published by the Bank of Tanzania in 2020 and 2021 indicated that the level of watch loans in banks impacts the level of non-performing loans, which then drive the bank into bankruptcy if not well monitored. The reasons being that some proportion of these watch loans normally migrate into the substandard, doubtful, and loss loan

categories, which constitute level of non-performing loans, thus increasing bankruptcy rate. For instance, International Monetary Fund (IMF) in its financial assessment report of 2019, indicated that the classification of watch loans includes currently up-to-date loans accompanied by factors that could in the future affect borrowers' ability to service accounts or impair collateral, thus escalates bankruptcy rate of banks.

The National Bank of Rwanda through its published Stability Report of 2018, it indicated that the classification and descriptions of watch loans included currently up-to-date loans accompanied by factors that could in the future affect borrowers' ability to service their accounts or impair collateral. Both cited reports, explains watch loans as being having negative relations with bankruptcy rate. Indriastuti et al. (2022) conducted a study titled "Corporate governance and non-performing loans: the mediating role of financial performance". The research data were processed by structural equation modeling based on partial least squares. The results of this study indicated that the management efficiency as represented by audit committee, CEO duality and independent commissioners do not affect banks failure through high level of non-performing loans while financial performance positively affects non-performing loans and bank failure. They said that management efficiency i.e. audit committee, CEO duality, and independent commissioners is required to stabilize and minimize level of watch loans (non-performing loans) in banks. Further, the study explained that high level of watch loans as indicator of non-performing loans indicated a bank's failure to manage its banking business, thus increase probability of failure for the respective bank. They added that the increasingly uncontrollable non-performing loans with a net position of above 5% will make the bank a patient regulator in the category of banks under intensive or special supervision. In that regard, they concluded that management efficiency has nothing to do with bank failure while watch loans have positive impact on the bankruptcy rate of banks. Gwahula et al. (2018) examined the impact of watch loans as indicator of non-performing loans on commercial bank profitability in Tanzania using asymmetry theory and bad management hypothesis. The study adopted causality research design using panel data (2007 – 2015) of 16 commercial banks in Tanzania. The study employed method of descriptive statistics and multiple regression analysis estimation, likewise ordinary least squares (OLS) regression techniques also used and then considered fixed effects and random effects assumption. The study found that occurrences of high level of watch loans is negatively associated with the level of profitability in commercial banks in Tanzania while liquidity and growth domestic product is also negative and statistically insignificant with the return on assets. Further, the study concepts indicated that watch loans or bad loans are just an indicator of non-performing loans, thus, may have no impact on bankruptcy rate.

Kingu and Macha (2018), Jeremiah (2016) and Buthiena (2019) pointed out that the designed conceptual framework aims at providing structure understanding on concepts and relationships of the identified explanatory and the dependent variables as centered on the interpretation of research findings against research hypotheses. The framework is based on classical positivist where the researcher collects data, conduct analysis and test results against the formulated hypotheses. The framework has used watch loan ratios and management efficiency as explanatory variables and the bankruptcy rate, which has been computed using the Altman's Z-score as a dependent variable. These variables' concepts are being linked with key theories, namely, theory of market structure, contagion theory, asymmetric information theory and financial intermediation theory of banking have been assisted in the construction of the conceptual framework. Therefore, this framework indicates how the mentioned explanatory variables impact level of bankruptcy rates of community banks under the case of worse scenario (unfavorable movement).

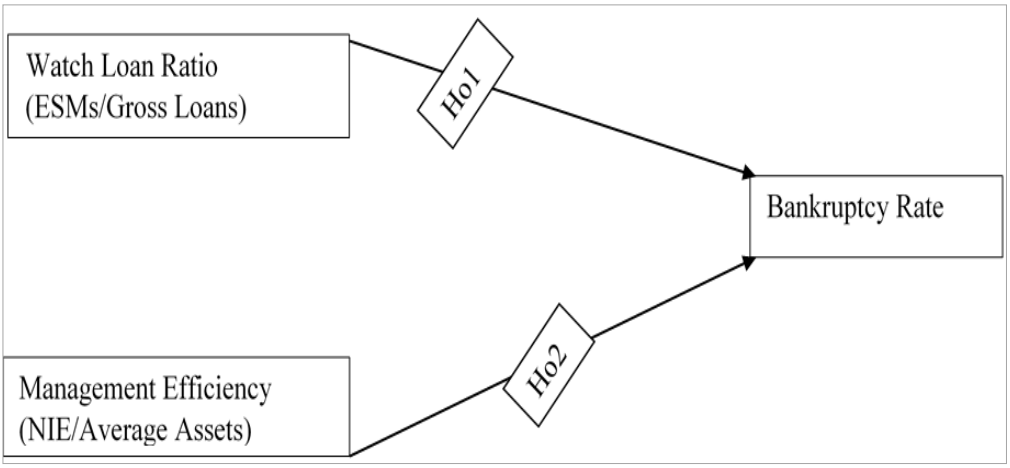

Figure 1: Conceptual Framework
Source: Authors (2023)

Therefore, research hypotheses have been developed from the formulated research objectives (ROs) explained above and the conceptual framework as identified in figure 1.0. The two formulated hypotheses are:

Ho1: There is positive relationship between watch loans ratio and bankruptcy rate (Altman's Z-score) of community banks in Tanzania banking sector (RO1); and

Ho2: There is positive relationship between management efficiency and bankruptcy rate (Altman's Z-score) of community banks in Tanzania banking sector (RO2).

This paper is organized in four parts as follows: - Section 1 explains an introductory part specifically on the background of the study, objectives, research gaps, conceptual framework and study hypotheses. Accordingly, section 2 provides a brief description of the study methodology in terms of all procedures and strategy employed by in this study, which includes sample size and data collection. Further, section 3 displays data analysis, which includes different regression diagnostic tests, type of model employed and results while section 4 provides explanation and discussion of regression results against the empirical evidence. Lastly, section 5 provides study implications, limitations and conclusion.

Methodology

The study used non-probability sampling approach based on purposive sampling, whereby all four (4) existing and seven (7) closed community banks were being considered as a sample for this research. In that regard, the study used a sample size of 11 community banks, which comprised of 100 percent of the intended population with 176 total observations. The secondary data were collected from financial statements of community banks and the database of the Bank of Tanzania for a period of 16-years, which range from 2006 to 2021. The study employed a random effect model rather than a fixed effect model due to naturalist of the employed panel data, based on the abilities and limitations of each model. Baum (2006) expressed the regression model for Random Effect panel data as follows: $y_{it}=x_{it}\beta k+zi\delta+(ui+\epsilon it)$

Where

yi,t = dependent variable and represents the bankruptcy rate of bank i at the time t,

xit = variables that vary over individual unit and time,

β = coefficients of explanatory variables,

zi = time-invariant variables that vary for individual banks,

δ = is the coefficient of variables for time-invariant variables,

ui = is the individual effect; and

$(ui+\epsilon it)$ = is the composite error term.

For the random effect model to yield consistent results, a critical assumption of this model was that ui was uncorrelated with the regressors, namely, xit and zi (Baum, 2006). The data variables used in this study were as identified in Table 2.1 and 2.2.

Table 2.1: Descriptions of Dependent and Independent Variables

Variable	Types of Variable	Authors
Bankruptcy Rate	Dependent	(BOLAT, 2017)
Watch Loans Ratio	Independent	(NBR, 2018 and BOT, 2021)
Management Efficiency	Independent	(Lucas, 2019 and Buthiena, 2019)

Source: Literature review and Authors, (2023)

Table 2.2: Expected Signs of the Explanatory Variables

Variables	Symbol	Descriptions	Expected Sign
Watch Loans Ratio	Wlr	WLs/Gross Loans	_
Management Efficiency	Me	NIE/Average Assets	_

Source: Literature Review and Authors, (2023)

Data Analysis and Results

Various regression models produce unique specifications and diagnostic tests. These tests allow researchers to determine whether the regressions are appropriate to serve as information regarding the determinants of the dependent variable, namely, the bankruptcy rate of community banks, for the purpose of this study. Therefore, different diagnostic tests and estimated results are discussed as part of research procedures. The study included a constant term in the regression equation (Brooks, 2008), thus the error zero mean (E (e) = 0) assumption is not violated. In order to test the data stationarity, the assumption was tested using the Levin-Lin-Chu unit-root test, and the summary of the results is shown in Table 2.3. The null hypothesis (Ho) was that, all the panels contained a unit root, while the alternative hypothesis was that the panels were stationary. Because all p-values for all independent variables were less than 0.05, Ho was rejected, indicating that the stationarity assumption holds for all independent variables.

Table 2.3: Stationary Test based on the Levin-Lin-Chu Unit-Root Test

Variables	brt	Wlr	me
Unadjusted t	-7.0144	-7.7254	-7.2908
Adjusted t*	-3.1674	-3.8963	-2.9003
P-value	0.0000	0.0000	0.0019
Average Lags	8.0000	8.0000	8.0000

Source: STATA, (2023)

Further, the study conducted test for data normality where skewness and kurtosis tests were employed. According to Brooks (2008), the Skewness and kurtosis values should be within the range of 2 and 7, respectively, to test the assumption of normal distribution for residuals. Normality means that the distribution of the test is normally distributed (or bell-shaped) with a zero (0)

mean, one (1) standard deviation, and a symmetric bell-shaped curve. Table 2.4's Skewness and Kurtosis values indicate that the normality assumption is valid.

Table 2.4: Skewness and Kurtosis Tests for Normality: Test for Univariate Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	Adj chi2(2)	Prob>chi2
brt	176	0.0000	0.0000	-	0.0000
wlr	176	0.0000	0.0000	-	0.0000
me	176	0.0000	0.0000	35.32	0.0000

Source: STATA, (2023)

The test for heteroscedasticity was also conducted using Breusch-Pagan Test. The null hypothesis (Ho) was constant variance (homoscedasticity), while the alternative hypothesis (Ha) was no constant variance (heteroscedasticity). Reject the null hypothesis when the p-value was less than 0.05 and otherwise accept it. The study used Breusch-Pagan to test for heteroscedasticity, and the results summary is shown in Table 2.5, which indicates that the p-value was 0.000, which was less than 0.05. Thus, the null hypothesis was rejected, implying heteroscedasticity across entities.

Table 2.5: Breusch-Pagan / Cook-Weisberg Test for Heteroskedasticity

Ho: Constant variance	Variables: fitted values of brt
chi2(1) = 242.03	
Prob > chi2 = 0.0000	

Source: STATA, (2023)

Further, the presence of serial correlation between the variables was being tested using FGLS-based Autocorrelation Test. The null hypothesis (Ho) is the presence of serial correlation up to order p, while the alternative hypothesis is no serial correlation up to order p. Reject Ho when Prob>F is less than 0.05; otherwise, accept it. The identified summary of results in table 2.6 indicates a P-value of 0.000, which is less than 0.05, so the null hypothesis is rejected, thus implying no serial correlation.

Table 2.6: FGLS-based Autocorrelation Test

brt	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
wlr	4.737114	6.856417	0.69	0.490	-8.701216	18.17544
me	-15.76325	2.455029	-6.42	0.000	-20.57501	-10.95148
cons	182.0108	40.46341	4.50	0.000	102.704	261.3177

Source: STATA, (2023)

Multicollinearity means that the variables of interest are highly correlated, and high correlations should not be present among variables of interest. The study used the variance inflation factor (VIF) to test the multicollinearity of the explanatory variables. If VIF is greater than 10, it indicates that there is a multicollinearity problem (Shrestha, 2020 and Gujarati, 2007). The summary results in Table 2.7 indicates that VIF is less than 10. Hence, there is no presence of a multicollinearity problem; no explanatory variable was found that is higher than 10 in the analysis.

Table 2.7: Multicollinearity (VIF) Results

Variable	VIF	1/VIF
ME	1.35	0.742972
WLR	1.35	0.742972
Mean VIF	1.35	

Source: STATA, (2023)

In addition, Hausman specification test (Baltagi, 2005) was conducted to determine the appropriate model to employ for unbalanced panel data between the random effect model and the fixed effect model (Brooks, 2008). The null hypothesis (Ho) was that differences in coefficients were not systematic, while the alternative hypothesis was the presence of systematic differences across variables' coefficients. The results were indicated in Table 2.8 with the following parameters: Prob>chi2, or a P-value of 0.0033, which was lower than 0.05, and the differences were negative 11.63 and positive 18.71, respectively. In addition, the p-value for RE was 0.00, while the p-value for FE is 0.213, so the random effect model is recommended as it yields a low p-value. Further, prob>chi2 = 0.0033 and chi2 (2) = 11.44, indicated that the coefficients of independent variables were different and therefore significant to the study.

Table 2.8: Coefficients for Hausman Test

	(b) Fixed	(B) Random	(b)-(B) Difference	sqrt(diag(v_b-v_B)) S.E
wlr	-24.42901	-12.7987	-11.63031	13.6862
me	-6.006503	-24.71962	18.71312	5.793808

Source: STATA, (2023)

The regression model employed was the random effect model, as it seemed to be superior over the fixed effect model and yields better results as tested using Hausman specification test. The test indicated results of p-value being lower for random effect model compared to fixed effect, thus selected. Table 2.9 indicates descriptions of the regression results with correlational coefficients of the explanatory variables against the dependent variable.

Table 2.9: Descriptive Statistics Using a Random Effect Model

brt |	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
wlr |	-12.7987	7.318242	-1.75	0.080	-27.14219	1.544787
me |	-24.71962	3.315504	-7.46	0.000	-31.21789	-18.22136
cons |	483.5869	76.31113	6.34	0.000	334.0198	633.1539

Source: STATA, 2023

The regression equation after the results is written as follows: -
(brt)it = 483.5869 -12.7987 (wlr)it - 24.71962 (me)it.
where brt = bankruptcy rate, wlr = watch loans, and me = management efficiency.

The results indicated significant negative relationship between watch loans ratio and bankruptcy rate of community banks. This implied that a unit increase in the watch loan ratio leads to a decrease in the variance of the bankruptcy rate by 12.7987 percent. Further, the results showed negative correlations between management efficiency and bankruptcy rate, which means that a unit increase in management efficiency of a respective community bank leads to a decrease in trends of bankruptcy rate of community banks by 24.71962 percent. In addition, the results negate the referenced hypotheses, which were depicted as follows: Ho1: There was positive effect of watch loans ratio on the bankruptcy rate (Altman's Z-score) of community banks in Tanzania's banking sector (RO1); and Ho2: There was positive effect of management efficiency on the bankruptcy rate (Altman's Z-score) of community banks in Tanzania's banking sector (RO2).

Empirical Analysis and Discussion of Results

This section provides explanations that links results obtained in this study against other empirical findings conducted in same field however using different sample, period, methodology and population. The first objective was to analyse the effect of management efficiency on bankruptcy rates of community banks. Therefore, the conclusion regarding this objective was reached by referring the regression results, which indicated negative coefficient of 24.71962 percent. The result implied significant negative influence of management efficiency on bankruptcy rates of community banks. Further, the result means that a unit increase in management efficiency of a respective community bank leads to a decrease in trends of bankruptcy rate for community banks by 24.71962 basis points. This result conforms to the finding of Ariemba et al. (2016) who explained that the increase in bank failure through asset quality deterioration was mainly influenced by low efficient and effective management of those banks in Kenya, thus recommended effective and strong management in order to ensure that banks do not become insolvent. Mathematically, they justified that management

efficiency was negatively correlated with banks' bankruptcy rates, which was in line with the research findings portrayed in this study. Further, Faqera et al. (2019) also provides concepts that indicating negative correlations between management efficiency and bank failure. The same stance was also observed by other studies such as Lotto (2019), Catherine (2020) and Emenike (2014) who also explained negative relationship between management efficiency and bankruptcy rate of banks, in line with the study findings of this paper.

However, this study contradicted with some of other research findings as follows: - Indriastuti et al. (2022) explained presence of no correlations between management efficiency and the bankruptcy rate of banks on ground that management of banks has nothing to do when the respective bank possesses low competitive advantage and poor asset quality. In same perspective, the study finding also contradict with the finding produced by Lucas (2019), who explained that net interest margin as a proxy for management efficiency was positively related to the bank inefficiency operations and bank failure. Further, the result disputes the finding explained by Dzomira (2014) who justified that the failing of banks in Zimbabwe was attributed to poor management efficiency, which caused drainage of liquidity and capital position of banks. Mathematically, Dzomira (2014) specified positive correlations between management efficiency and bankruptcy rates of banks.

The second objective was to determine the effect of watch loans on bankruptcy rate of community banks. In that regard, the conclusion regarding this objective were reached by referring the regression results, which indicated negative coefficient of 12.7987 percent. The result implied significant negative influence of watch loan ratio on bankruptcy rates of community banks. The result implied that a unit increase in the watch loan ratio led to a decrease in the variance of the bankruptcy rate by 12.7987 percent. This resulted supports the findings explained by Dzomira (2014) who argued that bank failures in Zimbabwe was mainly attributed by watch loans, which caused drainage of liquidity and capital position of banks. In same perspective, the finding also conformed with finding produced by Munangi (2020) who explained negative effect of watch loans on the financial performance and bank failure. This implied that the higher the incidence of watch loans, the lower the profitability of the bank, thus increases bankruptcy rate of a specific bank. In addition, Emenike (2014) also revealed negative relationship between watch loans and bank failure, thus conforms with the finding of this paper. However, this study finding contradicts with some of the empirical studies as follows: Indriastuti et al. (2022) explained presence of no correlations between watch loans and the bankruptcy rate of banks, which contradicted with the result of this paper. Further, this result was not line with the financial stability report published by

the Bank of Tanzania in 2021, which explained that when watch loans moved unfavorably, increases banks' bankruptcy rate due to its effect on non-performing loans.

In addition, this report implied that watch loans had positive correlations with bankruptcy rate in sense that when watch loans ratio rises, the bankruptcy rate also increases, inferring upsurges of potential failure of the respective bank. This result also controverted with that of Jing (2020) who explained neutrality correlations between watch loans and bank failure by arguing that watch loans are just non-performing loans indicators and not a straight factor that may cause bankruptcy of community banks. In addition, the finding also contradicts with explanations provided in the stability report of 2018 published by the National Bank of Rwanda, which indicated positive relationship between watch loans and bank failures. Mathematically, this relationship is expressed as positive correlations between watch loans and bankruptcy rates of a specific bank. In same perspective, the results with negative correlations contradicted with the explanations provided in the IMF reports (2019), which indicated positive relationship between watch loans and bankruptcy rates. In that regard, the study findings for management efficiency and watch loans against bankruptcy rate of community banks are in line with the most referenced studies despite of the fact that the result differs with the few empirical studies and reports as discussed in this paper.

Study Implication, Limitations and Conclusion

This study took its importance from the numerous bankruptcy rates of community banks in Tanzania's banking sector, which thus posed a threat to the stability of the financial system. The study examined the effect of management efficiency and watch-loan ratios on the bankruptcy rate of mentioned banks' category. The study has used a quantitative method to determine the relationship between the dependent variable, which is bankruptcy rate, and the independent variables, which are watch loan ratios and management efficiency. In order to test the research hypotheses, a random effect model was used, which indicated that both watch loans and management efficiency have significant influence on trends of bankruptcy rate of community banks. In that regard, to prevent bankruptcy rates, community banks are required to ensure adequate management and minimize level of watch loans in their lending portfolio that have proven to increase credit risk, thus upturns bankruptcy rates. The most important areas of contribution, especially for academic research is theoretical contribution. According to Eric (2020) and Lucas (2019), one of the ways to contribute to a theory is to compare the prevailing assumptions against the current situations or environment to test whether the assumptions still hold accordingly.

In addition, Eric (2020) and Peter (2018) conceptualized that papers make a theoretical contribution if they create a systematic understanding of some phenomena at an abstract level and apply existing theories to business and society. In that regard, this paper contributes to the contagion theory by arguing that not only bank runs (massive deposits withdrawal) due to public panic that causes bank failure, but also there are other factors such as management inefficiency and high level of watch loans resulting from the information gap as justified by the theory of market structure and asymmetric information theory, respectively. This stance is also justified by the following references: Munangi (2020), Dzomira (2014) and Emenike (2014), which justified the impact of watch loans on banks' bankruptcy rate. Watch loans are not related with bank runs as stated by contagion theory but these loans are concerned with poor administrative issues of a respective bank that leads to increase in defaults and therefore rises bankruptcy rates. Further, this stance is justified by Catherine (2020), Dzomira (2014), Faqera et al. (2019) and Ariemba et al. (2016) who also justified the impact of management efficiency on banks' bankruptcy rate. According to these referenced papers, management efficiency is not related with bank runs, which is stated by Contagion theory as major causes of bank failure but concerns with bad management of a respective bank that leads to increase in defaults and therefore increases bankruptcy rates. Therefore, based on this thought, it can be concluded that apart from bank runs, there are other factors that contributes to the bankruptcy of community banks in Tanzania, which includes management inefficiency and high level of watch loans as justified by theory of market structure and asymmetric information theory. Further, the study has encountered with certain limitations, which however did not affect results and findings. The limitations include insufficient coverage in terms of periodic, geographical and population level. In fact, the study has covered only a period ranging from 2006 to 2021 using data from specific individual country (Tanzania). Therefore, it is recommended to conduct other studies by expanding coverage of periods and using different countries such as East African Community (EAC) and Southern African Development Community (SADC) member countries.

In addition, this study has focused only on one category of banks, namely, community banks, thus it is further recommended to undertake other studies based on other left categories of banks such as commercial, microfinance, development and other specialized banks. Based on the research findings, it is therefore concluded by drawing some of the policy implications as follows: *Firstly*, management of community banks are required to ensure that watch loans are mitigated through establishment of an adequate credit policy that will eventually eliminate the level of watch loans in their lending portfolio, thus, reduce the bankruptcy rate. The adequate credit policy enhances loans

appraisal systems and quality review of credit before being granted to respective borrowers, thus reduce amount of watch loans. *Secondly*, community banks are required to increase management efficiency by putting in place a strong corporate governance policy to enhance their management efficiency through minimization of operational and administrative costs. The adequate corporate governance policy normally increases accountability of banks' management in terms of cost reduction and adequate credit appraisal systems that eventually reduces possibility of bank's failure and adherence to the going concern principle.

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Exploring the Causal Links of Public Spending on Bank-Based Financial Development in African Economies

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ABSTRACT
This work examined the causal impact of types of government spending on bank-based financial development. It tests the influences of both government productive and non-productive spending on bank-based financial development. Selected 37 African economies between 1980-2018 are sampled. Both the short –run and long –run effects are assessed using either Feasible Generalized Least Squares (FGLS), Mean Group (MG), Pooled Mean Group (PMG) and Dynamic Common Correlated Effects Mean Group (DCCEMG) estimators. Evidences support the hypotheses that both types of spending contribute positively to bank-based financial development. Bank-based financial development is more responsive to non-productive spending than it is to productive spending. Also, confirm the supportive roles of trade openness and GDP per capita, and the detriment of inflation to bank-based financial development. This study comprehensively unearths the impact of government spending on bank-based financial development in Africa by isolating spending into productive and non-productive types. Governments need to promote dual policies that address spending and financial development. They should avoid detrimental spending and promote enhancing spending within each type above. Spending that attract private agents, investments, saving, and liquidity in the financial sector, trade openness, and economic output should be promoted since these enhances bank-based financial development.

Keywords: *Bank-based financial development, Government spending, Africa, CCEMG*

INTRODUCTION

In this work two aspects of literature are unavoidably considered, these are government spending and financial development. More or less other linked reviews such as economic growth, private investment, and government borrowing are also invited to enable the debate and facilitate the connection between government spending and financial development. Generally, various proxies are normally employed in quantifying financial development. Financial development via financial institutions is commonly proxied by credit-bank based measures, such as domestic credit to private sector as a

percentage of GDP (financial depth), deposit money bank to deposit money bank assets and central bank assets as a percentage of GDP, and deposit money bank to deposit money bank assets and central bank assets percentage, liquid liabilities as percentage of GDP and money three (M3) (Kapaya, 2021). Via stock market indicators included are stock market capitalization, stock market depth (value of share traded as a percentage of GDP), stock market turnover/efficiecny (ratio of share traded to market capitalization) (Kapaya, 2020).

Financial sectors development in Africa since indepence have moved from worse situations towards significant improvements. Gelbard and Leite (1999) indicate that significant financial development happened in 1987-1997 in Sub-Sahara Africa (SSA). Progress jumped from 2 economies with relatively developed financial system to 27 in that period. The economies with completely undeveloped financial systems reduced from 8 to 2 in the same period. They show that, by the year 1997 economies which had the most developed financial systems were South Africa, Namibia, Kenya, Zambia, Ghana and Mauritius. Most economies which were repressed, by this year had done main steps in liberalizing their financial systems. By 1997, improvement in institutional environment increased from 8 to 23 economies and financial openness had increased from 2 to 30 economies. Worldbank (2019) show that between 2015-2017, based on 42 SSA economies, financial institutions depth as measured through private credit to GDP% was 21.6%, compared to world at 52.2%, while that of developed economies was 84.4%, and that of developing economies 36.8%. In terms of financial institutions access (account at formal financial institutions, %, age 15+) SSA was 30.1%, world 58.0%, developed economies 89.0% and developing economies 42.5%. In terms of financial institution efficiency (bank lending-deposit spread %) SSA was 9.3%, world 7.3%, developed economies 4.4%, developing economies 8.4%. In all counts, SSA is still struggling compared to the rest of the world, however there are significant progress since the decades of reforms.

From 1980 a declining development is witnessed, but over the recent past two decades, improvement in financial development has been witnessed for African economies (Figure 1). Tyson (2021) support this development, she notes that during 2000-2020 has been an action-packed time for bank-based financial development evidenced by significant financial deepening. The steady progress in overall financial development for SSA increased from 0.125% to 0.16% between 2000-2018. This improvement has been mainly in the banking sector. Despite progress, the sector in SSA has been constrained by risk aversion from poor investment environments, political and legal risks, lack of adequate level of competition and resulting high cost to credits. These

weaknesses in financial architecture create inefficiency in basic functions of banking system, which create fragility and shocks susceptibilities.

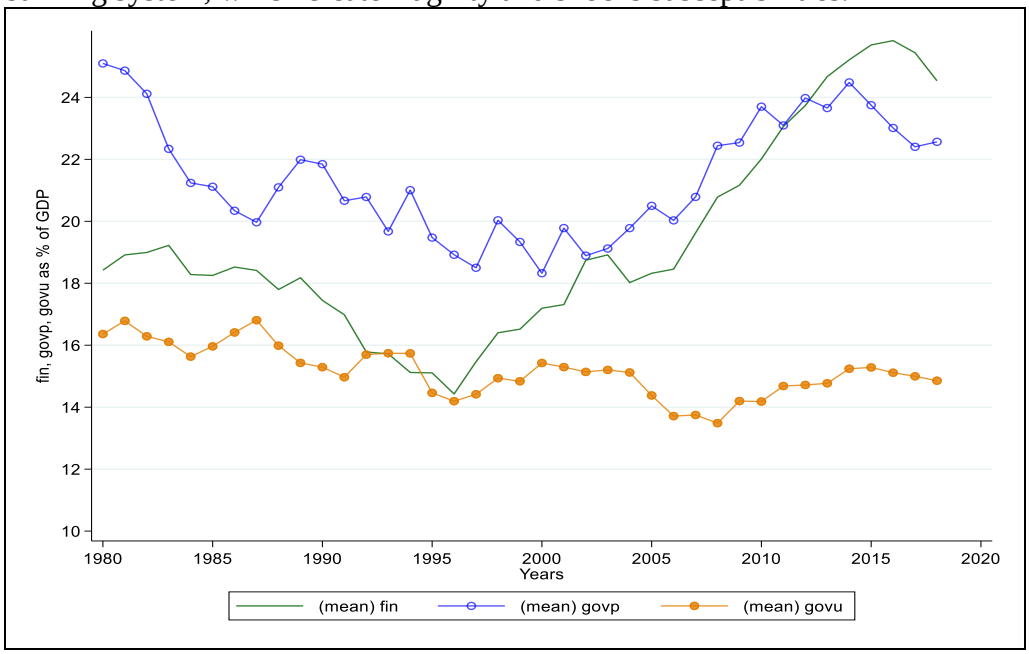

Figure 1: Financial Development and Government Expenditure Series for Selected African Economies.

This figure depicts the mean values for financial development indicator (fin, govp, and govu) which tend to incline up after 1995 and decline after 2015. Both productive and unproductive government expenditures depict parallel movements, which also tend to rise after 1995 and declines after 2015. The former is higher above the later series.

Government spending as depicted in Figure 1, tend to be concentrated around productive spending with less being deployed for non-productive spending. While the former is increasing and cyclical, the later seems to be more or less declining over time in Africa. One possible reason is the government push to spearhead development by injecting more for productive investments such as infrastructures (Michaillat & Saez, 2019). Government size plays a critical role in the development of the economy, because changes that are made in the growth of the government affects changes in the economy. As determined by research and fiscal policies government spending and economic growth are positively related (Nartea & Hernandez, 2020).

Theoretical and empirical studies, focus on the link between government size in terms of its spending and overall development of the economy (Nartea & Hernandez, 2020). The intuition is that if government size or spending relates positively to economic development, then it is logical to argue that it also

relates positively to financial development since the latter is a crucial part of the former. Several factors are thought to affect the composition of government spending but not total government spending. For instance, Kotera and Okada (2017) found that democratization has an impact on government spending policy, which essentially implies that more democratization more spending on consumption, such as health, but in some case the effects are reversed, for example decrease in social protection is related to increase in democratization.

Government spending play a role in promoting economic development, particularly through resource mobilization and allocation channels through the financial system (Kimaro, et al., 2017). It is thus indispensable to articulate economic development by singling out specific areas of development that are affected by government spending. One, such area would be financial development. While there are many studies done on composition of government spending, evidences show that economies with higher level of financial development tends to have lower productive spending (Chen, et al., 2019). Theoretically, the kind of government spending composition affect different facets of the economy differently, for example productive spending is thought to promote economic growth, while non-productive spending is considered to affect income redistribution in the economy (Huang, 2011-a).
Both theoretically and empirically, using an endogenous model it has been possible to connect financial development and the structure of government spending in the economy (Chen, et al., 2019). These authors, offer supportive evidence presenting the negative impact of financial development on productive spending as a percentage of total spending. Nonetheless, to the best of this review, there has not been much interest on research on the roles of both productive and non-productive spending on financial development.

The study's theoretical contribution is its evidence supporting the positive impact of both productive and non-productive government spending on bank-based financial development in Africa. It emphasizes that bank-based financial development is more responsive to non-productive spending. By categorizing government spending into productive and non-productive types, the study provides a comprehensive understanding of their specific effects on financial development, contributing to existing literature. The study suggests adopting dual policies that address spending and financial development, prioritizing spending that attracts private agents, investments, savings, and liquidity in the financial sector, while promoting trade openness and economic output for fostering sustainable financial development.

This study significance lies in understanding the impact of these spending types on private credit demand is crucial for policymakers and investors

seeking to optimize economic outcomes and financial stability. The study's importance lies in uncovering how different spending patterns affect the financial sector, providing insights for policymakers to design effective fiscal policies and financial regulations. It contributes to existing literature by exploring the nuances of government spending and its influence on private credit demand, offering practical recommendations for achieving credit availability, economic growth, and financial stability. Ultimately, this research aims to provide valuable empirical evidence and insights, making it a relevant and significant contribution to the field of financial research and economics.
Therefore, the following research questions is the focus of this research: How does the type of government spending (productive vs. non-productive) influence private sector credit demand, and what are the underlying mechanisms that drive this relationship?

Literature review

Theory of public spending and composition

According to Michaillat and Saez (2019), the essence of public spending lies in the government's allocation of funds towards fulfilling collective requirements and providing essential services. It refers to expenditure on development and non-development activities such as construction of roadways, dams, railways, bridges and other activities directly influencing the whole economy and its development. The theory suggests that governments strive to optimize their size and economic role through revenue generation from taxes, investments, and borrowings. Decisions on public spending are guided by considerations of who will benefit and who can contribute to these benefits. Accordingly, effective use of public spending becomes a crucial economic policy tool for governments to address and rectify the nation's current economic state. (Nartea & Hernandez, 2020). In this regards, fiscal policy, defined as the use of public spending and taxation to influence the economic performance, can be a means to increase needs and demand for services and goods, which in turn increases output and employment, which ultimately impact economic growth significantly (Nartea & Hernandez, 2020) as well as financial development endogenously.

Decentralization of government leads to variations in choices, tastes, and preferences among individuals in different jurisdictions (Granado, et al., 2012). As a result, government spending can influence financial development through this decentralization channel. Given the impact of decentralization on the structure of spending, it is reasonable to expect that the type of government spending, particularly on publicly provided goods like health and education, can play a role in affecting financial development. Chu, et al. (2020) confirm that, government spending shifts from non-productive to productive types of spending is related to higher growth levels in middle- and high-income

economies. They show that, the level of mix between productive and non-productive spending matters in promoting growth. For instance, productive government spending is known to increase productivity of private sector and a direct impact on growth. While, non-productive spending is demonstrated to have zero or negative impact on growth. Devarajan et al. (1996) pioneered the distinction between productive and non-productive government spending. They demonstrated that increasing the proportion of productive spending compared to non-productive spending can lead to a more optimal growth rate in an economy. Empirical evidence, including studies by Afonso & Alegre (2011), supports the positive impact of productive government spending on economic growth, while non-productive spending has either a negative or neutral effect. Gemmell et al. (2016) found that reallocating more towards infrastructure and education (productive spending) positively affects long-term output levels, while directing more funds to social welfare (non-productive spending) may result in modest negative effects on long-term output levels.

Government spending and financial development

Fiscal volatility and interest rates channels

The theoretical case for fiscal variables rests on two main channels: the volatility of the tax burden and/or the volatility of the supply and price of public bonds. Consequently, government spending is primarily funded through taxes or debt. Regardless of the funding method, the unpredictable nature of government expenditure creates uncertainty, impacting financial markets and generating various forms of uncertainty (Brzozowski & Siwinska-Gorzelak, 2013). They illustrate how private actors in financial markets must prepare for the possibility of unexpected rises in government spending, achieved through issuing enticing bonds or significant tax increases. Instead of using readily available funds to buy these volatile bonds, agents have to sell stocks or other assets on the financial markets to afford the bonds or higher taxes. Since assets in financial markets are not perfectly liquid, this process incurs illiquidity costs, leading to increased interest rates due to the time lag between selling and buying assets. This increase is known as a liquidity premium, which arises when financial investors seek cash to meet short-term, unforeseen needs during government actions. As government bonds flood the market and taxes rise, investors adjust their holdings, driven by profit and liquidity concerns. Consequently, fiscal policy volatility is positively related to the likelihood of increased government taxes or attractive bond offerings. These mechanisms ultimately reduce the depth of the financial sector.

The connection between public spending policies and financial markets development, have been studied for the most part in isolations. However, few studies have attempted this linkage, for intance, Brzozowski and Siwinska-Gorzelak (2013) studied both developed and developing economies between

1960 and 2009. They discover proof that the unpredictability of government expenditure and its financing result in high interest rates, uncertainty about the timing and price of asset sales, and restrictions on the availability of credit to individuals and enterprises in the financial markets. They especially discover evidence that there is a bad correlation between the volatility of government spending and financial development. They contend that the financial markets' depth is dampened by the irregular course of fiscal factors. Demystifying the channel(s) via which fiscal policy on government expenditure influences financial development is the key innovation in their study. Both theoretically and empirically, they were able to demonstrate that variability of government spending' channel triggers higher borrowing interest rates, leading to lowered bank credit activities.

Fiscal volatility, particularly in government spending, has multifaceted impacts on the economy. Brzozowski and Siwinska-Gorzelak (2013) present two situations for financial market investors concerning government financing options: taxes and debt. When government actions are predictable, investors face less uncertainty, avoiding the need to sell securities prematurely in response to tax increases. However, an increase in market interest rates triggered by government spending volatility reduces available loanable funds, indicating reduced financial market depth, a crucial indicator of financial market development. Thus, fiscal volatility negatively affects credit levels and financial development. Brzozowski and Siwinska-Gorzelak (2013) identify a second channel, the balance sheet channel, linking fiscal volatility and financial development. Unpredictable fiscal policies lead to higher interest rates, diminishing borrowers' net worth. As collaterals are required to mitigate financial market imperfections, rising interest rates weaken borrowers' balance sheets, limiting their access to external finance, known as the 'financial accelerator mechanism.' Therefore, the two channels can be summarized as follows: expected costs of premature security sales increase interest rates, and resulting higher interest rates reduce asset values, hampering firms' ability to access external financing, thereby hindering financial development.

Public borrowing channel

One of the hot subjects in economic policy research in both developing and developed nations is the crowding-out of the private sector by government borrowing (Haikala, et al., 2021). They note three strands of literature in aggregate effect of fiscal policy narratives. The Keynesians contend that more government spending boosts the economy and attracts private sector investments by causing an increase in economic activity. On the other hand, the neoclassical school of thought is in favor of the idea that as government spending rises, private investment becomes more and more crowded out. The Loanable Funds Theory attributes the crowding-out effect to an increase in

interest rates caused by the public deficit, leading to a restoration of equilibrium in capital markets and, consequently, a reduction in private investment. The final perspective relies on the Ricardian Equivalence, suggesting that an increase in the public deficit, which leads to a shift from private to public investment, results in the expectation of higher future taxation to fill the gap, ultimately leaving private spending unaffected.

Mbate (2013) demonstrated that government domestic borrowing hinders capital accumulation and private sector growth and crowds out private sector financing. He contends that SSA's dependence on domestic debt financing has increased as a result of the region's low tax revenues and heavy infrastructure spending. Because it lessens currency mismatch losses, reversals in capital outflows, and accumulation of debt denominated in foreign currencies, which have an increased impact on an economy's access to global capital markets, the use of domestic debt financing has been encouraged. On the other hand, he warns that an excessive reliance on domestic debt may result in financial instability and the exclusion of the private sector in general and loans to the private sector in particular. The stability of external indebtedness and the development of private sector investment depend on sound regulatory financial policies and well-developed domestic debt markets. Contrariwise, deficiency in sound regulatory mechanism may lead to debt crunch and dissuade both economic growth and financial sector growth. Similarly, Anyanwu, et al. (2017) found evidence for crowding –out effect of government domestic borrowing to finance its spending. They discovered that domestic government borrowing had a negative effect on private sector credit but had no effect on bank lending rates. They suggest the slowdown of the private sector credit through a private credit channel and not lending rate channel.

Regulatory measures such as regulatory oversight on rate of interest, high reserve ratios, direct credit allocation procedures, public ownership and or control of financial institutions, and entry barriers by the government can all have an impact on the equilibrium interest rate in economies with less developed financial systems. Government borrowing affects private investments through changes in lending rates. Therefore, the degree of crowding-out will rely on the banks' endogenous reactions to increased government borrowing. These reflexes are corroborated by Adeyemi, et al. (2022) who assessed the sensitivity between government capital spending and private investment in the Sub-Saharan nations. They found the impact of capital spending on private investment to be negative in both west and southern African sub-regions, significant and positive impact in east African sub-region and no significant impact in central Africa. They credit the east African sub-region's effects to the high sensitivity to economic reform, the

region's strong institutional foundation, and the comparatively high quality of government investment. In a similar line, Bikefe, et al. (2022) found that government borrowings crowds –out private sector credit. They note a significant decrease in credit to the private sector but ascribe higher government borrowing to higher government spending. Similar defenses of the Lazy Bank theory demonstrate that banks are probably shifting their credit portfolios toward less risky investments, particularly in government and household lending. This conduct may ultimately result in the crowding-out of financing available to the private enterprise sector. (Haikala, et al., 2021). These authors argue for a significant crowding –out effect of public internal borrowing from banks on credit to business private sector. They attribute this consistent to the neoclassical theory which agree with the idea that government spending crowds –out private investment.

Private investment channel

Wang (2005) attests that influence of government spending on private investment, for a long time, has been an important fiscal and policy debate issue. Although many positions have been advanced on the issue, it still stands indeterminately controversial. Private investments are represented significantly these days through financial markets, specifically via stock and bond markets. Thus, government spending and bank-based financial development linkages can be modelled via the private investment channel. Xu and Yan (2014) list evidences showing that, higher taxes reduce real profit of private agents, and that, fiscal and budget deficit cause higher interest rates, both leading to crowding –out effects on private investment.

Productive government investment spending positively affects private investments, and particularly infrastructural spending crowds –in private investment, this is the case because productive investment increases private investments through provision of services to government productive infrastructural spending. Whereas, non-productive government investment spending and non-infrastructural spending crowds –out private investment leading to negative effects to it. Arguably, productive (non-productive) government investment spending may lead to crowding –in (out) effects in both bond and stock markets investments from private agents. This condition, through the private investment channel, may lead to a positive (negative or zero) impact on bank-based financial development in an economy, in turn through banking and stock markets complementarities, demand for credit from private agents may rise to compensate private business financing for funds invested in financial markets. This is the case, because in market economies both stock markets and the private sector normally plays a major role in influencing the banking sector (Xu & Yan, 2014).

Hypotheses development

African economies strive to grow, there is more spending in productive investments. Policies that encourage public private partnership through productive government investments such as construction of major assets crowd –in the private agents, who expand their capital through private credits from bank. Similarly, based on Keynesians argument, augmented government spending may influence an increase in private sector agents' undertakings and thereby crowd –in private investments which create demand for credit by private agents, this effect is mostly manifested through productive rather than unproductive spending.

Hypothesis – I. *Productive spending encourages private sector credit demand by a way of complementarity*

Higher non-productive government spending stimulates income re-distribution, money supply, and liquidity in the economy. Similarly, depending on the level of crowding –in or –out of private investments, it is proposed based on Keynesians idea that, enlarged public spending leads to an increase in private agents' activities which increase demand for private credit by private agents. Thus, since private agents' study and wait on government spending moves, frequent and increase in non-productive government spending stimulates opportunistic borrowing and investment activities by private agents in the short run, which stimulates demand for credit from banks by private agents thereby fostering bank-based financial development.

While the former trend may be entertained in the short-run, in the long-run comprehensive financial policies and well-built domestic debt markets may be key to promotion of private sector investment. Contrariwise, deficiency in sound regulatory mechanism may lead to debt crisis and deter bank-based financial development. Otherwise, government interferences such as supervisory controls on high reserve ratios, interest rates, direct credit distribution involvements, high levels of government ownership and or control of banks and barrier to entry by the state may act a part in hiding the influence of non-productive public spending on bank-based financial development in the long-run.

Hypothesis – II. *Non-productive spending stimulates private credits demand through increased income re-distribution, money supply and liquidity in the economy.*

Methodology

Data and variables

This article employed data from World Bank Development Indicators (WDI), the series span from 1980 to 2018. A total of 39 years by 37 selected economies based on availability of data. The panel composes a maximum observations of 1443 data points. Table 1 summarizes the variables details. These are Bank-based financial development (fin) as the dependent variable, and two independent variables coming from government spending, these are Productive government spending (govp) and Non-productive government spending (govu); and other related control variables of interest appropriate to this specific setting were inflation (infl), trade openness (open), and GDP per capita (grow). The variables were log transformed for scaling and normalization purposes. These variables are commonly used by researchers as indicated in table 1.

Table 1: Variables and Measurements

Variable	**Bank-based financial development**	**Productive spending**	**Non-productive spending**	**GDP per capita**	**Trade Openness**	**Inflation**
Symbol:	**fin**	**govp**	**govu**	**grow**	**open**	**infl**
Description:	Natural log of domestic credit to private sector by banks, as percentage of GDP.	Natural log of gross government capital formation, as percentage of GDP.	Natural log of government final consumption spending, as percentage of GDP.	Natural log of GDP per capita.	Natural log of the sum of exports and imports divided by GDP.	Natural log of inflation, as annual percentage.
Review Source:	(Hauner, 2009), (Kotera & Okada, 2017), (Brzozowski & Siwinska-Gorzelak, 2013) (Kapaya, 2021)	(Xu & Yan, 2014) (Adeyemi, et al., & Oluwa, 2022), (Ouedraogo & Sawadogo, 2020)	(Ouedraogo & Sawadogo, 2020)	(Kotera & Okada, 2017)	(Kotera & Okada, 2017)	(Kotera & Okada, 2017)

Note: This table summarizes the variables and their respective measurements. Both variables are transformed using natural logarithms to maintain uniform scaling and easy interpretation of the results. The sources from which these are adapted are also indicated in the last row.

Bank-based financial development is usually captured by credit-bank based measures, the current study applies domestic credit to private sector as

percentage of GDP (capturing financial depth), (Kapaya, 2021). It has been noted previous that banks are the main section representing the financial development disposition in African countries (Worldbank, 2019). As such, the development of the banking sector is commonly identical to financial development of a country. Thus "bank credit to private sector" is always in this context used both as the best channel and measure of financial development in an economy (see Table 1).

Estimation strategies and techniques

It is common practice when dealing with country panels to assess the presence of cross-sectional dependence, panel unit routs and panel co-integration. (Bilgili & Ulucak, 2018; Pesaran, 2004; Grossman & Krueger, 1995). Certainly, more or less of the causes that may lead to *cross-sectional dependence* in this African panel are such as shared economic pressure wielded by the western nations in favor of deregulation of the economies, promotion of free market economy and liberalization policies, regional blocks policies on common infrastructure spending, common patterns on government consumption spending due to large young dependent populations, and shared International Monetary Fund (IMF)'s policy on bank-based financial development among developing countries. If cross-sectional dependence is not controlled the data may lead to correlation in the residuals, as a result it will impair estimation efficiency and inference validity (Krieger & Meierrieks, 2020). To test for cross-sectional dependence (CD), the Pesaran (2004) CD-tests was applied, this tests the null hypothesis of presence of "cross-sectional independence". It is also worth noting that CD-test is robust to non-stationarity (Pesaran, 2004).

The presence of a unit root in data series is a common challenge. The presence of two or more non-stationary variables may lead to spurious regression results, this quashes the regression results. Some aspects that my cause this problem in data are political regime change effects which may cause swing in government spending, exposure from exterior stimulus towards weaker economies which may cause substantial borrowing which in turn cause extraordinary spending at times. Secretive spending military equipment and arms during war times. The cross-sectionally augmented Im-Pesaran-Shin is part of second generation panel unit tests, which are accurate in the presence of cross-sectional dependence (CIPS) (Pesaran, 2007), and Maddal and Wu (MW) (Maddala & Wu, 1999) panel unit root tests were used to test against the null hypothesis of "presence of a unit root".

The CD-tests indicated the presences of cross-sectional dependence in our data as expected, and presented in Table 2. Thus, justifying the use of estimation methods discussed later which account for this dependence. The stationarity

tests indicated that most series were integrated of order 0, while some were integrated of order 1, and some with trend, thus, offering a further justification of using the methods.

Table 2: Unit root and cross-sectional dependence tests

Variable	Name of Test	(A) Maddala and Wu (1999) Panel Unit Root test (MW)		(B) Pesaran (2007) Cross-sectionally augmented Im-Pesaran-Shin (CIPS) Panel Unit Root test		(C) Pesaran (2004) Cross-Section Dependence-Test		
Specification	Integration	without trend	with trend	without trend	with trend	CD-Test	Average Correlation	Coefficients
	Order	chi_sq	chi_sq	Zt-bar	Zt-bar	CD-test	corr	abs(corr)
fin	1	1024.161***	901.626***	-23.71***	-22.483***	33.57***	0.234	0.452
govp	0	138.32***	145.168***	-5.385***	-6.468***	7.01***	0.049	0.285
govu	0	165.23***	125.212***	-4.053***	-3.186**	0.86	0.006	0.319
infl	0	483.904*	501.16*	-	-	23.01*	0.16	0.223
Grow	1	841.3***	762.097***	-20.882***	-19.734***	27.7***	0.193	0.544
open	0	116.863***	124.702***	-2.142**	-1.703***	10.77***	0.075	0.300

Note: This table presents cross-sectionally augmented Im-Pesaran-Shin (CIPS) (Pesaran, 2007), and Maddal and Wu (MW) (Maddala & Wu, 1999) panel unit root tests were used to test against the null hypothesis of "presence of a unit root". The significant tests indicated most series were integrated of order 0, and 1. The CD-tests indicated the presence of cross-sectional dependence Thus justifying the use of estimation methods which account for this dependence.

In the process the Westerlund (2007) panel co-integration test, in the presence of cross-sectional dependence is suitably applied, it is actually based on the error-correction model (ECM) (Persyn & Westerlund, 2008), which assumes the data generating process similar to the ECM (ref. model 3). Where the existence of co-integrating effect is ascertained by a negative and significant error correction coefficient in the ECM. Several test for robustness sake were run (Table 3). The tests support the presence of panel co-integration in the sample, which allow and justify the next step of estimating both short –run and long –run estimations for our variables.

In the estimation approach the general linear model is estimated as follows:

$$fin_{it} = \beta_i^P govp_{it} + \beta_i^U govu_{it} + \beta_i^I infl_{it} + \beta_i^O open_{it} + \beta_i^G grow_{it} + u_{it} - - - - - - - - (1)$$

$$where;\ u_{it} = \alpha_i + \lambda_i \boldsymbol{f}_t + \varepsilon_{it}$$

The variables in equation (1) represent the observable part of the model along sides respective parameter coefficients $\beta_i^j (for\ j = P, U, I, O, G)$ being permitted to vary between nations The second portion lists α_i which are intercepts specific to a country and $\boldsymbol{f}_t$ captures a set of unobserved common factors with country specific factor loadings λ_i.

Table 3: Panel co-integration tests

Types	**Westerlund**	**Pedroni**		**Kao (1999)**				
	VR	MPP	PP	MDF	DF	ADF	UMDF	UDF
Statistic	3.541***	3.716***	0.047	-2.198	-3.085**	-2.729**	-5.642**	-4.813**
H0: Not	na	na.	NO	na.	na.	na.	na.	na.
Ha: All	na.	YES	na.	YES	YES	YES	YES	YES
Ha:	YES	na.	na.	na.	na.	na.	na.	na.

Note: This table present several tests for co-integration, namely Westerlund's Variance ratio (VR) test, Pedroni's Modified Phillips–Perron (MPP) and Phillips–Perron (PP) tests; and Kao's Modified Dickey–Fuller (MDF), Dickey–Fuller (DF), Augmented Dickey–Fuller (ADF), Unadjusted modified Dickey–Fuller (UMDF) and Unadjusted Dickey–Fuller (UDF) tests. These tests support the robustness of the results which indicate strong indications for co-integration in the series.

When the data have unequal variances and there is a specific degree of correlation between the observations, the feasible generalized least squares (FGLS) estimator has historically been seen to be an effective method for estimating the coefficients of a linear regression model. (Kantar, 2015). FGLS is here considered to accommodate violations of the basic assumptions of ordinary least squares (OLS) which in most cases do not hold when dealing with country panels. FGLS has capability to handle heteroscedasticity, cross-sectional dependence across panels and serial correlation along time (Reed & Ye, 2011).

$$FGLS \rightarrow \widehat{\boldsymbol{\beta}} = (\boldsymbol{X}'\widehat{\boldsymbol{\Omega}}^{-1}\boldsymbol{X})^{-1}\boldsymbol{X}'\widehat{\boldsymbol{\Omega}}^{-1}\boldsymbol{y};\ Var(\widehat{\boldsymbol{\beta}}) = \left(\boldsymbol{X}'\widehat{\boldsymbol{\Omega}}^{-1}\boldsymbol{X}\right)^{-1} - - - - - - - - - - - - (2)$$

where $\widehat{\boldsymbol{\beta}}\ \&\ Var(\widehat{\boldsymbol{\beta}})$ are its beta estimates and respective variances, and $\widehat{\boldsymbol{\Omega}}$ incorporates underlying assertions for auto correlation, cross-sectional dependence, and error heteroscedasticity.

It is well established that under the presence of cross-sectional dependence the traditional regression estimators are possibly biased and highly inconsistent (Pesaran & Smith, 1995; Paramati, et al., 2017). To deal with this situation,

scholars have further proposed the mean group (MG) estimator (Pesaran & Smith, 1995), which allows all slopes coefficients and errors variances to change across the panels or countries, using the OLS estimation for each panel or country and then draws averages for all countries coefficients (Huang, 2011-a). The approach applies the ordinary least square estimation techniques for each country or panel to arrive at each panel's slope and then average all the panel specific coefficients.

The MG and PMG estimators both allow for significant variation between country panels, however the PMG estimator is primarily suited to panels with extended time series and broader cross-sectional dimension. The PMG estimator only places cross-sectional homogeneity requirements on the long-run coefficients, in contrast to the MG. (Huang, 2011-a). Pesaran (2006) and Pesaran and Yamagata (2008) demonstrate that the PMG estimator is consistent and asymptotically normal irrespective of presence of underlying regressors being I (1) or I (0), and it is very robust to outliers. The PMG approach necessitate that the coefficients for long –run cause be common across countries (Eberhardt & Bond, 2009; Eberhardt & Teal, 2010).

The weighted cross-sectional means of the dependent variable and the regressors are incorporated into the Common Correlated Effects Mean Group (CCEMG) estimator, which uses OLS to generate a secondary regression one per country. The coefficients and standard errors are then computed as usual. (Huang, 2011-a). The CCEMG estimator, it a generalization of the MG estimator of Pesaran and Smith (1995), it is employed due to its ability to account for cross section correlation if present (Huang, 2011-b). The CCEMG estimator (Pesaran, 2006) is considered to be robust and can be adapted to dynamic CCEMG application which accounts for time series bias not accounted by CCEMG (Chudik & Pesaran, 2013). It is considered to be robust to cross-sectional dependence and slope homogeneity, the dynamic CCEMG estimator has been shown to be asymptotically consistent and unbiased as time and size of panel approach to infinity, and have finite sample properties as well (Huang, 2011-a). Huang (2011-b) states that the MG, PMG and CCEMG permit short-run coefficients to vary across countries. This assumption is considered to be more realistic given the nature of country panel data.

The following formulation is adopted where the chosen strategies are known to estimate models following OLS, where all features needed to be controlled when applying to OLS are handled, such as non-stationarity, cross-sectional correlation, heterogeneity across countries non-linearity and asymmetry are captured. (Eberhardt & Presbitero, 2015). Considering the importance of these time series characteristics and dynamics in macro panel data analysis, the error correction model (ECM) formulation was employed for the above equation (1)

above. This method helps separate short-run from long-run characteristics, investigates the error correction process, ascertains how quickly the long-run equilibrium will adjust, and tests for co-integration in the ECM via the error correction term's negative statistical significance. (Eberhardt & Presbitero, 2015). The ECM formulation is presented as follows:

$$\Delta fin_{it} = \alpha_i + \rho_i\left(fin_{i,t-1} - \beta_i^P govp_{i,t-1} - \beta_i^U govu_{i,t-1} - \lambda_i \boldsymbol{f}_{t-1}\right) + \gamma_i^P \Delta govp_{it} + \gamma_i^U \Delta govu_{it} + \gamma_i^I infl_{it} + \gamma_i^O open_{it} + \gamma_i^G grow_{it} + \gamma_i^F \Delta \boldsymbol{f}_{t-1} + \varepsilon_{it} - - - - - - - - - - (3)$$

$$\Leftrightarrow \Delta fin_{it} = \pi_{0i} + \pi_i^{EC} fin_{i,t-1} + \pi_i^P govp_{i,t-1} + \pi_i^U govu_{i,t-1} + \pi_i^F \boldsymbol{f}_{t-1} + \pi_i^{p'} \Delta govp_{it} + \pi_i^{u'} \Delta govu_{it} + \pi_i^{l'} infl_{it} + \pi_i^{o'} open_{it} + \pi_i^{g} grow_{it} + \pi_i^{f'} \Delta \boldsymbol{f}_t + \varepsilon_{it} - - (4)$$

The β_i^j in equation (3) represents the long run equilibrium relationship between bank-based financial development (fin) and measures of independent variables in the model. While γ_i^j represents the short-run relationships. The ρ_i is the short –run speed of convergence towards its long-run equilibrium. The entries enclosed in the brackets represents co-integrating relationship to be identified. The $\boldsymbol{f}$ represents unobservable common factors in the model's long –run model. The π_i^{EC} represents the speed at which short –run estimates returns to the long-run equilibrium and provide light on the presence of a long-run equilibrium relationship.

$$\Delta fin_{it} = \pi_{0i} + \pi_i^{EC} fin_{i,t-1} + \pi_i^P govp_{i,t-1} + \pi_i^U govu_{i,t-1} + \pi_i^{p'} \Delta govp_{it} + \pi_i^{u'} \Delta govu_{it} + \pi_i^{l'} infl_{it} + \pi_i^{o'} open_{it} + \pi_i^{g'} grow_{it}$$

$$\ldots$$

$$+\pi_{1i}^{CA}\overline{\Delta fin}_t + \pi_{2i}^{CA}\overline{fin}_{t-1} + \pi_{3i}^{CA}\overline{govp}_{t-1} + \pi_{4i}^{CA}\overline{govu}_{t-1} + \pi_{5i}^{CA}\overline{\Delta govp}_t + \pi_{6i}^{CA}\overline{\Delta govu}_t + \sum_{\ell=2}^{P}\pi_{7i\ell}^{CA}\overline{\Delta fin}_{t-\ell} + \sum_{\ell=1}^{P}\pi_{8i\ell}^{CA}\overline{\Delta govp}_{t-\ell} + \sum_{\ell=1}^{P}\pi_{9i\ell}^{CA}\overline{\Delta govu}_{t-\ell} + \varepsilon_{it} - - (5)$$

In equation [iv], line one and two represents the MG estimator (Pesaran & Smith, 1995) with control variables (infl, open, and grow) loaded, the added third and fourth lines represent the CCEMG estimator with cross-section averages (Pesaran, 2006), while the whole model formulation taken together produce the DCCEMG estimator (Chudik & Pesaran, 2013). As a result, the PMG estimator can be seen as a bridge between an MG estimation with heterogeneous coefficients and a strictly pooled estimator with homogenous coefficients. The CCEMG estimator assumes that heterogeneous coefficients are distributed around a common mean, whereas the PMG assumes that regressors have homogeneous long-run and heterogeneous short-run effects on the dependent variables. The idea for CCEMG is to eliminate unobserved common factors differential effects through cross-sectional averages (Pesaran, 2006). Thus, the compact short form representation for the dynamic CCEMG

would be: $y_{it} = \alpha_i + \lambda_i y_{i,t-1} + \beta'_i x_{it} + \sum_{l=0}^{PT} \boldsymbol{\delta}_{il} \bar{\mathbf{z}}_{t-l} + e_{it}$. Where $\bar{\mathbf{z}}_t = (\bar{y}_{t-1}, \bar{x}_t)$ and stack λ_i *and* β_i into $\pi_i = (\lambda_i, \beta_i)$, $PT = \sqrt[3]{T}$ denoting the floor of number of lags of the cross-section averages and the strictly exogenous variables to be added to gain efficiency, and the MG estimates are given by $\hat{\pi}_{MG} = 1/N \sum_{i=1}^{N} \hat{\pi}_i$.

To ensure the reliability and validity of the Common Correlated Effects Mean Group (CCEMG) estimator, data quality was rigorously addressed by preprocessing, handling missing data, and outliers. Assumptions, especially the existence of common correlated effects across units and time periods, were verified. Robustness checks were conducted using various specifications and control variables to validate the estimator's stability. Results were compared with alternative estimators (MG, PMG and FGLS), and endogeneity concerns were considered to avoid biases in the estimation process. Proper identification of the model was crucial for uniquely estimating parameters of interest from the data.

Results and Discussion

Descriptive and correlations estimates

Values for descriptive statistics (not log transformed) indicate higher levels of productive government spending compared to non-productive government spending (Table 4). That means the economies' spending are more into investing for long –run outcomes, these results are comparable to those of Ouedraogo and Sawadogo (2020) who found similar results. The proportions for bank-based financial development and spending types account for a considerable 'comparative' portion of the GDP in the economy. The 'comparative' share of trade openness to the GDP (63%), the GDP per capita which capture the individual's economic output (2,079.68 US$) and high inflation (11.02%) all highlight progress and digress in these economies. The considerable mean values of the variables in the sample highlights their economic significance, and expected impacts among connected sectors. Average bank-based financial development over the study period is more pronounced with high means in North African states (i.e. Algeria, Egypt, Morocco and Tunisia), Kenya (Eastern), Namibia, Mauritius, and South Africa (Southern), Senegal, Togo, and Cote d'Ivoire (Western). Countries performing high in terms of measures of variables over the selected period are highlighted based on minimum bench marks. Certain economies seem to perform better over time across indicators, these are Algeria, Morocco, Tunisia, Seychelles, Namibia, Mauritius, South Africa, Mauritania and Cote d'Ivoire on at least three or four indicators highlighted (see Appendix 1).

Table 4: Descriptive statistics and correlation matrix

Statistics	fin	govp	Govu	infl	open	grow
Mean	19.301	21.417	15.169	11.022	63.775	2079.68
Standard Deviation	16.781	9.695	6.153	18.454	30.658	2557.62
Minimum	0.403	-2.424	0.000	-27.049	6.32	164.192
Maximum	106.26	89.381	51.975	219.003	225.023	14417.0
Number of	1443	1443	1443	1443	1443	1443
Variables						
fin	1					
govp	0.277***	1				
govu	0.372***	0.04	1			
infl	-	-0.023	-	1		
open	0.436***	0.279**	0.409***	-	1	
grow	0.530***	0.359**	0.243***	-	0.539**	1

Note: This table presents both descriptive statistics in the upper rows and correlation values in the lower rows. The descriptive statistics are untransformed emphasizing their size while correlations are based on log-transformed values emphasizing uniformity in interpretation. The ***, **, and * denote variables significance at 1%, 5% and 10% levels for two sided tests.

The positive significant correlation between bank-based financial development with most of the variables highlights its anticipated responses based on these independent variables' movement. Inflation is evidently not good for bank-based financial development while the types of government spending, trade openness and GDP per capita are good for bank-based financial development.

Baseline causal estimates

Two samples are compared in the results, that of Africa and that of Sub-Sahara Africa. Causal results are presented in Tables 5 and 6. Estimates 1 to 3 represents model [ii] estimates (FGLS), while estimates 4 to 6 represent first part of the model [iv] MG estimates which is considered more realistic in that it allows for heterogeneities across country panels. Both productive spending and non-productive spending estimates are positively influencing bank-based financial development. The directions of the results are positive consistently/robust even after introducing control variables and use alternative estimation methods (refer Table 5), Figure 2 support the positive effect. Such effects are more positively steep for South Africa, Mauritius, Tunisia, Morocco, Namibia and Egypt. Government spending for countries on the far lower right position in the graphs such as Nigeria and Tanzania are expected to have lesser impact on bank-based financial development, and have relatively lower level of bank-based financial development over the sampled period. But, government spending for countries relatively on the upper left positions such as South Africa and Mauritius have the most impact on bank-based financial development, and have relatively high average level of bank-based financial development over the sample period.

Table 5: Baseline regression results

	1	2	3	4	5	6
govp	0.264***	0.122***	0.108***	0.125**	0.074	0.047
	[0.032]	[0.031]	[0.031]	[0.044]	[0.061]	[0.060]
govu	0.361***	0.300***	0.299***	0.352**	0.301**	0.304**
	[0.045]	[0.041]	[0.041]	[0.107]	[0.107]	[0.114]
infl		-0.029*	-0.013		-0.024*	-0.024*
		[0.011]	[0.012]		[0.010]	[0.009]
open		0.207***	0.226***		0.143	0.093
		[0.046]	[0.046]		[0.083]	[0.092]
grow		0.729***	0.704***		0.612*	0.668*
		[0.047]	[0.050]		[0.302]	[0.289]
trend				0.014***	0.009	0.01
				[0.004]	[0.006]	[0.005]
constant	0.906***	-4.466***	-4.561***	1.032**	-2.972	-3.246
	[0.181]	[0.358]	[0.369]	[0.361]	[1.966]	[1.927]
	1443	1443	1287	1443	1443	1287
N_g	37	37	33	37	37	33
r2_w	0.076	0.27	0.28			
r2_b	0.323	0.421	0.405			
r2_o	0.207	0.341	0.327			
Chi^2	125.832	505.413	468.338	18.672	22.679	20.481
RMSE	0.478	0.429	0.416			
Sample	Africa	Africa	Sub-	Africa	Africa	Sub-
Model	GLS	GLS	GLS	MG	MG	MG
Robust	YES	YES	YES	YES	YES	YES

Note: This table presents the baseline regression results. Six models are presented side by side, label 1 to 6. Models 1 and 4 are using selected countries from the whole of Africa, while models 2, 3, 5 and 6 are using selected countries from sub-Saharan Africa. Models 1 to 3 are analyzed using Generalized Least Squares (GLS) while models 4 to 6 are analyzed using Mean Group (MG) estimator. All the models were robust. Controls variables (infl, open and grow) are introduced in subsequent models to show stability of the models. These results are consistent and robust sign are depicted across models. The ***, **, and * denote variables significance at 1%, 5% and 10% levels for two sided tests. Robust standard errors are in box parentheses. N_g, r2_w, r2_b, r2_o, Chi^2, and RMSE represents number of groups, r-square for within groups, between groups, and overall sample and rout mean square error respectively.

The values for productive government spending are comparatively inelastic compared to elastic values for non-productive spending on bank-based financial development. Inflation was found to be steadily negative and less elastic in its impact on bank-based financial development, while economy openness and GDP per capita are consistently positively contributing to bank-based financial development. These variables account for a sizable impact on bank-based financial development at a range of 20.7% to 34.1% r-squares.

Short –run and long –run causal estimates

Evidences for presence of co-integration in Table 3 in the variables support that bank-based financial development and types of government spending share common stochastic trends towards a long –run path (Sare, et al., 2018). Given this evidence and to address fully the extent of posed hypothetical expectations, short –run and long –run estimations are isolated and presented

in Table 6. Two estimators are compared, the PMG which allows the short –run heteroscedasticity and the pool the long –run estimates, and the DCCEMG which also allows for short –run heteroscedasticity, cross-sectional averaging and estimates long –run estimates, also controls for cross-sectional dependence, serial correlation if present, and allows for dynamism in the model. Both methods also estimate short –run error correction speed towards the long –run to account for such long –run convergence. The short –run estimates are robust and consistently maintain same signs for both models even after addition of control variables. Consistent to results in Table 5, bank-based financial development is robustly less sensitive to productive spending as compared to more sensitivity to non-productive spending in the short –run. Figure 2 also highlight this sensitivity difference by the degree of steepness of the fitted lines.

Table 6: Short –run and long –run regression results

	7	8	9		10	11	12
govp (short – run)	0.093*	0.036	0.006	d.govp	0.104*	0.084*	0.088*
	[0.037]	[0.039]	[0.038]		[0.044]	[0.041]	[0.036]
govu (short –	0.258**	0.183**	0.148**	d.govu	0.275**	0.144*	0.132
	[0.061]	[0.056]	[0.043]		[0.061]	[0.071]	[0.07]
Infl		-0.009	-0.01	infl		-0.01	-0.011
		[0.009]	[0.01]			[0.01]	[0.011]
Open		0.125*	0.137*	open		0.013	0.033
		[0.054]	[0.06]			[0.058]	[0.058]
Grow		0.216**	0.224**	grow		0.178	0.105
		[0.052]	[0.055]			[0.141]	[0.172]
constant	-0.117**	-1.507**	-1.620**	constant	-26.564	-9.752	-5.717
	[0.025]	[0.416]	[0.446]		[31.91]	[5.402]	[4.773]
_ect	-0.014	-0.03	-0.033	**_ect**	-0.037	-0.042	-0.047
	[0.014]	[0.03]	[0.033]		[0.037]	[0.042]	[0.047]
govp (long –	1.200**	0.156**	0.191**	l.govp	0.444	0.338	0.437*
	[0.136]	[0.054]	[0.058]		[0.991]	[0.208]	[0.193]
govu (long –	0.188	0.155**	0.159**	l.govu	2.923	0.012	0.105
	[0.19]	[0.052]	[0.055]		[2.846]	[0.213]	[0.28]
Observations	1406	1406	1254	Observations	1369	1369	1221
N_g	37	37	33	N_g	37	37	33
Log-Bayesian	769.72	938.753	801.476	Years	37	37	37
Akaike's Criteria	-1527.441	-1859.506	-1584.951	cd	1.81	1.219	1.083
				cdp	0.07	0.223	0.279
				F-statistic	1.384	1.557	1.63
				RMSE	0.187	0.179	0.18
				R-squared	0.601	0.485	0.474
				Adj R^2	0.409	0.134	0.114
				r2_pmg	0.263	0.324	0.334
Model	PMG	PMG	PMG	Model	DCCE	DCCEM	DCCEM
Sample	Africa	Africa	Sub-	Sample	Africa	Africa	Sub-

Note: This table presents models 7 to 12. All the models were robust. Controls variables (infl, open and grow) are introduced in subsequent models to show stability of the models. The second row depicts short –run estimates while the fifth row depicts long –run estimates. These results are consistent and robust sign are depicted across models. The ***, **, and * denote variables significance at 1%, 5% and 10% levels for two sided tests. Robust standard errors are in box parentheses. N_g, r2_w, r2_b, r2_o, Chi^2, and RMSE represents number of groups, r-square for within groups, between groups, and overall sample and rout mean square error respectively. While in models 10 to 12, cd, cdp, and r2_pmg represent cross-sectional dependence test, its probability value, which are not statistically significant supporting the fact that the models were able to control for cross-sectional dependence, and r-square is based on pooled mean group estimator's adaptation, but note the models related to these statistics are DCCEMG defined previously in methodology section. _ect in all the models represents the error correction term.

The long –run estimates for model [iv] later part of the equation, are consistently positive for pooled estimates with bank-based financial development being more sensitive to productive spending than non-productive spending (see Table 6). The _ect estimates represents the error correction terms which is the speed of convergence in the financial sector to its long-run equilibrium. This term as stated earlier should be negative and statistically significant for results to be considered important. Under pooling estimation circumstances (PMG) the speed of short –run adjustment towards equilibrium is shown to be slower between 0.087 and 0.203, while under the dynamic common correlated effects mean group circumstances (DCCEMG) the adjustment is shown to be faster between 0.355 to 0.401. While the PMG in this case facilitates robustness of the results directions, the DCCEMG additionally control for manifested cross-sectional dependence in the panel (see Table 2). The insignificant values for 'cd' indicated by 'cdp' of the CD-test after running regressions in Table 6 offer evidence for successful correction of cross-sectional dependence in the models.

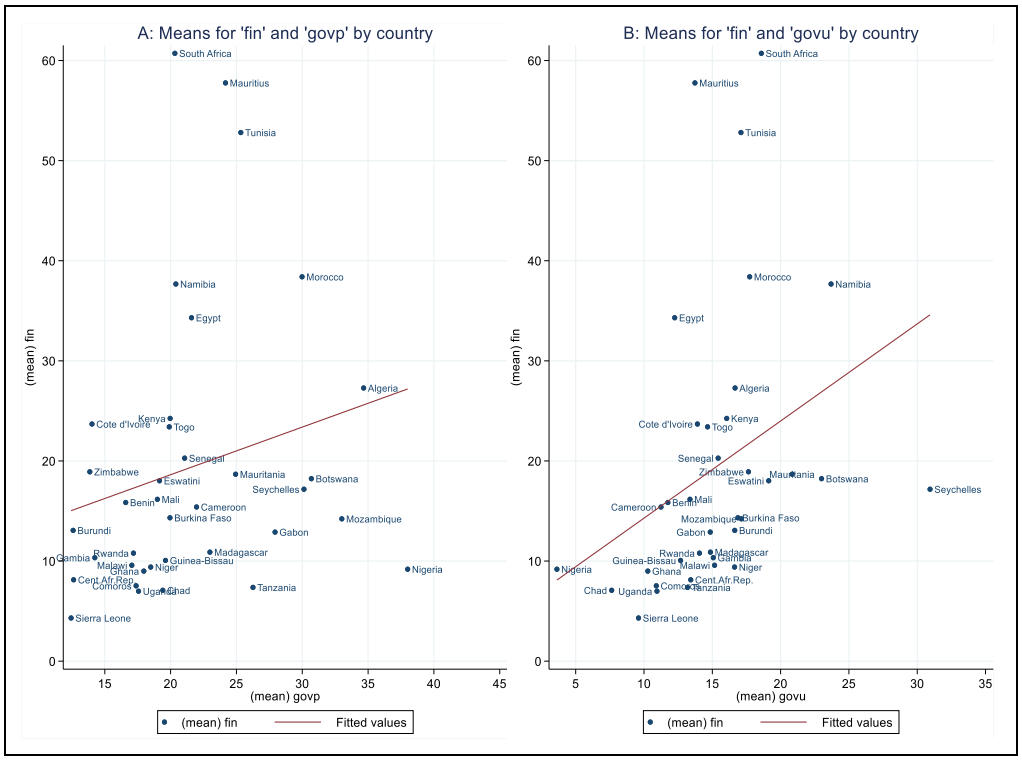

Figure 2: Financial Development and Government Expenditure Types for Selected African Economies. In this figure, two graph panels are presented. In panel A, means of financial development plotted against productive government expenditure highlighted by country. In panel B, means of financial development plotted against unproductive government expenditure highlighted by country. Government expenditure types for countries above the red-fitted lines tend to have above average (more) drive on financial development, while those below it, have less drive. More developed countries tend to dominate the above the fitted red-line. Financial development indicator tends to be more sensitive to unproductive expenditure compared to productive expenditures as depicted by the steepness of the fitted red-lines.

The results of the study support the two hypotheses: firstly, productive spending encourages private sector credit demand through complementarity, and secondly, non-productive spending stimulates private credit demand through income redistribution, increased money supply, and liquidity in the economy. Specifically, the capital spending effect on private investment channel aligns with Adeyemi et al.'s (2022) findings in the East Africa region, indicating a positive impact attributed to private investment's sensitivity to macroeconomic reforms on inflation, as well as productive debt stock influenced by high public investment quality and strong institutional frameworks. The financial sector, being a service sector, depends on the success of other productive sectors. Channeling non-productive spending to areas in which private agents can convert these funds into investments on their part may facilitate a positive impact. Isolating the long-term impact of productive spending is probably achieved through control, aiming to attain the

desired effect based on the type of spending being undertaken. Based on assumptions of stable productive government spending and following Keynesian arguments, the evidence supports a positive impact, as government spending crowds in private sector agents, promoting private investments that, in turn, demand credits from banks. Governments' emphasis on spending policies that allow private sector participation, including public-private partnerships (PPP), may be crucial in accelerating credit demands from banks. Similarly, stability in non-productive government spending ensures income redistribution, increased money supply, and liquidity, supporting the positive role of non-productive government spending in financial sector credit growth. Therefore, in line with Keynesian ideas, governments are likely encouraging public spending that stimulates private agents' activities, leading to increased demand for private credit from banks.

The results suggest that, governments are promoting spending stability and encourage private sector activities and partnerships in the economies, thereby enhancing the banking sectors. This aligns with the recommendation of Ngeendepi and Phiri (2021), who argue that increasing public expenditure efficiency to crowd in private investments and credits involves strengthening project appraisals, screening, selection, and implementation. It also involves implementing procedures to limit transaction costs, control corruption, and target effective and efficient expenditure items. If governments spend more on taxes than borrowing, the negative impacts of government borrowing to private sector credit are reduced. If taxes are sufficient to cover for government spending, then governments are not able to affect the supply by curtailing it through taking a large share since governments are more trusty worth borrowers than private agents, and are not able to cause rise in interest rates in the market for private sectors. That means, the resulting crowding –in of the private sector agents take a large share of credits from the financial sector at affordable interests. Thus, there is an implied dissuation towards heavy domestic borrowing, and possibly, calibrated tax-based spending need is encouraged giving positive impacts of government spending on bank-based financial development that is evidently sustained in the long –run.

As evidenced by negative impacts of inflation, and positive impacts of openness and GDP per capital, there is possibly less control on inflation, but more promotion on openness of the economies, the later benefits bank-based financial development. One particular effort seems to be on avoid unnecessary and discretionary spending, channeling spending where necessary and where they could have positive impacts both to the economy and financial sector. Opening up the economies encourage competition, efficiency, liquidity, price stability thereby attracts private agents to take credits from financial institutions. Controlling population growth and size tends to improve GDP per

capita but reduce potential market power, increasing productive spending tends to increase national output, simply means positive GDP per capita does promote bank-based financial development via increased purchasing power of the working population, that means more credits could be secured by private agents. Thus, promotion of liberalization of both trade and economy play significant impact on financial development. Fostering convergence of financial institutions intermediation, productive spending and private agents' investments surely help a faster short –run effect convergence into long –run equilibrium, which helps a faster realization of the development agenda in this region. It is shown from the sample that both productive and non-productive spending tend to crowd –in credit to private sector. Thus, based on the research question, it is established that bank-based financial development is favorably influenced by both productive and non-productive government spending.

Conclusion and Recommendations

This study employed innovative methods that are considered more appropriate when it comes to dealing with panel data characteristics. Both short –run and long –run estimations and error correction terms were estimated. Results supports a strong persistent positive impact of both types of spending on bank-based financial development, both in the short –run and long –run spans. Therefore, these results support both propositions that; first, *Productive spending encourages private sector credit demand by a way of complementarity* and secondly that *Non-productive spending stimulates private credits demand through increased income re-distribution, money supply and liquidity in the economy.*

Policy recommendations based on the study's findings suggest that governments in Africa should focus on both productive and non-productive spending. Productive spending should be encouraged to promote all sectors of the economy, as the financial sector's success is closely tied to the success of productive sectors. Non-productive spending should be directed towards areas where private agents can convert the funds into investments. To ensure the positive impact of government spending on private credit demand, policies should prioritize stability in spending and encourage public-private partnerships.

In line with Keynesian arguments, policies should promote stability in both productive and non-productive government spending. Public spending that leads to increased private agents' activities and partnerships with the government can accelerate demands for credits from banks, enhancing the banking sector. To increase public expenditure efficiency and crowd-in private investments and credits, governments should strengthen project appraisals,

control transaction costs, and target effective and efficient expenditure items while minimizing corruption.

To mitigate negative impacts on private sector credit, policies that discourage heavy domestic borrowing should be encouraged, and calibrated tax-based spending should be promoted. Controlling inflation and encouraging openness in the economies can benefit bank-based financial development. Policies that foster convergence of financial markets, productive spending, and private agents' investments can expedite short-run convergence into long-run equilibrium, accelerating the region's development agenda. Overall, policies addressing all three variables - productive spending, non-productive spending, and private sector credit - in both short-run and long-run perspectives are essential for expanding bank-based financial development in the region.

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Appendix 1: Country list and means

Country name	Country codes	Region	fin	govp	govu	infl	open	grow
Chad	TCD	CA	7.079	19.407	7.635	4.505	61.466	634.611
Central African Republic	CAF	CA	8.128	12.632	13.421	5.011	45.878	453.908
Uganda	UGA	EA	6.988	17.562	10.948	33.633	34.915	590.817
Tanzania	TZA	EA	7.365	26.257	13.186	16.271	45.044	609.395
Rwanda	RWA	EA	10.788	17.178	14.060	7.961	35.179	485.763
Burundi	BDI	EA	13.062	12.595	16.643	10.084	34.419	261.600
Kenya	KEN	EA	24.249	19.964	16.056	10.331	55.004	909.111
Algeria	DZA	NA	27.288	34.660	16.665	11.404	57.248	3950.717
Egypt, Arab R.	EGY	NA	34.306	21.587	12.247	10.895	50.156	1960.568
Morocco	MAR	NA	38.398	29.985	17.735	3.619	62.702	2174.518
Tunisia	TUN	NA	52.809	25.331	17.098	5.691	89.829	3048.777
Comoros	COM	SA	7.528	17.379	10.901	4.110	36.660	1344.756
Malawi	MWI	SA	9.580	17.052	15.166	22.005	60.081	403.519
Madagascar	MDG	SA	10.889	22.984	14.863	14.209	43.717	510.040
Mozambique	MOZ	SA	14.217	33.004	17.128	20.952	63.585	332.983
Seychelles	SYC	SA	17.176	30.128	30.937	5.742	126.679	9190.614
Eswatini	SWZ	SA	18.018	19.157	19.129	9.143	132.568	3212.886
Botswana	BWA	SA	18.226	30.690	22.998	8.924	101.401	5098.862
Zimbabwe	ZWE	SA	18.916	13.863	17.646	2.925	63.106	1245.449
Namibia	NAM	SA	37.674	20.397	23.692	9.226	98.273	4483.783
Mauritius	MUS	SA	57.764	24.169	13.728	6.618	116.422	5695.534
South Africa	ZAF	SA	60.718	20.322	18.589	10.161	52.802	6547.387
Sierra Leone	SLE	WA	4.311	12.440	9.600	31.168	51.764	403.302
Ghana	GHA	WA	8.994	17.966	10.277	30.295	62.688	1066.954
Nigeria	NGA	WA	9.184	38.005	3.624	22.080	32.674	1766.332
Niger	NER	WA	9.399	18.489	16.630	4.770	40.817	501.806
Guinea-Bissau	GNB	WA	10.059	19.611	12.677	26.784	51.073	584.410
Gambia, The	GMB	WA	10.337	14.243	15.072	12.970	68.974	816.418
Gabon	GAB	WA	12.893	27.932	14.848	5.790	88.779	10446.789
Burkina Faso	BFA	WA	14.325	19.949	16.875	3.476	41.408	515.887
Cameroon	CMR	WA	15.398	21.970	11.244	4.558	48.199	1340.846
Benin	BEN	WA	15.849	16.589	11.747	5.229	51.990	951.231
Mali	MLI	WA	16.165	18.994	13.364	5.097	54.050	582.075
Mauritania	MRT	WA	18.672	24.937	20.844	8.290	78.615	1615.756
Senegal	SEN	WA	20.279	21.064	15.428	3.721	62.296	1181.080
Togo	TGO	WA	23.405	19.897	14.655	4.475	85.776	577.826
Cote d'Ivoire	CIV	WA	23.690	14.027	13.909	5.698	73.431	1451.837
Benchmark minimum (highlighted)			**20≤fin**	**20≤govp**	**20≤govu**	**infl≤10**	**50≤open**	**1500≤grow**

Note: This table summarizes each country involved in the analysis by depicting mean values for each variable used in the analysis. The countries are grouped into five regions, CA, EA, NA, SA, and WA, representing central, eastern, northern, southern, and western Africa countries. Values above selected minimums are highlighted to show the performance of each region on these variables.

Not only Adventurous but also Leisure: Re-defining Tourism in Tanzanian Mount Kilimanjaro National Park

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ABSTRACT
The highest mountainous tourism destinations in the world receive few numbers of tourists both domestic and international. Mount Kilimanjaro, the highest mountain in Africa is not exceptional. This is because mountains are famous as adventure destinations due to the associated risks during trekking the summit. Consequently, only risk-taker tourists trek mountains. The objective of this study is to profile attractions in Mount Kilimanjaro's altitudinal gradients to attract adventurous, acrophobic (fear of heights), and leisure tourists using a mixed-method approach. The results revealed that each altitudinal gradient harbours unique attractions. At an altitude of 1800 - 2800masl, leisure, and acrophobic tourists experience endemic forest flowers like 'touch-me-not' or impatiens'and viola, and diverse wildlife species. Between 2800 and 4000 masl, floristic tourists enjoy giant groundsels, such as senecio and lobelia and the Shiraplateau. At 4000 -5000masl, where semi-adventurous hope to experience nothing, the study found attractive rocks with unique shapes like a cathedral, turtle, mushrooms, and captivating striped Zebra-like rocks. Finally, above 5000masl, the adventurer tourists experience dazzling stars at night, the snow in the tropics, and the summit. The study concludes that the diversification of attractions is likely to draw a variety of tourists, thus, boosting the overall number of tourists. Therefore, in order to increase revenue generated from tourism, tourism planners should market mountains as not only adventurous but also leisure destinations.

Keywords: *Kilimanjaro National Park, Tanzania, Adventure tourism, Tourist attractions, Leisure tourism.*

INTRODUCTION

Indisputably, Tanzania's global appeal as a tourism destination is rooted in the breathtaking scenery of Mount Kilimanjaro landscape, the highest mountain in Africa. Millions of foreign and domestic tourists could be drawn to Mount Kilimanjaro. Nevertheless, according to Croughs *et al.*,(2022), this alluring mountain draws between 45,000 and 60,000 international tourists annually. Despite what the government and tourism stakeholders state, the number of tourists is remarkably below the actual capacity and does not reflect the mountain's magnificence.Research on the identification of tourist attractions is

crucial for the growth of the tourism industry, particularly in high mountains, and especially for the development of new tourism products as well as the management of existing attractions (Zygmunt, 2014). The need to diversify tourist attractions is critical because mountains are home to roughly half of the world's biodiversity "hot spots" and offer exceptional global natural beauty (Rössler, 2022; Sharma *et al.*,2019). Nevertheless, in contrast to non-mountainous tourist destinations, the highest mountains in the world have not received a comparable number of tourists. About 14% of the almost 1.2 million tourists to Nepal trekked Mount Everest (the highest mountain in the world), in 2019, prior to the COVID-19 pandemic (Niebauer & Burtscher, 2021).

Approximately, 4% (or 60,000) of the roughly 1.5 million tourists to Tanzania in the same year climbed Mount Kilimanjaro, the tallest free-standing mountain in the world (Croughs *et al.,* 2022). Despite high mountains having exceptional planetary beauty, they attract few tourists. Low visitation suggests that mountains' key attractions are either not fully identified or high mountains are portrayed as hazardous destinations. Consequently, the highest mountains are believed to be reserved solely for tourists who are inclined to undertake risks, notably adventurers and mountaineers. This erroneous assumption has deterred risk-averse tourists from exploring the mountains, perhaps explaining the low number of global visits. Indeed, mountainous tourism destinations can present certain risks to tourists (Pröbstl-Haider, *et. al*., 2016). Nevertheless, tourists need to be informed that they can still experience leisure. Risks in mountains can vary depending on the altitude and other various factors, including health and the level of acclimatization (Pasha & Newman, 2010). While risks are almost negligible at lower altitudes, they become much more significant at higher altitudes due to complex topography, weather, and low oxygen. The perceived risks play a major role in a tourist's safety, thus influencing the decision of whether to trek or not (Taher*et al*., 2015; Pröbstl-Haider*et al*., 2016). High-volume high-velocity landslides (rockfalls, rockslides, debris flows, avalanches), blizzards, reduced oxygen, extreme cold, unpredictable weather, altitude sickness, and heavy rains are among the risks that mountaineering perceive or endure. The mainstream media compounds the problem by emphasizing the number of fatalities brought on by landslides or low oxygen levels rather than the pleasant experiences tourists had along the altitudinal gradient (Gatterer*et al*., 2019; Rosser *et al*., 2021; Sharma *et al*., 2022). In fact, every tourist destination presents some potential risk, although not as frequently reported as mountaineering. Tourists can also be killed by lions while participating in wildlife tourism (Hehir *et al*., 2022; Weiler *et al.*, 2021) or drown in the water while participating in boat rafting or snorkelling (Samat *et al*., 2020). Since not all tourists must hike to the summit, risks do not exist along the entire gradient of altitude. The objective of this study is was to profile attractions in Mount Kilimanjaro National Park to attract diversified

tourists. Specifically, this study (i) identified attractions, (ii) categorized attractions along the altitudinal gradients from the Park's entrance gates to the summit following the standardized altitudinal zones (1800 – 2800, 2800 – 4000, 4000 – 5000, 5000 – 5895masl, and (iii) re-defined tourism for diversified tourists.

The study was timely and informative as the highest mountainous tourism destinations in the world were prone to degradation and finances from tourism to conserve the fragile mountainous ecosystem have been limited. Thus, the methodology, results, and recommendations from the Mount Kilimanjaro case study are likely to provide insights into how to profile attractions to promote mountain tourism destinations not only for mountaineering but also for sightseeing and leisure tourists, and in turn, increase tourism earnings. The study is also pertinent to the Tanzania National Park Authority as Mount Kilimanjaro National Park is currently in the process of reviewing its General Management Plan (2016-2026). Kilimanjaro National Park (KINAPA) is situated 330km South of the Equator. Its proximity to the Equator makes trekking challenging considering the unpredictable weather and the influence of El Niño and La Niña climate circle. KINAPA (1668km^2) conserves the highest mountain in Africa, yet merely receives about 4% of all foreign tourists to Tanzania (Croughs *et al.*, 2022; Kilungu *et al*., 2019). Considering the prominence of the mountain around the world, the number of international tourists leaves a lot to be desired. The Mountain can be accessed by public transport and trekked up on foot thus, no need for costly 4W drives, yet limited domestic tourism exists compared to Serengeti National Park. The Park has five trekking routes and several attractions owing to diverse weather conditions and ecosystems along the altitudinal gradient ranging from the montane forest ecosystems (1800 - 2800masl), heath/moorland (2800 - 4000masl), alpine desert (4000 - 5000masl), to the arctic (5000 – 5895masl). Lastly, studies on KINAPA are well saturated, however, empirical evidence of attractions along its altitudinal gradients is inadequate to inform tourism planners and stakeholders in general (I. Kikoti, personal communication, March 15, 2023). Dr. Kikoti has been a park ecologist for almost 20 years.

Materials and Methods

Case Study

This study focuses on the Kilimanjaro National Park (KINAPA) where Mount Kilimanjaro: the highest mountain in Africa is conserved. Mount Kilimanjaro is listed as among the 'Seven Summits' of the tallest mountains across the seven continents (Figure 1)The Park is found in Tanzania between $2^0$45' – $3^0$25' and $37^0$00' $37^0$43'E.

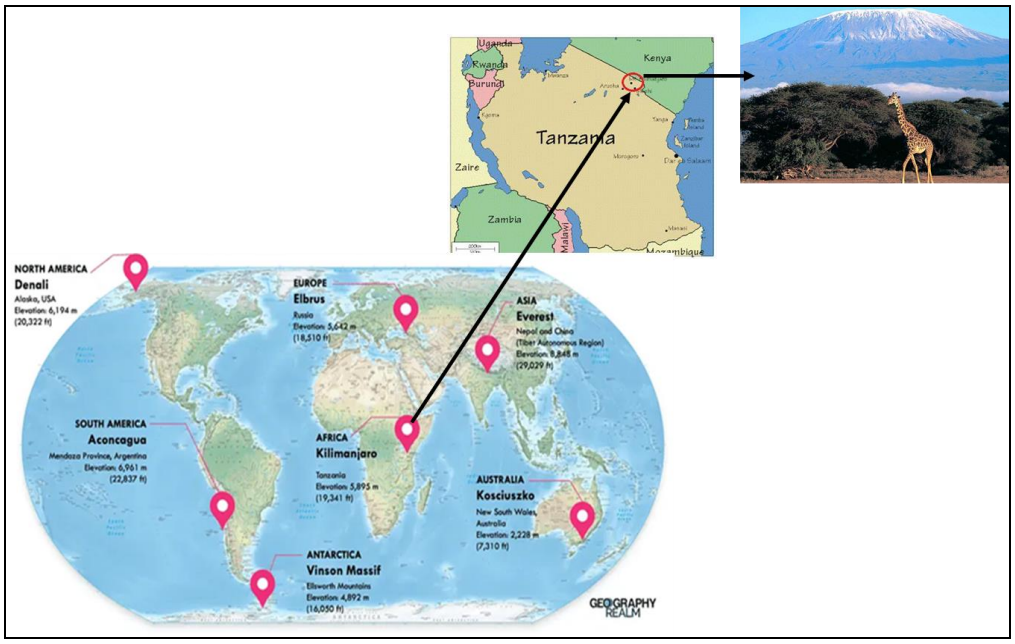

Figure 1: Mount Kilimanjaro as among the tallest Mountains in the seven Continents –

Source: Geography Realm

Data Collection

Three methods of data collection were used to thoroughly identify and categorise tourist attractions along Mount Kilimanjaro's altitudinal gradients. These include observation, augmented by the researcher's knowledge of and experience with the park, interviews with park wardens, and a literature review. Participant observation, which entailed the researcher hiking the Mountain as a tourist was also employed. The observational data collection technique was employed to respond to the research question based solely on what the researcher observes in order to gain an impression of what tourists regard to be attractive in the first place. The precise tourist attractions were noted during the observation, by either observing tourists taking pictures of an attraction or spending extensive time at specific spots.

The researcher was able to precisely take notes and photos of what tourists consider as attractive. The researcher's tourism expertise and experience with the park served to identify tourist attractions unfamiliar to tourists, particularly those located off-trail, where tourists rarely venture because Tanzania promotes High-Value Tourism, making off-road trekking absolutely illegal. The attractions documented in the literature were validated through interviews with park ecologists and tourism wardens. The list of attractions that the park had already identified but had not been thoroughly documented was also enhanced by the interview. The literature reviews involved compiling

information that was available online or in academic articles. The research analysed three studies (Kilungu*et al.,* 2019; Minja, 2014 & Foley *et al.,* 2014) since there is a scarcity of information detailing Mount Kilimanjaro's attractions in scholarly journals. Online platforms, such as; Flickr and Trip Advisor are among the popular sites where tourists voluntarily post their travel locations and experiences. These platforms have been instrumental to tourism research (Spalding *et al.,* 2023; Teles*et al.,* 2022). Most attractions, including flowers and wildlife, are presented without names and geolocations on Flickr and TripAdvisor. By consulting the literature, the park ecologist, and the tourism officer, flowers and wildlife were identified and assigned either scientific or common names. All of the listed attractions were georeferenced in accordance with their appropriate altitudinal gradients.

Results

Tables 1 and 2 demonstrate that Mount Kilimanjaro had a variety of attractions besides the widely recognised snow and Kibo Summit and that each altitude gradient has its own special attractions and potential tourists. The results further revealed that from the entrance gates or at lower altitudes between 1800 and 2800masl, leisure and other risk-averse tourists or acrophobic can enjoy endemic flowers, such as touch-me-not or *Impatiens kilimanjari* and *Viola eminii*, the evergreen montane forest close to the equator, numerous waterfalls, and diverse wildlife and bird species. Further, between an altitude of 2800 and 4000, in the heathland vegetation, floristic tourists may delight in the everlasting flowers species of the genus Helychrusm, other rare and endemic flowers, giant groundsels, and the Shira Plateau -the flattest area on Mount Kilimanjaro.

Mount Kilimanjaro is endowed with endemic flowers, unique to the mountain and not found on any other mountain across the globe. These include, among others, *Stoebekilimandscharica, Hebenstretiadentata, Kniphofiathomsonii, Proteakilimandscharica, Dendroseneciokilimanjari.* Even though the risk of Altitude Mountain Sickness increases with increasing altitude (Luks et al., 2017, Burtscher et al., 2023) higher altitude attractions are numerous. The results suggest that mountaineering or semi-adventurous tourists can have a memorable experience in the alpine desert (between 4000 and 5000masl) before reaching the Kibo summit. In this cold desert, the assessment discovered novel uniquely shaped rocks, including those that resembled a cathedral, club mushrooms, turtles, zebra stripes, and subsurface waterfalls (complete with waterfall sound). At the summit (~5000-5895masl), purely-adventure tourists can have an everlasting memorable experience on Africa's highest point (5895masl), touch ice sheets in the tropics, climb rock pinnacles on the Mawenzi peak, and stargaze on dazzling bright stars at night and experience spectacular sunrise and sunset.

Table 1: Key Attractions on Mount Kilimanjaro Along the Altitudinal Gradients and Potential Tourists

Altitudinal gradient	Land cover	Type of Attractions	Potential tourists
1800 -2800	Montane Forest Vegetation	• The evergreen montane forest • Endemic forest flowers (*Impatiens kilimanjari* and *Viola eminii*), • Other attractive flowers • Diverse wildlife species (elephants, zebra, black and white colobus monkeys, • Diverse bird species (hartlaub turaco, sunbirds, Ruppell's robin chat, silvery-cheeked hornbills, and speckled mousebirds • Waterfalls, • Ritual sites (kifunika), • The Maundi Crater	Leisure, floristic & acrophobic
2800-4000	Heath/moorland Vegetation	• Heath flowers (everlasting flowers, • Giant groundsels (i.e. senecioand lobelia), • Shira Plateau (a collapsed peak), • Underground waterfall • migratory wildlife such as buffaloes, elephants, elands	Floristic and Mountaineering
4000-5000	Alpine/cold desert (sand and Rocky land)	• Attractive rocks with unique shapes like a cathedral, turtles, mushrooms, and zebra stripes • Bright stars at night, sunrise, and sunset	Adventure tourists and Mountaineering
5000-5895	Arctic/snowy	• Kibo Summit (the highest point in Africa) • Ice sheets • The crater and crater ream • Brilliant sky filled with stars at night and sunrise for stargazing • Temperate weather in the tropics, and • Mawenzi, the second-highest summit in Africa and its rock pinnacle for technical climbing	Purely-Adventure tourists

Table 2: Pictorial Representation of the Diverse Attractions along KINAPA's Altitudinal Gradients

Altitude zone	Attractions			
Montane forest (1800-2800masl)	 The evergreen forest	 **Touch-me-not (***Impatiens kilimanjari)*	 *Viola (Viola eminii)*	 Waterfall
	 Giraffe	 Elephant	 Black and White colobus Monkey	 Zebra
	 Turacos	 Malachite sunbird	 African Pitta	 Cuckoos
Heath Vegetation	Endemic flowers and plants			

(2800-4000m asl)	 *Stoebekilimandscharica*	 *Hebenstretiadentata*	 *Kniphofiathomsonii*	 *Everlasting flowers (Helichrysumsps)*
	 *Proteakilimandscharica*	 *Erica arborea*	 *Helichrysumnewii*	 *Dendroseneciokilimanjari*
	 *Lobelia deckenii*			
Alpine desert (4000-5000m asl)	 Cathedral-like rock	 Turtle-like rock	 Mushroom-like rock	 Zebra stripes rocks

Summit (5000–5895m asl)	 The Kibo Summit	 The ice sheets in the tropics	 Rock Pinnacles on Mawenzi Peak	 Sunrise at Kibo summit

Discussion

Primarily, the identification and visual interactive presentation of tourist attractions is important to the development of mountainous tourism destinations. This is because mountainous destinations usually receive few tourists due to limited information on diverse attractions other than their summits. In addition, identifying endemic plants and animals that tourists cannot see in other destinations is imperative to the tourism research agenda, particularly for attracting tourists to unique destinations in the world. The push-pull theory argues that tourist attractions are the key pull factors motivating tourists to destinations. This implies that without developed attractions, nature-based tourism and its destinations would not exist (Yale, 2004 & Kilungu, 2019).Therefore, the present study is in line with Pizam, (2010) who argues that the identification of attractions is likely to attract diversified tourists to a destination and create memorable tourism experiences that are the central facet of tourism development. As such, mountainous tourist destinations must strive to deliver memorable tourism experiences to their diversified tourists (Bigne *et al.,* 2020; Kostopoulos *et al.,* 2021).

One of the most effective ways to attract more tourists and create a memorable tourist experience in the mountains is to profile the tourist attractions along their altitudinal gradients. This is especially important now that Tanzania is attempting to boost the number of foreign tourists from 1.5 million to 5 million by 2030. In spite of being home to the highest mountain in Africa and the only free-standing mountain in the world, Kilimanjaro National Park only receives 4% of the total number of tourists to Tanzania. This study offers scientists and tourism stakeholders an innovative approach to identifying attractions. The highest mountainous tourism destinations in the world offer more than merely climbing to the top. To catalogue the attractions in all mountains along altitudinal gradients, research is essential. On Mount Kilimanjaro, for example, in addition to the stunning vistas a tourist can see while trekking in different climactic zones to the summit, the identified brilliant star in the sky at night, the glaciers, and a multitude of unique plants, wildlife, and bird species, and rocks of magnificent shapes (cathedral, mushroom, turtle) could be promoted to enhance the experience and, in turn, diversify tourists and tourism in general.The marketing and promotion of tourism rely heavily on this information. Attributable to a dearth of information, few adventurer tourists opt to climb the highest mountains in the globe, while a great number of potential leisure, acrophobic, and florist tourists, who are generally risk-averse, are led to believe that climbing mountains is horrific (Miller & Mair, 2021). This study aimed at bringing clarity to this misconception, with the intent of boosting mountaineering tourism. In fact, the risk linked with the mountain's altitude diminishes at lower altitudes (<2500masl) (Shen *et al*., 2020). Thus, leisure, acrophobic, and

florist tourists can enjoy a variety of attractions. According to Shen *et al*., (2020), acute mountain sickness (AMS) is the mildest form of illness that occurs when unacclimatized persons ascend high altitudes. Altitude sickness is a major source of unsuccessful summiting (Miller & Mair, 2020). However, researchers contend that trekkers start to experience altitude sickness above 2500masl (Croughs *et al*., 2022; Shen *et al*., 2020). Karinen *et al*.,(2008) argue that trekkers start to experience the first symptoms of altitude sickness at an elevation of about 2700m.

At altitudes above 3700, some trekkers, depending on their health conditions and level of acclimatization may potentially suffer fatal forms of altitude sickness, namely High-Altitude Pulmonary Oedema and High-Altitude Cerebral Oedema. However, this should not be the case for most risk-averse tourists. At lower altitudes (1800-2800m asl), where the risk is nearly negligible, the current study identified a multitude of attractions including wildlife, waterfall, birds, endemic flowers, and the sense of the evergreen forest close to the equator. This novel assessment implies that leisure tourists who simply wish to experience the thrill of life on Africa's highest mountain are likely to be drawn to an equally fascinating experience. Traveling for leisure comprises discovering new places, taking part in leisure pursuits, and resting and unwinding without encountering extreme risks (Jin *et al*., 2019). Due to outstanding world reputations, the highest mountainous tourism destinations are expected to attract millions of tourists each year. As a result, several adventurists are motivated to summit the highest peaks in the world to set an example of maximum human endurance (West, 2004). In this lifetime accomplishment, numerous high-altitude tourism destinations worldwide, such as Mount Everest in Asia, Mount Kilimanjaro in Africa, Mount Aconcagua in South America, Mount Denalli in North America, Mount Elbrus in Europe, and Vinson Massif in Antarctica should receive significant attention from the scientific arena. Research, particularly focusing to identify attractions would be an effort to diversify tourism activities to draw a variety of tourists. It is important to note that diversified attractions would attract more diversified tourists to these mountains, as each tourist type wants to experience new attractions and to have everlasting experiences, like that of visiting the highest mountains in the world.

Conclusion

The assessment of tourist attractions along Mount Kilimanjaro's altitudinal gradients revealed that the highest mountainous tourism destinations in the world have a variety of attractions beyond their summits. Therefore, mountains ought to be promoted for a variety of tourists rather than just the adventurous. Few (45,000 to 60,000) tourists ascend Mount Kilimanjaro annually via an array of routes. Given the mountain's exceptional significance

to the globe and the nation, the Tanzania National Park Authority (TANAPA), and other tourism stakeholders maintain that the number of tourists is low. The study proved essential since it demonstrates that there are more tourist activities to accomplish on Mount Kilimanjaro than just reaching the summit.

The results showed that in addition to the stunning vistas a tourist can see while trekking in different climactic zones to the summit, the dazzling stars in the night sky, the glaciers, a variety of endemic plants, animals, and bird species, unique rocks with magnificent shapes (cathedral, mushroom, turtle), could be promoted to redefine tourism on Mount Kilimanjaro and enhance tourists' experiences. This would in turn broaden the range of tourists. As research in the medical sciences has demonstrated that the risk of mountain altitude sickness is low at lower altitudes (<2500) and for individuals who have not acclimated, the results in this study urge tourism managers to promote mountains for leisure, floristic, and other sightseeing purposes. According to the current study, there are numerous tourist attractions in lower altitudes (1800–2800masl). The varied attractions found along the altitudinal gradients lead to the conclusion that Mount Kilimanjaro is appealing to both leisure, acrophobic and adventurous tourists. The study recommends similar studies to other mountains to attract more tourists and in turn, boost revenue generated from tourism.

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Influence of Monitoring and Evaluation Practices on Performance of Tobacco Contract Farming Projects in Katavi Region, Tanzania

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ABSTRACT

Monitoring and Evaluation is globally used in assessing the project's use of limited resources, transparency, improved service provision, value for money and accountability. The study's main objective was to determine the influence of monitoring and evaluation practices on performance of tobacco contract farming projects in Katavi region, Tanzania. Whereas the specific objectives were to: determine the effect of M&E human resource capacity; establish the effect of M&E technical expertise; and determine the effect of stakeholder involvement in M&E processes team. The study used Resource Based Theory; Dynamic Capabilities Theory; and Theory of Change that were related to the study's independent variables. Explanatory research design and cross-sectional strategy were used. The sample frame was purposively chosen while the 132 respondents sample size was selected using simple random sampling. Descriptive and inferential statistics were used in data analysis. The results indicated that M&E human resource capacity and M&E technical expertise were not significant. However, stakeholder involvement in M&E processes team was significant. The study recommends that the Agricultural and Marketing Cooperative Societies should establish all the M&E related policies, M&E plan framework, M&E department with all necessary resources while embracing results-based management, participatory Monitoring and Evaluation and information & communication technology.

Keywords: *Monitoring and Evaluation, Contract Farming, Tobacco Farming, Farming Projects*

INTRODUCTION

The Structural Adjustments Programmes (SAPs) automated the emergence of contract farming (CF) in Tanzania context particularly in Katavi region. Thus, the Agricultural and Marketing Co-operative Society (AMCOS) ought to collaborate with stakeholder to fulfil the contractual arrangements (Mzovu, 2013). It should be noted that in Contract Farming (CF) there might be misplaced priorities that may hinder the project performance (World Bank, 2013). AMCOS therefore faces such a situation in their tobacco CF projects. According to Tanzania Tobacco Board, (TTB), CF in Tanzania was established in 1994, but got stabilized in 1997 (TTB, 2006). According to

Tanzania Tobacco Board and Tanzania Tobacco Council (TTC), the trend of tobacco production in Katavi region was noted from 2009/10 season in which AMCOS started securing inputs fund from financial institutions. The production increased from 12 356 to 15 695 tonnes in 2009/10 and 2010/11 respectively (TTC, 2009; TTB, 2020). Within the 9 subsequent seasons the trend had a shape of 'ups and downs'. For instance, the highest production was noted by 13 305 tonnes in 2014/15 and the lowest 3 829 tonnes in 2019/20 season (TTB, 2020). This connotes that there might be something wrong in tobacco production processes.

The performance of tobacco CF projects was revealed through production against price index during the study's review scope from 2015/16 to 2019/20 respectively. The 8 445 tonnes were sold at an average price of US$ 2.16 per kg in 2015/16 season. In 2016/17 season 12 099 tonnes were sold at US$ 1.64 per kg. The increase in production was noted by 43%, but the price dropped by 24%. The 2017/18 season marked a production of 5 426 tonnes and sold at an average price of TZS 3 635 per kg. This season used a Tanzanian shilling currency as per government instruction. The production decreased by 55%, whereas in the 2018/19 season the achievement rose up to 7 144 tonnes and sold at an average price of US$ 1.44 per kg. In that season the Government allowed the reuse of US$ currency. The production increased by 31%. On the fifth season 2019/20 the production was only 3 829 tonnes and sold at an average price of US$ 1.60 per kg. This revealed that production decrease by 46% and price increased by 1.39% (TTB, 2020). The fluctuation in production and price showed a negative effect which altered a cost of production and revenues to small-scale farmers (MAFS, 2006). But Kagwiria and Gichuki (2017) requested the government to establish a policy that will enhance the reduction of cost of production. Furthermore, (Moyo, 2014, 2019) suggested that a legal framework should be established to handle the hazards from hail stone and crop failures, regardless of some of challenges but still CF is an option that ensures production sustainability and incomes to individual farmers. However, Moyo (2017) asserted that there is no difference between CF and non-CF farmers in terms of social aspect. Rather, it is an exploitative intervention. Therefore, these challenges and contradictions also face AMCOS in Katavi Region. Moreover, AMCOS leaders are supposed to fulfil the interest of their farmers, especially in timely supply of tobacco farm inputs and right and timely produce payments. Failure to that may frustrate tobacco CF in Katavi Region. At this juncture the application of Monitoring and Evaluation (M&E) is inevitable. The M&E has got a broader global emphasis as a tool that provides a road map to achieving project objectives in terms of performance and sustainability (Okuta, 2019). The M&E also provides lessons to be used in the future CF projects (Ojok, 2016). Moreover, M&E allows the voiceless project beneficiaries get heard through involvement and participation

in all project phases by participatory monitoring and evaluation (PM&E) approach (Mgoba & Kabote, 2020; Mujuru, 2018).

Due to the fact that AMCOS secures substantial financing from financial institutions in form of loan for CF tobacco inputs as well as afforestation programmes, the M&E practice is inevitable. Muniu (2017) urges organizations to comply with M&E practices in order to realize the value for money. Onyango (2019) also suggested that the M&E plans should be in place before project inception. Moreover, Kanyamuna (2019) also suggested that the use of M&E should be coupled with Results-Based Management (RBM). Nevertheless the M&E is a global agenda, but still some of the organizations especially in developing countries, do not implement it (Kule & Umugwaneza, 2016). This statement is well demonstrated in AMCOS in Katavi region. It positions the AMCOS in prone zone of gradual deterioration of farmers' economic status and national macroeconomic growth through co-operatives. Thus, the current study harmers the nail to fix the existing M&E gap in Katavi Region's AMCOS, as it has a socio-economic impact to all the households in Katavi region. The M&E is a tool for measuring either success or failure of a project (Magagula, 2019). Since the M&E practices are suspected to be in vain in AMCOS, that situation threatens the farmers' economy because tobacco CF projects involve a huge financing. It thus requires personnel and stakeholder with diverse knowledge and skills. The poor performance of tobacco CF projects in AMCOS is believed to emanate from lack of M&E personnel with appropriate skills and unorganized stakeholder involvement respectively (Akanbang & Bekyieriya, 2020; Muumbi & Chege, 2021). The arguments from (Safari & Kisimbii, 2020) suggested that, having a special knowledge and skills to interact in global business environment rich in technology and diverse demography is paramount. Lack of M&E Practice application in AMCOS is a problem that needs to be addressed by the current study. The current study used three theories that are cohesively related to the three study variables found in the specific objectives. Based on the M&E Human Resource Capacity variable, the Resource Based Theory (RBT) clarifies that if the organization wants to win and remain competitive in local and international context, must possess all the necessary resources. These include personnel with capacity, qualifications and right qualities (Penrose, 1959; Roos & Roos, 1997). Thus, human resources in AMCOS are expected to possess the same in order to manage their jobs, achieve the set organizational objectives as well as goals.

Hence organization enjoys economies of scale. Otherwise, lack of capacity is a potential gap. (Hijzen, Görg & Hine, 2005). Therefore, RBT puts an emphasis on human resource capacity as a competitive advantage as well as superior performance of a firm. Many scholars and managers try to find out why some

firms survive and prosper, while others perish in the rapidly changing business environments regardless of having all resources including human resources. Then what is needed? By referring to the M&E Technical Expertise variable, the Dynamic Capabilities Theory (DCT) gives the answer to such a question that the firms need to renew their resources in order to overcome that situation (Diericks & Cool, 1989). 'Dynamic' means a renewal process of resources and competences. Thus, in order the firms including AMCOS remain competitive, survive and sustainable, should have an ability to either renew or change their resources. That can be achieved by applying the 'create-and-abandon' some of their resources that are not compatible with their pace. By doing so the organizational objectives and goals will be achieved with higher assurance of success during crisis times as well as environmental and technological advancements (Eisenhardt & Martin, 2000). The DCT therefore, echoes an alarm to AMCOS personnel as suspects to lack M&E Technical Expertise (or specific skills) as a potential gap. The Stakeholder Involvement in M&E processes Team variable is well demonstrated in the discipline of M&E by which cohesively attracts the fundamentals of Theory of Change (ToC). The ToC is regarded as the only theory that contemporarily guides the process of M&E (Weiss, 2000). The ToC also exerts a cause-and-effect relationship to arrive at the desired results in a sequential style from inputs to impacts (Ibid.) In order for the firm like AMCOS, to achieve development outcomes, ToC should be used by stakeholders at global and local level contexts (Vogel, 2012). For so many decades stakeholders have been using ToC in their development interventions in form of logic model. In regard to the tobacco CF projects that involve some stakeholders (with diverse expertise) in different project phases, the ToC is inevitable. The ToC in the current study enhances project team and stakeholders to be focused through the four project phases on the intended future realities that are important to the core success aspiration of the project (Ibid.). The three specific objectives of this study emanates from the main objective which determines the influence of M&E practices on performance of tobacco CF projects in Katavi region. Moreover, the three specific independent variables (M&E Human resource capacity; M&E Technical expertise and Stakeholder involvement in M&E processes team) were measured to check the effect they cause on performance of tobacco CF projects. The study's scope covered from the year 2015 to 2020 due to the fact that data was adequately available in this period in regard to the study variables. The next part of the study comprises: Section 2 which outlines the methods applied in data analysis. Section 3 gives the details on results and discussion. Section 4 presents conclusion and recommendations. Finally acknowledgement is found in section 5 of the study.

Literature Review

In the current study, monitoring and evaluation (M&E) is defined as the

planning of the objectives and goals of coordinated activities of a project or programme that is compatible to the available physical, human and financial resources, thereafter appraise it and report the findings for implementation in decision making, purposely for improving the on-going and future project or programme's limited resources, service provision, accountability and realization of value for money for the benefit and sustainability of all parties involved. The study also defines contract farming (CF) as an agricultural arrangement backed up with a legal agreement framework within which both parties to the contract (the Seller and the Buyer), set standards of terms and conditions to abide with, the parties should also be committed to the trustworthiness, predetermined price, technical expertise, quantity and quality that ensure safety, market information availability and risk avoidance for the benefit of both parties to the contract. The historical overview of M&E can be traced back to the three perspectives that is global M&E practices, African M&E practices and Tanzanian M&E practices. The global level trends perspective of M&E practices started between 1980s and 1990s as the development agenda for both the public sector and the private sector (Kanyamuna, 2019). Raimondo (as cited in Kanyamuna, 2019, p.38) stated that whenever using Poverty Reduction Strategy (PRS) there must be a close foliow-up in terms of monitoring together with the national statistical office. For the Tanzania context should be the National Bureau of Statistics ((NBS). Having statistics at hand, the decision making process on problem identification, policy designing, setting targets and allocating resources becomes easy task But during that time, it was a challenge and obstacle to achieve the said strategy in lower levels in terms of technology (Kusek & Rist, as cited in Kanyamuna, 2019, p.39).

The 2008 Accra Agenda for Action (AAA) was the next sitting to the 2005 Paris Declaration (PD). Chianca (Kanayamuna, 2019) stated that the great emphasis under this was to enforce good governance and sustainable development especially on the sound effectiveness. It was also concerned with restructuring the way the developed and developing countries work together. The purpose was to ensure that existence Aid is spent objectively to strengthen sustainable economies that help people free from poverty (Ibid.). The next sitting was held in Busan, Korea in 2011 which was known as the Fourth High Level Forum (HLF4). This forum aimed at promoting M&E in global perspective. The focus was on principles of ownership, results, partnerships, transparency and shared responsibility towards sustainable impacts (Kanyamuna, 2019). Moreover, the aim to harmonize various practices and management at country levels and at regional levels was remarked as the Rome Declaration in Italy in the year 2003. According to UNDP (Kanyamuna, 2019) the 2004 Marrakech Memorandum in Morocco, concentrated in better development results which required management systems and capabilities, that

put results at focal point of planning, implementation and evaluation (Kanyamuna, 2019). The 2005 Paris Declaration in France targeted to be a practical action orientated road map to improve and embrace the quality of Aid and impact (Ibid.). Moreover, the 2011 Busan Declaration in Korea aimed to review the implementation of Paris Declaration and also to maintain the relevance of the Aid effectiveness in development context (Ibid.). In summary, the major global efforts can briefly be traced from the year 2000 to 2016. During this period the Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs) were initiated. The initiatives aimed to end poverty as well as protect the planet and ensure that people enjoy peace and prosperity (Ibid.). After the global level trend perspective of M&E practices, came in the African level trends perspective of M&E practices. The pace of M&E in African countries is gradual as a result many countries including Tanzania are at initial stages of constructing their own M&E in African systems. Initially, the M&E in Africa was regarded as the donor's agenda, but now in most countries are constructing their own practices and systems to achieve good governance as well as poverty reduction (, Kanyamuna, 2019). Moreover, Chouinard and Cousins (Kanyamuna, 2019) stated that a conference held in 1998 in Abjan, Ivory Coast/Cote D'Ivoire was a follow-up of the 1990 conference held in the same venue. The conference aimed at checking the M&E capacity status in Africa for public service delivery and holistic performance. The participants appreciated the methods of innovation to stabilize the M&E function across the Africa continent.

The move towards M&E development in African context, was established in 1999 (AfrEA, 2020). The 8th conference held in Kampala, Uganda from 27 to 31 March 2017, focused on exchange between researchers and M&E practitioners. That was based on demand and supply of credible and effective evaluative evidence to support the Sustainable Development Goals (SDGs) in Africa. OECD and World Bank (Kanyamuna, 2019) asserted also that the conference aimed at building essential M&E practices so as to arrive at informed decisions hence hit the national agendas in Africa continent. The 9th AfrEA international conference convened on 11-15 March 2019 in Abjan, Cote D'Ivoire. Its theme was "Accelerating Africa's Development: Strengthening National Evaluation Systems" (AfrEA, 2019). The 10th sitting was the AfrEA international virtual conference which was planned to convene on either 8-12 March or November, 2021 in Addis Ababa, Ethiopia. But it was instead convened on 14-18 March 2022 in virtual modality. The conference theme was "Evaluation That Leaves No-One Behind: Empowering Progress towards the Africa We Want amidst the COVID-19 Pandemic and other Crises and Opportunities Facing us" (AfrEA, 2020). The participation in the conference was drawn from a wide range of stakeholders on the African continent and globally, including National Evaluation Associations, the AfrEA

emerging Evaluators Network, World leaders in the monitoring and evaluation field and students (AfrEA, 2022). In regard to the conference theme, the 10th AfrEA conference specifically aimed to: (i) "Promote learning and action to support evaluation practice that contributes to real responsive, agile and sustainable development in Africa; (ii) Promote African-rooted and Africa-led evaluation through sharing African evaluation perspectives; (iii) Build the theory and practice of evaluation in Africa by providing the platform for the development and sharing a high quality body of contextually-relevant knowledge on evaluation; (iv) Support the establishment and growth of national evaluation associations or Voluntary Organizations for Professional Evaluations (VOPEs) and other related communities of practice; (v) Facilitate capacity building, networking and sharing of new developments in evaluation theory and practice, towards fostering capacity development among evaluators, policy makers, researchers, development specialists and related stakeholders in the evaluation eco-system; (vi) Facilitate networking and partnerships between key local and global stakeholders and development partners towards an integrated, coherent approach to strengthening evaluation systems, knowledge and practice on the African continent; and (vii) Empower members to influence national M&E system and policy in their respective states and represent Africa on the global stage of M&E" (AfrEA, (2022). In summary, since the AfrEA was established in 1999 as a non-profit umbrella organization, with its headquarters in Accra, Ghana has had conducted 10 conferences as follows: In Kenya 1999; in Kenya 2002; in South Africa 2004; in Niger 2007; in Egypt 2009; in Ghana 2012; in Cameroon 2014; in Uganda 2017; in Cote D'Ivoire 2019; and in Ethiopia 2021/2022 as shown in Figure 1 below (AfrEA, 2020).

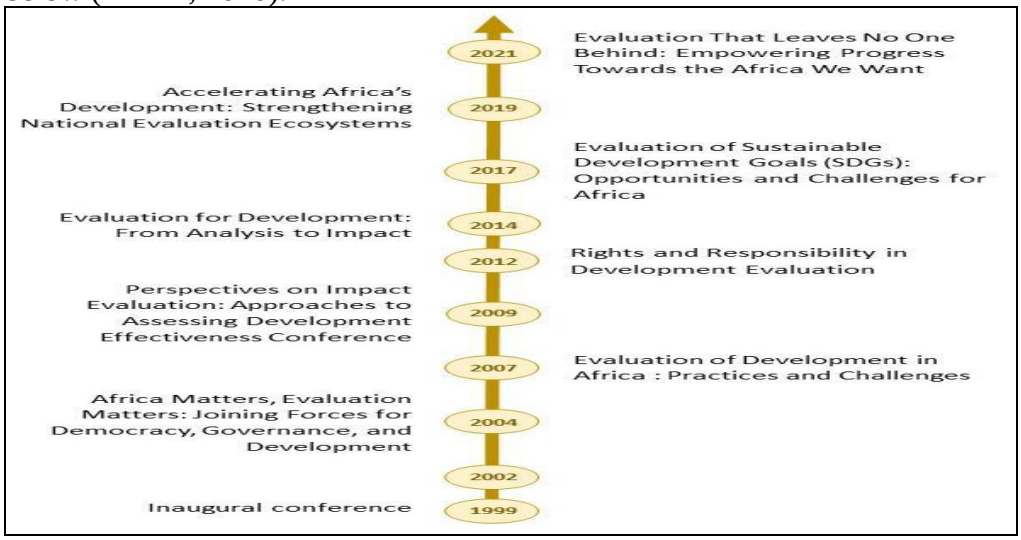

Figure 1: African Evaluation Association Conferences (from the 1st to the 10th)

Source: Adapted from AfrEA (2020, p.4)

In the United Republic of Tanzania (URT) context, the trends perspective of M&E practices were taken on board in the very beginning of 1990s, as a result of reflection of African and global M&E (URT, 2014). The Government of the United Republic of Tanzania, introduced M&E practices in her organs for instance, it initiated the Public Service Management and Employment Policy (PSMEP) in 1998. The policy necessitated a sound M&E in public organizations. This requirement provides performance feedback information that help stakeholders, policy makers and decision makers to always be proactive rather than being reactive (Ibid.). The government has done a lot in policy, strategies and structural institutional reforms with the focus on stabilizing M&E function. That is found in various government levels, for instance, the Local Government Authorities (LGAs), Regional Secretariats (RSs) , Independent Departments and Executive Agencies (MDAs), (Ibid.). Thus, the M&E practices enhance the government authorities to properly and systematically provide social services to the public, aiming at provision of improved social services in relation to the value for money (Ibid.). However, from the private sector point of view, in which the Agricultural and Marketing Cooperative Societies (AMCOS) and other stakeholders are found, still the M&E practices are questionable. That is due to the fact that, in private sector probably there is no a well structured, organized and coordinated M&E practices and systems. This remains as a vivid gap that exists between the public sector and the private sector needed to be observed in order to move in the same pace as a country in M&E development.

Theoretical Review

The Resource Based Theory (RBT) postulates that a collection of resources including but not limited to human, physical, financial and Information and Communication Technology (ICT) form a complete organization that is believed to be competitive in local and international business contexts (Hijzen, Görg & Hine, 2005). Thus, the personnel working in AMCOS need to have appropriate qualifications for M&E activities. Therefore, the RBT relates with the M&E Human Resource Capacity variable because the theory puts emphasis on the firms to own and possess the right resources with capacity to achieve the organizational objectives. Table 1 illustrates. In order that the Dynamic Capabilities Theory (DCT) to be practically measured, there should be all resources needed in the organization. Dynamic means a renewal process of resources and competences in order to survive in the rapidly changing business environment (Eisenhardt & Martin, 2000). Thus, AMCOS need to 'create-and-abandon' some of their resources which are outdated (Ibid.). The M&E coupled with Results-Based Management (RBM) will assist the dynamic process (UNDP, 2007). The RBM aligned with the new system will lead to project outcome (Ibid.). The DCT therefore has a direct relationship to the M&E Technical Expertise variable. That is because the theory clarifies the

essence of having resources that are update, competitive, with current skills that can enable the firm compete and survive in contemporary pace of business environment, economy, social (demography) and contemporary technology. Table 1 and 2 below illustrates the above explanations.

Table1: Prospective Cultural Changes in AMCOS

Prospective cultural changes in AMCOS		
Today		**Tomorrow**
Project driven	➡	Policy driven
Process orientation	➡	Results orientation
Low level specialized expertise	➡	Clear competency profile
Low knowledge-based capacity	➡	Innovative and Information technology networked capacity
Risk aversion	➡	Risk taking
Introverted, sceptical of partnerships	➡	Outward looking, partnerships oriented
Cumbersome decision making	➡	Flexible and real-time decision making
Bureaucratic culture	➡	Merit-rewarding and initiative-driven culture
Weak management accountability	➡	Responsive leadership management

Source: Adapted from UNDP (2007, p.13)

Table 2: Key Features in Implementation versus Outcome Monitoring

Key features in implementation versus outcome monitoring		
Elements of Implementation Monitoring (Traditionally used for projects)		**Elements of Outcome Monitoring (Used for a range of interventions and strategies)**
Description of the problem or situation before the intervention	➡	Baseline data to describe the problem or situation before the intervention
Benchmarks for activities and immediate outputs	➡	Indicators for outcomes
Data collection on inputs, activities and Immediate outputs	➡	Data collection on outputs and how/whether they contribute towards achievements of outcomes More focus on perceptions of change among stakeholders and more focus on soft assistance
Systematic reporting on provision of inputs, etc.	➡	Systematic reporting with more qualitative and quantitative information on the progress of outcomes
Directly linked to a discrete intervention (or series of interventions)	➡	Done in conjunction with strategic partners
Designed to provide information on administrative, implementation and management issues as opposed to broader development effectiveness issues	➡	Captures information on success or failure of AMCOS partnership strategy in achieving desired outcomes

Source: Adapted from UNDP (2007, p.16)

The discipline of monitoring and evaluation (M&E) cohesively attracts the theoretical fundamentals of Theory of Change (ToC). That is because it exerts a 'cause-and-effect' relationship to reach at the desired results from inputs to activities, outputs, outcomes and impacts (Weiss, 2000). For that to be practical, AMCOS should have plans in their M&E framework to consolidate the RBM culture. This will enable the management to figure out which activities need to be implemented for planned results (UNDP, 2007). Stakeholders apply ToC in public and private development interventions. Therefore, the Stakeholders Involvement in M&E Processes Team variable, relates to the ToC because tobacco Contract Farming (CF) projects involve some stakeholders in various project phases in order to be focused as a project team to get the intended results (Vogel, 2012). Figure 2 below clarifies the above explanations.

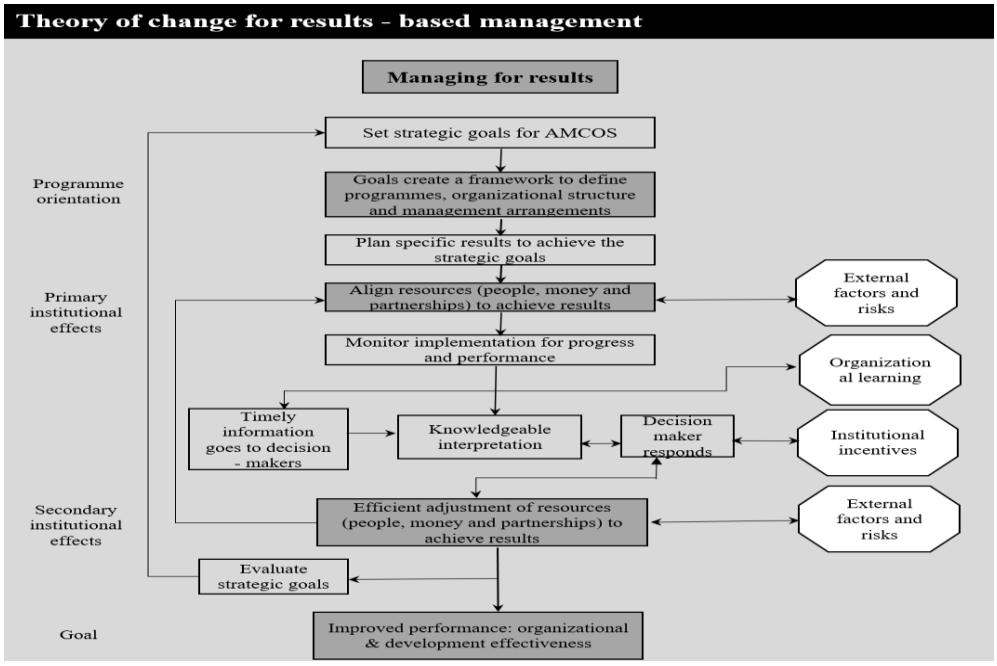

Figure 2: Theory of Change for Results-Based Management (RBM)
Source: Adapted from UNDP (2007, p.2)

Policy Review

The United Republic of Tanzania Government has been struggling to remove cooperative development constraints caused by various national economic development interventions. Some of them were initiated after independence in 1961 (URT, 2003, p.1). For instance, the Arusha Declaration of 1967 utilized Co-operatives to implement the socialism and self-reliance policy in transforming rural production. The intervention still was not so successful. The consequence caused by the Structural Adjustment Programmes (SAPs)

and trade liberalization disturbed the Co-operatives focus. Lack of skilled management in Co-operatives was among the constraints (Okem, 2016). The device to overcome such constraints was the enactment of Co-operative Societies Act No. 15 of 1991 and Co-operative development policy of 1997 (Ibid, pp.1-2). However, the 1997 policy was not effective to assist Co-operatives exist in a stiff competition (URT, 2003, p.2). Moreover, a new Co-operative development policy of 2002 was established followed by enactment of Co-operative Societies Act No. 20 of 2003. But this Act was revised to the current Co-operative societies Act No. 6 of 2013 (Ibid, pp.3-8). The current policy also has shown some deficiencies. For instance, Faustine (2021) during the television interview with the Tanzania Broadcasting Corporation (TBC) stated that, the policy lacks M&E component and Co-operative development strategic plan framework. The failure of Co-operative Reform and Modernization Programme (CRMP) 2005-2015 was also among the deficiencies because currently, there is no any evaluation report concerning CRMP (Kabale, 2021). Moreover, Alfred S. Sife (2021), during the television interview with TBC also added that the policy lacks the compulsory Co-operative education provision for Co-operative employees (Kabale, 2021). From the M&E human resource capacity perspective, it is imperative to note that either failure or success of any organization is measured in terms of value for money and time invested that must be manifested in M&E (URT, 2013). In order to get the right human resources and professional management in all levels of Co-operatives, employment guidelines and trainings should be embraced (Sumelius et al., 2014). The weak and understaffed oversight body is another constraint facing Co-operative development policy in Tanzania (Sambuo & Msaki, 2019). Thus, the Tanzania Co-operative Development Commission (TCDC) has an obligation to make sure that all constraints hindering Co-operatives are sought out.

For instance, availability of an appropriate human resources in Agricultural and Marketing Co-operative Societies (AMCOS) are collaboratively given solutions through policy revision. It is imperative to also note that the Co-operative development policy 2002 should link with other national plan frameworks. That can be achieved through establishment of M&E plan framework, reporting plan, (internal and external reports), in all levels of Co-operatives (TISCO Consultants and Associates, 2009). For that case, the successful contract farming (CF) arrangements, production services, new knowledge in technology and insurance cover, to mention a few, the M&E technical expertise for AMCOS personnel is inevitable (Tanzania Development Commission [TCDC], 2016). Stakeholder involvement in M&E processes team is one of the sensitive areas of policy implication. Thus, it needs more attention for improvement of AMCOS CF through participatory approach (URT, 2013). The focal point in policy revision should be how to

harmonize all the sector policies in the Co-operative development strategic plan. Such few sector policies are national employment policy of 2008; agricultural marketing policy of 2006; Public Private Partnership (PPP) policy of 2009; national information and communication technology policy of 2003; the trade policy of 2003; and gender policy of 2000 with their amendment if any. These policies have bearing impact in national, regional and global context economic fluctuations on Co-operative development (URT, 2013). There should be a coordinated programme and action plan for implementing Co-operative development policy in relation to the national policy frameworks such as, the Tanzania Development Vision 2025, the Poverty Reduction Strategy Paper (PRSP) and the National Strategy for Growth and Reduction of Poverty (NSGRP II). Having done all that will assure the contribution of Co-operatives in the national economic congruence goal (Ibid.). Thus, stakeholder involvement in all policies harmonization, will assist to strengthen agriculture input availability, agriculture extension research, human resource development, agro processing agriculture, insurance, environmental issues and information and communication technology (that is e-agriculture) (Ibid.). These few out of many constraints necessitate the 2002 Co-operative development policy to be revised.

Empirical Review

The majority of monitoring and evaluation (M&E) practice researches have been done globally in various economic and social activities. But less had been done in agriculture sector, tobacco in particular. Chege and Bowa (2020) in Kenya, examined the M&E project performance in non-governmental organizations implementing education projects in Nairobi County, specifically measured the strength of M&E team. By using narrative and inferential analysis, the results revealed that M&E team significantly influenced project performance. This study was NGOs oriented in education industry whereas the current study is agricultural and marketing cooperative society (AMCOS) oriented in agriculture sector. Moreover, Dejene (2017) in Ethiopia studied the roles of M&E functions in achieving project success. Data was analyzed using binary logistic regression and multiple-regression, the results concluded that M&E human resource capacity significantly influenced project success. The author suggested that M&E system should be established together with thematic resources. Contextually, Ethiopia is located in the horn of Africa proximity to Middle East and Europe, against Tanzania located in East Africa. Moreover, Mhina (2017) in Tanzania studied M&E practices and their effects in district councils. Data was analyzed using descriptive techniques, the results proved that although M&E was used in their projects and programmes, the evaluation aspect was not given much consideration due to lack of the M&E department and appropriate human resources. Based on the empirical studies, the current study objectively expected and hypothesized that M&E human

resource capacity has positive significant influence on performance of tobacco contract farming (CF) projects in Katavi Region. The M&E human resources should have technical expertise attribute. Taking that into consideration, Jahaf (2021) studied the effect of M&E practices on the performance of the development projects in Yemen and its relation in gender. Descriptive statistics, correlation and regression were used in data analysis. The results revealed that M&E skills and technical activities had a positive significant influence. The author recommended to embracing continuity of Results-Based Management (RBM). The author suggested that there should be M&E system usage and policies establishment in order to satisfy the targeted community. Contextually, Yemen is a Middle East country whereas Tanzania is an East African country. Muumbi and Chege (2021) studied the effect of technical expertise engagement in M&E on performance of residential construction projects in Kajiado County in Kenya. They analyzed data using descriptive and inferential statistics and also used ordinal logistic regression analysis. The findings proved that M&E technical expertise had an influence on construction projects.

Hence the study recommended that hiring of expert managers and capacity building for project players is paramount. The study of the contribution of M&E to promote good governance in Oman was conducted by Al-Busaidi (2018). Data was analyzed using SPSS and Analysis of Moment Structure (AMOS)-SEM. The findings revealed that M&E accountability, management decisions, and organizational learning leading to good governance were not statistically significant. Additionally, the current study objectively expected and hypothesized that M&E technical expertise has positive significant influence on performance of tobacco CF projects in Katavi Region. Taking into consideration the study conducted by Omondi and Kinoti (2020) which determined stakeholder participation and performance of road construction projects in Kilifi County in Kenya. Data was analyzed using descriptive and inferential analysis. From the study findings it was established that, during project identification and planning stages, stakeholder participation was positively and significantly contributed to project performance of road construction. The author recommended that road construction projects should be beneficiaries centred and embrace all relevant stakeholder inclusion and participate in all project phases. Likewise, the study of participatory monitoring and evaluation (PM&E), power dynamics and stakeholder participation was conducted by Mujuru (2018), in Thusalushaka area in South Africa. Data was analyzed using both a thematic and content analysis. The results revealed that the beneficiaries were rarely involved in the PM&E process, rather were limited to problem identification. The author recommended that World Vision was supposed to establish strategies to allow beneficiaries fully participate in all stages of PM&E and make final decision.

Manumbu (2020) in Tanzania studied the community participation in M&E and its implication in village land use plan sustainability. Qualitative and quantitative techniques were used in data analysis. The findings disclosed that community participation was higher at introduction stage during village assembly. The author recommended that responsible officials should build capacities of the community to create awareness. From the empirical studies, the current study objectively hypothesized that stakeholder involvement in M&E processes team positively influences performance of tobacco CF projects in Katavi Region.

Methods

The Positivism philosophy was applied in the current study. Thus the visible realism can be consistently investigated to prove the cause-and-effect relationship between variables on the available quantitative data to come up with general conclusion (Saunders et al., 2012). The philosophy establishes the base of knowledge and its nature with varied perspectives of a researcher who can view the world differently by relating it into two perspectives that is the Ideal world and the Real world (Ibid.). The current study employed explanatory research design with cross-sectional survey strategy. The sampling frame had 12 Agricultural and Marketing Co-operative societies (AMCOS) and 1 Co-operative Union (the Lake Tanganyika Co-operative Union-LATCU). Thus, a population was 199 (188 respondents from AMCOS management, staff, board members, and 11 from LATCU staff. (Source: LATCU office's register). The study used purposive sampling and simple random sampling to select tobacco AMCOS and individual respondents respectively. The sample size of 133 was found by using Yamane (1967) formula. ata was collected using questionnaire that adopted a five point Likert scale. The 5-point Likert scale is simple to understand and use for survey respondents. It takes less time and effort to complete than higher scales. It is often used to measure respondents' attitudes by asking to the extent to which they either agree or disagree (Strongly Disagree, Disagree, Neutral, Agree and Strongly Agree). Likert scale can meet researcher's needs when he/she has attitude, belief or behaviour items. Also Likert scale allows researchers to collect data that can be utilized to gain greater insight into peoples' thoughts and emotions about a particular subject. It also helps to reduce bias and allow for more accurate responses Kothari (2014). Data was analyzed using descriptive statistics and inferential statistics (Correlation and multiple-regression). The multiple regression assumptions were handled by using Pearson's correlation of exogenous variables as follows: The independent variables were three; these variables had a linear relationship which was checked by using a scatter plot. The data was free from multicollinearity which was checked by using Variance-Inflated-Factor or VIF and Tolerance values. High VIF (greater than 5) indicates that the associated independent

variable is highly collinear with the other variables in the model. Thetolerance of not less than 0.2 implied that the presence of multicollinearity had been detected (Cohen & Cleveland, 2013; Hair et al., 2016). There was neither missing data nor outliers. The independent and dependent variables were tested by using the Colmogorov-Smirnov test. They indicated to be normal distributed and were presented in the Q-Q plot. The data was analyzed using SPSS 20.

Yamane formula $n = N / [1+N (e)^2]$

Where: n = Sample size, N = Total population, e = Error tolerance (or precision). Since Population of the study (N) was 199, and Error of tolerance (e) was 0.05. Hence, the sample size was calculated as $n = 199/ [1+199 (0.05)^2]$, giving 133 the sample size of the study. But the actual response was 132 out of 133 respondents.
Multiple- regression model is given by $Y=\alpha+\beta_1 X_1+\beta_2X_2+\beta_3X_3+\varepsilon$.
Where: Y= Performance of projects, α = *Constant term*, β1 - β3= *Beta coefficients*, X_1 =*M&E Human resource capacity*, X_2 = *M&E Technical expertise*, X_3 = *Stakeholders involvement in M&E processes team*, ε = *Error term (or Precision)*

Results and Discussion

Demographic Information

The distributed questionnaires to the respondents were 133 but the filled and returned were only 132 giving a response rate of 99.3%.

Respondent's Gender

Based on the results in Table 3 revealed that Males possessed 86.4% and Females had 13.6%. The result implies that the gender imbalance in Co-operative societies especially in AMCOS was there. This situation sends a call to the responsible authorities to sensitise females to join the cooperative activities so as to remove gender disparity. This result has had no effect to statistical findings because all genders were represented as noted by Kihuha (2018).

Table 3: Respondent's Gender

Gender	Frequency	Percent
Male	114	86.4
Female	18	13.6
Total	132	100.0

Source: Field Data, (2020)

3.1.2 Respondent's Age

The results in Table 4, showed that the age ranges were 31- 40 years with 33.3% followed by 41-50 years with (31.1%). Above 50 years had 20.5% and the rest group of 25-30 years had 15.2%. The indication showed that the majority of respondents were in the economically active group of people that contributed to the development of the nation. This decreases unemployment and contributed to the national economic development as it was disclosed by Matonya (2018).

Table 4: Respondent's Age

Age	Frequency	Percent
25 - 30 years	20	15.2
31 - 40 years	44	33.3
41 - 50 years	41	31.1
Above 50 years	27	20.5
Total	**132**	**100.0**

Source: Field Data, (2020)

Respondent's Education

The results in Table 5 revealed that the majority of respondents represented by 52.3% had primary education, while 24.2% had certificate or diploma. Secondary school and graduate levels had 18.9% and 3.8% respectively. The rest 0.8% was represented by postgraduate cadre. The implication is that during the study period, Co-operative societies in Katavi Region especially tobacco AMCOS were led by low level educated people with primary education. However, Kihuha (2018) pointed out that the study's demographic profile had a satisfactory educated people ranging from secondary school to postgraduate.

Table 5: Respondent's Level of Education

Education level	Frequency	Percent
Postgraduate	1	0.8
Graduate	5	3.8
Certificate / Diploma	32	24.2
Secondary school	25	18.9
Primary school	69	52.3
Total	**132**	**100.0**

Source: Field Data, (2020)

Respondent's Work Experience

The results shown in Table 6 revealed that 59.8% of respondents had worked in their organizations for less than 5 years. Those who worked between 5-10 years had 27.3% and the rest 12.9% worked for above 10 years. This implied that the majority of respondents had less experience and therefore, they had less knowledge about their organizations. This situation is prevalent in Co-operative societies probably due to but not limited to the Co-operative societies Act No.6 of 2013. This Act requires an elected board member to stay in that position for one term of 3 consecutive years. He or she may be re-elected for the next last second term of 3 years, for the will of either the electoral committee or members of the general meeting. The committee and members of the general meeting vets the applicants' forms and voting for respectively. For the employees, also do not stay longer because of weak employment or recruitment practices, which may attract a high rate of employee turnover, uncertain job security and unfair remuneration, as it was stated by (B.H. Kassia, personal communication, December 20, 2020).

Table 6: Respondent's Work Experience

Work experience	Frequency	Percent
Less than 5 years	79	59.8
5-10 years	36	27.3
Above 10 years	17	12.9
Total	**132**	**100.0**

Source: Field Data, (2020)

Descriptive Analysis Statistics

M&E Human Resource Capacity

The respondents were asked on the indicators basis by using 1-5 point likert scale. The results were as shown in Table 8.

Table 7: Statistics of M&E Human Resource Capacity

Statement/Indicator	(1) Strongly Disagree	(2) Disagree	(3) Not Sure	(4) Agree	(5) Strongly Agree
Staff working on M&E are determined and dedicated to the function and M&E activities	61.4%	37.1%	1.5%	0.0%	0.0%
The M&E officers have high knowledge and skills in M&E	45.5%	52.3%	2.3%	0.0%	0.0%
The organization has and uses technological resources for M&E	48.5%	49.2%	2.3%	0.0%	0.0%
The organization has a department in charge of M&E related activities	67.4%	31.8%	0.8%	0.0%	0.0%

Source: Field Data, (2020)

From the results in Table 7 above was found out that, the majority of respondents 61.4% and 37.1% strongly disagreed and disagreed respectively on the statement that, staff working on M&E are determined and dedicated to the function and M&E activities. But 1.5% of respondents were not certain. However, respondents neither agreed nor strongly agreed on the same statement. Furthermore, on the statement that the M&E officers have high knowledge and skills in M&E, the majority of respondents 45.5% and 52.3% strongly disagreed and disagreed respectively. The results were similar to (Magagula, 2019; Njeri & Omwenga, 2019). On the other side (Njeru & Luketero, 2018) got different response. The respondents who were not sure had 2.3%. And no one either agreed or strongly agreed. The statement that the organization has and uses technological resources for M&E, 48.5% and 49.2% strongly disagreed and disagreed respectively. Still 2.3% were not sure. No one either agreed or strongly agreed. And on the statement that the organization has a department in charge of M&E related activities, 67.4% and 31.8% strongly disagreed and disagreed respectively. Whereas 0.8% was not certain, no one either agreed or strongly agreed. The general implication is that AMCOS in Katavi Region during the study period got no human resources appropriate to the M&E activities.

M&E Technical Expertise

Table 8: Statistics of M&E Technical Expertise

Statement/Indicator	(1)Strongly Disagree	(2)Disagree	(3)Not Sure	(4) Agree	(5)Strongly Agree
Project planning is done to ensure the right project activities are implemented	43.9%	53.0%	2.3%	0.8%	0.0%
Staff have competences and experience in designing monitoring and evaluation plans	44.7%	54.5%	0.8%	0.0%	0.0%
Project training need assessment is done to ensure the right skills are acquired to manage the monitoring and evaluation activities	37.1%	60.6%	2.3%	0.0%	0.0%
Project staff are trained in order to equip them with technical expertise necessary to carry out monitoring and evaluation	43.9%	53.8%	2.3%	0.0%	0.0%

Source: Field Data, (2020)

The results in Table 8 also indicated that all the four indicators got negative response from the majority of respondents. The statement that project planning is done to ensure the right project activities are implemented, 43.9% and 53.0% strongly disagreed and disagreed respectively. Respondents represented by 2.3% were not sure, whereas 0.8% agreed but none of them strongly agreed on the same statement. The results were in line with that of (Okuta, 2019). This result of not having a clear project plan may attract some of stakeholders to overtake the power of AMCOS leaders and make imposed intervention which may harm project performance (Mujuru, 2018). From the statement that, staff have competences and experience in designing monitoring and evaluation plans, 44.7% and 54.5% strongly disagreed and disagreed respectively. A similar result was found out by (Suleiman, 2020). For those who were not sure represented by 0.8%. Still none of them either agreed or strongly agreed. The statement that project need assessment is done to ensure the right skills are acquired to manage the monitoring and evaluation activities, 37.1% and 60.6% strongly disagreed and disagreed respectively. However, 2.3% were not sure. They neither agreed nor strongly agreed. It was

found out that 43.9% and 53.8% strongly disagreed and disagreed respectively on the statement that project staff are trained in order to equip them with technical expertise to carry out monitoring and evaluation. Akanbang and Bekyieriya (2020) found similar result. An uncertain possessed 2.3%. However, none either agreed or strongly agreed. The general implication is that during the study period tobacco AMCOS in Katavi region lacked personnel with M&E technical expertise.

3.2.3 Stakeholder Involvement in M&E Processes Team

Table 9: Statistics of Stakeholder Involvement in M&E Process Team

Statement/Indicator	(1)Strongly Disagree	(2) Disagree	(3) Not Sure	(4) Agree	(5)Strongly Agree
Stakeholders involvement attracts political interference in projects monitoring and evaluation which creates fear and poor performance of projects	3.0%	11.4%	5.3%	32.6%	47.7%
Participation of stakeholders reflects the community needs and stimulate people's interest in the implementation of monitoring and evaluation	2.3%	7.6%	6.1%	43.2%	40.9%
It enables the stakeholders to influence the product or service acceptance based on their needs	2.3%	9.8%	5.3%	46.2%	36.4%

Source: Field Data, (2020)

The majority of respondents agreed with all the three indicators as shown in Table 9. From the statement that stakeholders involvement attracts political interference in projects monitoring and evaluation which creates fear and poor performance of projects, 32.6% and 47.7% agreed and strongly agreed respectively. Kamau and Mohamed (2015) got similar results. However, 3.0% and 11.4% strongly disagreed and disagreed respectively on the same statement. But 5.3% were not sure. From the statement that, participation of stakeholders reflects the community needs and stimulates people's interest in the implementation of monitoring and evaluation, 43.2% and 40.9% agreed and strongly agreed respectively.

Mgoba and Kabote (2020) got similar results. On the other side, 2.3% and 7.6% strongly disagreed and disagreed respectively while 6.1% were not sure.

Results also indicated that, 46.2% and 36.4% agreed and strongly agreed respectively on the statement that, it enables the stakeholder to influence the product or service acceptance based on their needs. The remaining 2.3% and 9.8% strongly disagreed and disagreed respectively on the same statement. But 5.3% remained uncertain. All results imply that during the study period stakeholder involvement had a positive contribution on performance of tobacco CF projects in Katavi region. Moreover, the necessity of stakeholder involvement in project M&E is inevitable. But proper stakeholder identification should be taken to avoid undue influence as a result of unnecessary stakeholder involvement. This was also cautioned by Mayanja (2020) that care should be taken in involving stakeholder especially in decision making processes for sensitive issues like the academia.

3.2.4 Performance of Tobacco Contract Farming Projects

Table 10: Statistics on Performance of Tobacco contract Farming Projects

Statement/Indicator	(1)Strongly Disagree	(2) Disagree	(3) Not Sure	(4) Agree	(5)Strongly Agree
Projects are implemented and completed within expected timeframe	14.4%	37.1%	5.3%	31.1%	12.1%
Projects are implemented and completed within budget	11.4%	16.7%	2.3%	47.0%	22.7%
Conducted projects normally meet the required specifications, scope and quality project standard	18.9%	59.8%	14.4%	6.8%	0.0%
Product or service has acceptance outcome on the customer and end user	1.5%	3.0%	2.3%	61.4%	31.8%
Product or service has an impact on the customer and end user	0.8%	1.5%	3.8%	47.7%	46.2%
The project meet its intended goals and objectives	13.6%	51.5%	10.6%	21.2%	3.0%
The organization gives regular project progress reports on its performance	4.5%	26.5%	3.1%	44.7%	21.2%
There is conformity of the goods and services delivered to the project plan	10.6%	58.3%	12.1%	16.7%	2.3%

Source: Field Data, (2020)

The response shown in Table 10 revealed that there are contradicting views from respondents. Four of eight indicators 50% in average, generally agreed by the respondents that there was project performance. On the other side the rest four of eight indicators 50% in average, generally disagreed by the respondents by saying that there was no project performance. By implication is that performance of tobacco CF projects in Katavi region has a contradiction. This situation calls for an urgent remedial action to address the deficiency on performance of tobacco CF projects in Katavi region.

Inferential Analysis

Correlation Statistics

Table 11: Correlation Coefficients Matrix of Exogenous Variables

		1	2	3
1.	M&E Human Resource Capacity	1		
2.	M&E Technical Expertise	0.441**	1	
3.	Stakeholder Involvement in M & E processes Team	-0.122	0.660**	1

. Correlation is significant at the 0.01 level (2-tailed). **Source: Researcher, 2020

The results in Table 11 revealed that M&E human resource capacity had a positive correlation of 0.441 towards tobacco CF projects. Moreover, between M&E technical expertise and tobacco CF projects had a negative correlation of (-0.122). Similarly this was found out by (Muchelule, 2018; Matyako, 2019). Positive correlation was observed between stakeholder involvement and tobacco CF projects by 0.660.

Model Summary

Table 12: Model Summary

Model Summary[b]										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig.F Change	
1	0.705[a]	0.497	0.485	0.41387	0.497	4.428	3	128	0.005	1.945

a. Predictors: (Constant), M&E Human Resource Capacity, M&E Technical Expertise & Stakeholder involvement in M&E Processes Team,

b. Dependent Variable: Performance of Tobacco Contract Farming Projects

As shown in Table 12, R is the correlation coefficient indicating the relationship between the study variables. Thus, it revealed a strong and positive relationship as evidenced by 0.705. The coefficient of determination (or R squared) was 0.485 indicating a variation of 48.5% in project

performance due to changes in the independent variables. However, 51.5% were not explained by this study's independent variables.

Analysis of Variance (ANOVA)

As shown by a regression model, a margin of error p = 0.005 implies that the model has a probability of 0.5% in giving false prediction. In other words, the model is 99.5% in giving true prediction.

Table 13: ANOVA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.224	3	1.408	4.428	0.005[b]
	Residual	40.698	128	0.318		
	Total	44.922	131			

a. Dependent Variable: Performance of Tobacco Contract Farming Projects

b.Predictors: (Constant), M&E Human Resource Capacity, M&E Technical Expertise & Stakeholders involvement in M&E processes Team

From Table 13 the significance value was 0.005 < 0.01 legitimizing the model to be statistically significant in predicting the influence of independent variables on the dependent variable. Moreover, the F- statistics of 4.428 tells that the model is fit at 1% level of significance (Sig. F < 0.01). Thus, $Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$. Now, a goodness of fit is given by: $Y = 2.275 + 0.089X_1 - 0.091X_2 + 0.226X_3 + \varepsilon$. The model had significance level of 0.5% (or 0.005) implying that data was fit and ideal for analysis as the p-value was less than 1% (or 0.01).

Regression Coefficients

Table 14: Regression Coefficients

Coefficients[a]

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.275	0.372		6.120	0.000		
	M&E Human resource Capacity	0.089	0.149	0.056	0.597	0.551	0.795	1.258
	M&E Technical expertise	-0.091	0.151	-0.056	-0.601	0.549	0.806	1.241
	Stakeholder involvement in M&E processes Team	0.226	0.063	0.306	3.604	0.000	0.985	1.015

a. Predictors: (Constant), M&E Human Resource Capacity, M&E Technical Expertise & Stakeholders involvement in M&E Processes Team

b. Dependent Variable: Performance of Tobacco Contract Farming Projects

Source: Field Data, (2020).

By incorporating the Beta (standardized) values into the regression model found in Table 14, $Y = 2.275 + 0.056X_1 - 0.056X_2 + 0.306X_3$. Based on 99% level of confidence and 1% level of significance, the increase of a unit in M&E human resource capacity caused 0.089 units increase on performance of tobacco CF projects. This implied that the contribution of the variable was extremely low. Meaning that during the study period, AMCOS lacked appropriate personnel with M&E capacity to manage M&E activities. This is a bad signal as the current result does not conform to the resource based theory which guides this study. The findings aligned with (Njeri & Omwenga, 2019), but other researchers like (Chege & Bowa, 2020) had different findings. Moreover, for every unit increase in M&E technical expertise caused a decrease of 0.091 units on performance of tobacco CF projects. This implied that AMCOS lacked personnel with M&E knowledge and skills. This was similar to Matyako (2019) findings. But (Jahaf, 2021; Muumbi & Chege, 2021) had opposite results. This current result also did not conform to the dynamic capabilities theory that guides this study. However, for every unit increase in stakeholder involvement in M&E processes team caused an increase on performance of tobacco CF projects by 0.226 units. Omondi and Kinoti, (2020) got similar results. However, Micah & Luketero (2017) contradicted with the current findings. By implication is that though AMCOS lacked formal M&E system, but stakeholder involvement greatly contributed to the performance of tobacco CF projects. The current findings conform to the theory of change that guides this study.

Conclusion and Recommendations

Based on the main objective of this study which determined the influence of monitoring and evaluation practices on performance of tobacco contract farming projects in Katavi Region, Tanzania. Specifically and objectively, the study also had three M&E practices to be determined. The determination focused on the effect of M&E human resource capacity on performance of tobacco CF projects; the effect of M&E Technical expertise on performance of tobacco CF projects; and stakeholder involvement in M&E processes team on performance of tobacco CF projects. After analysis of collected data, the findings revealed that M&E human resource capacity was not significant on performance of tobacco CF projects. The results implied that during the study period, whenever human resources in agricultural and marketing cooperative societies (AMCOS) exposed to M&E activities could not manage. That was due to the fact that they didn't have capacity to implement M&E activities. From the facts obtained, it is concluded that AMCOS in Katavi Region lacked personnel with M&E capacity, unless a remedial action is taken to either hire the appropriate or train the existing personnel.

Moreover, it was also noted that by these findings the M&E Technical expertise was not significant rather it showed a negative effect on performance of tobacco CF projects. This implied that the AMCOS human resources have never ever equipped with M&E expertise. Thus, it was concludes that a remedial action is inevitable to let personnel in AMCOS be equipped with M&E expertise, hence contribute on performance of tobacco CF projects. However, the stakeholder involvement in M&E processes team had a positive significant effect on performance of tobacco CF projects. This implied that from the sampled AMCOS, the project performance was extensively contributed by some of stakeholder involvement in some of the four project phases. The study concludes that since the stakeholder involvement in M&E processes team was positive significant predictor, a proper way of coordinating stakeholder involvement and participation is expected to be established to increase the project performance rate.

AMCOS

The study recommends that AMCOS in collaboration with stakeholders, especially the Tanzania Development Commission (TCDC), should establish the: employment/recruitment policy with a provision of hiring personnel with formal M&E skills, and train those already employed without M&E skills. This should be coupled with M&E implementation plan framework and thematic M&E system department in order to survive in the rapidly changing global business environment rich in technological advancement. In order to be focused in M&E activities and enhance M&E technical expertise, AMCOS should establish training policy to ensure that the right M&E skills are acquired. The regular trainings to the newly personnel employed and the elected board members should be offered as the skills requirements between them differ and the level of interaction with stakeholder also differ. AMCOS should also get appropriate M&E system, physical resources, human resources, financial resources and information and technology (ICT) resources.

By doing that would better support implementation of M&E activities and stay competitive in the business environment. That should be coupled with introduction of Results-Based Management (RBM) to build and strengthen the spirit of M&E culture. The study recommends also that AMCOS should know their appropriate stakeholder by identifying them through the ‘Six Questions Model for Stakeholder Identification’ (SQM-SI). The questions are: *What, Who, Why, How*, *Where* and *When* to participate in the four (initiating, planning, implementation and closing) project phases. This will enable them to sail in a Participatory Monitoring and Evaluation (PM&E) approach. Moreover, it will reduce undue influence, unfair intervention and interference

that may harm performance of tobacco CF projects. AMCOS should also establish a legally structured decentralised decision-making process to the grassroots level from which the inclusive resolution and approval should be finalized in their Annual General Meetings (AGMs). Thus, a created synergy would make farmers who own the AMCOS feel valued, respected and supported. Hence they would have a positive emotion, feel passionate about their jobs and get committed to delivering their best work.

Policy Implication

From the policy review in relation to the findings from the main objective of this study and the recommendations raised, the 2002 Co-operative development policy has to be revised. The study concludes that the 2002 Co-operative development policy should be revised on the following grounds: the responsible authorities should clearly re-define and revise the policy in order to strengthen and accelerate the growth of AMCOS and agriculture sector at large, the revised policy should also include M&E Co-operative development strategic plan framework that will be implemented at all levels of Co-operative societies, the Tanzania Co-operative Development Commission (TCDC), should be given a task to overseer it. Further, the revised policy should also have a provision showing a link with other national policy frameworks. That will strengthen the protection of Co-operative societies against unfair competitions posed by the well prepared private sector traders.

In the revised policy, the Moshi Cooperative University (MoCU), should be given a task of training provision specifically on but not limited to good governance, contract farming practices, market information, networking and business linkages, M&E practices, M&E systems and information and communication technology (ICT). The Co-operative employees should possess a Co-operative education preferably from the Moshi Co-operative University (MoCU). Thus, a Co-operative professional management would be enhanced. Co-operative researches and their findings established in a database, Co-ordinated and implemented should be given a provision in the revised policy. The responsible authorities should make legislation for M&E and RBM in order to enact appropriate laws. The laws would enforce the education institutions system to include M&E and RBM in their programmes and courses to bridge the gap that currently exists between the public sector and the private sector. It is concluded that, the output of the current study is substantial and has a potential of being a reliable tool for policymakers' use and think critically how best to address the M&E practices problems facing AMCOS as well as the agriculture sector and industry at large.

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Firm-Specific Determinants of Profitability of Listed Commercial Services Companies in Kenya and Tanzania

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ABSTRACT

The issue on whether firm-specific determinants such as capital adequacy, financial leverage, company liquidity and firm size influence the profitability of listed commercial services companies is still debatable to date. Therefore, this study examines the firm-specific determinants of profitability of listed commercial services companies at Dar es Salaam Stock Exchange (DSE) and Nairobi Stock Exchange (NSE) in Tanzania and Kenya respectively. The study used data extracted from annual reports of eleven commercial services companies from 2015 to 2020 yielding 66 firm-year observations. Moreover, panel data regression analysis specifically a random effect estimator was employed to estimate firm-specific determinants of profitability of commercial services companies listed in Tanzania and Kenya. The study found out that capital adequacy was significantly positively linked to the profitability of listed commercial services companies at DSE and NSE. Likewise, the study revealed that firm size was significantly positively associated with the profitability of commercial services listed at DSE and NSE. Moreover, the study uncovered an insignificant positive association between profitability and both financial leverage and liquidity of commercial services companies listed at DSE and NSE. The results suggested that corporate managers are advised to increase investment in equity through selling equities to the general public and private shareholders so as to increase profitability. Furthermore, corporate managers are advised to increase firm size to enhance profitability.

Keywords: *Firm-specific determinants, listed commercial services Companies, profitability, liquidity, leverage, firm size, capital adequacy*

INTRODUCTION

The commercial services sector worldwide is an integral part of production networks and global value chains; as such it is an important driver of efficiency, competitiveness and economic performance for countries. The sector has played the uttermost role in providing support services to businesses and organizations worldwide. The commercial services sector globally grew from USD 5,152 billion in January 2022 to USD 5,696 in 2023 January (The Business Research Company, 2023). Moreover, the compound annual growth

for the commercial services sector for the past year stood at 10.6% slightly lower than the annual compound growth rate of 12.7% for the previous year 2021 (The Business Research Company, 2023). The growth of commercial services globally implies that commercial services companies are economic enablers, as such it is imperative to ensure that a conducive environment is built for making sure commercial services companies flourish and grow. Commercial services companies are paramount as they provide support services that stimulate trade and production of a country. In Africa, particularly Egypt, South Africa and Morocco, over the past eleven years (2008 -2018),the commercial services sector contributed approximately 55.5% of the Gross Domestic Product (GDP)(Milton, 2018, USITC 2018).

Despite, the significant role the commercial services companies performance, the contribution of services companies in East Africa specifically in Kenya and Tanzania over the past ten years (2010-2020) was relatively low approximately 43.4% and 39.36% of the GDP respectively (O'Neill, 2022). This suggests that commercial services companies in East Africa, specifically Kenya and Tanzania, contribute less to economic growth compared to countries like Egypt, South Africa, and Morocco. Despite various efforts to increase the number of listed companies to enhance more contribution of commercial services companies to the economy in East Africa, still, the number of commercial services companies in Kenya and Tanzania is low (Ndiritu & Mugivane, 2015).The number of commercial services companies listed in the Nairobi stock exchange (NSE) is eleven (11) out of all sixty-eight (68) as of December 2022. Likewise, the number of commercial services companies listed in the Dar es Salaam Stock Exchange (DSE) is five (5) out of twenty- eight 28 listed companies as of December 2022.This implies that unlisted commercial services companies will not be able to access finance through the capital market, thus, hindering their growth and contribution to the economy. There is no yet consensus on the key firm-specific determinants of the profitability of commercial services companies globally. Prior studies have documented that there are various determinants of a company's profitability, which may be classified as macro-economic determinants and firm-specific determinants (Connell, 2023; Kengatharan, 2020; Mansikkamäki, 2023; Matar & Eneizan, 2018). Several studies have documented several macro-economic determinants that influence profitability of commercial services companies which are GDP, consumer price index (CPI), interest rates, inflation rates, stock market index and unemployment (Al-Homaidi et al., 2018; Camino-Mogro & Bermúdez-Barrezueta, 2019; Linawati & Halim, 2017). However, it is important to note that countries differ in terms of the macro-economic conditions, the operating environment as well as financial systems, thus the macro-economic determinants that trigger profitability in one country may not have the same influence in another country.

Several studies that examined the determinants of the profitability of commercial services companies have focused on firm-specific factors relative to macro-economic factors due to the fact that they are unique and different for each company unlike macro-economic factors that are general and affect companies pervasively (Adelopo et al., 2022; Nguyen & Nguyen, 2020). Specifically, prior studies done by Nguyen and Nguyen(2020) and Zainudin et al.(2018) revealed the influence of company size as proxied by the level of assets on the profitability of listed companies. This implies that asset increases give a company a competitive advantage and economies of scale thus leading to higher level of profitability. Moreover, Taha, (2015) documented the influence of liquidity and leverage on the profitability of listed Malaysian companies. Furthermore, studies by Al-Homaidi et al.(2018), Jreisat & Bawazir(2021) and Lim and Rokhim(2020) affirmed the link between capital adequacy, liquidity and profitability. Similarly, Taqi et al.(2020),Le Thi Kim et al.(2021) Nguyen et al.(2019) and Morara and Sibindi(2021) revealed that the asset quality and financial leverage influence the profitability of listed firms. Despite the substantial role of commercial service companies in the economy, their contribution to the GDP in Tanzania and Kenya remains low. Additionally, the specific factors that influence the profitability of these companies, and thus their potential to enhance GDP, have not been well-explored. Moreover, there is a significant scarcity of studies examining the firm-specific determinants of profitability in commercial service companies, particularly in East African countries such as Kenya and Tanzania, when compared to studies conducted in developed economies(Camino-Mogro & Bermúdez-Barrezueta, 2019; Mansikkamäki, 2023). Therefore, this study is unique one as it attempts to examine the firm-specific factors that influence the profitability of commercial services companies listed in Kenya and Tanzania so as to enhance growth and increase the sector's contribution to the GDP. The findings can provide useful information to corporate managers with regards to firm-specific determinants that enhance profitability of firms in Tanzania and Kenya. This paper is organized as follows: section two provides a review of the literature, while section three outlines the methodology used in this study. Subsequently, Section four presents a comprehensive discussion of the findings obtained from the research. Finally, section five concludes the paper by summarizing the key insights and implications drawn from the study's results.

Review of Related Literature and Hypotheses Development

Firm Size and Profitability

Firm size is the internal strength of the company that gives the company economies of scale thus enhancing profitability. Large firm size tends to have large profit than smaller firms due to large resources that enhance higher production scale (Mansikkamäki, 2023). Yet, the question of whether an

increase in a firm's size leads to profit increase is still not well established among studies that examine firm-specific determinants of profitability. Several prior studies have documented evidence that links firm size and profitability. For instance, Nugraha et al., (2021) revealed size gives companies competitive advantages thus enhancing profitability. However, Matar and Eneizan(2018)found out that for the companies listed in Jordan that their size was inversely related to profitability. This implies that not all the time firm may benefit from economies if operating costs are not well managed. Moreover, Abdulrahman and Musa(2019)conducted a study in Nigeria focusing on listed consumer goods companies and found out that firm size is positively linked with profitability. Likewise, Nguyen and Nguyen(2020) documented a significant positive influence of firm size on the profitability of Vietnamese listed companies. Moreover, Zainudin et al.(2018) conducted cross country study involving eight Asian countries and found a significant positive association between firm size and profitability. Morara and Sibindi(2021) uncovered that firm size is positively linked with the profitability of insurance companies in Kenya. Moreover, Al-Homaidi et al.(2018) revealed that firm size influence positively financial performance of banks in Tanzania. Likewise, Alarussi and Alhaderi(2018) examined the firm specific determinants of Malaysian listed companies and found out that firm size is positively linked to profitability. Therefore, this paper hypothesized that;

H1: *There is a positive association between firm size and profitability of commercial services companies listed in Kenya and Tanzania.*

Capital Adequacy and Profitability

Capital adequacy enables the company to improve its creditworthiness thus enhancing profitability. Adequate capital improves companies' bargaining power with suppliers and creditors minimize cost and increase profitability. Several prior studies have documented the influence of capital adequacy on profitability. Camino-Mogro and Bermúdez-Barrezueta, (2019) studied the determinants of profitability of Ecuadorian listed insurance companies and found out that capital adequacy is positively linked with the profitability of listed Ecuadorian companies. Likewise, Irawati et al.(2019) examined the firm specifc determinants of profitability of Indonesian's banking industries. They found out that both capital adequacy ratio (CAR) and non-performing loan (NPL) are significantly and positively associated with the profitability of the Indonesian banking industry.

Moreover, Suganya and Kengatharan(2018) uncover superior capital ratio in influencing the profitability of Sri Lanka commercial banks. Amararathne and Wanigasuriya(2022) revealed that there is a positive significant association

between capital adequacy and profitability of Sri Lanka commercial banks. Barus et al.(2017) examined the firm specific determinants of profitability for the Kenyan insurance sector and found out that capital adequacy is significantly positively associated with the profitability of insurance companies. Moreover, Malimi (2017) conducted a study in Tanzania and found out that capital adequacy is not linked to non-performing loans. Also, Hossain and Ahamed (2021) examined the effect of capital adequacy on profitability of Bangladesh banks and found a significant positive relationship between capital adequacy and profitability. Similarly, Nguyen (2020) uncover that capital adequacy is positively linked to the profitability of Vietnameselisted companies. Likewise, Lingerih Zerihun(2021) revealed that the capital ratio is significantly related to the profitability of Ethiopian commercial banks. This implies that as the level of equity increases the cost associated with borrowing declines hence increase in profitability. However, Hakuduwal(2021) affirmed that the capital ratio of Nepalese commercial banks is not linked with profitability. Additionally, Djaya(2019) examine the influence of capital ratio on profitability of Indian banks. The study found an insignificant positive association between capital adequacy and the profitability of Indian banks. Moreover, Hakuduwal(2021) documented an insignificant positive influence of capital adequacy on the profitability of Vietnamese listed companies. In general, aforementioned studies have uncovered the superiority of capital adequacy in influencing the profitability of companies; thus this paper hypothesized that;

H2: *There is a positive association between capital adequacy and profitability of commercial services companies listed in Kenya and Tanzania.*

Financial Leverage and Profitability

Financial leverage is linked with the cost of capital of a company. Companies with higher growth opportunities will rely less on long debt financing than those with fewer growth opportunities (Nguyen et al., 2019). The work of Modigliani and Miller (1958) opened discussion on the ideal optimal level of financial leverage for companies. However, many studies have been done, yet there is no consensus on the optimal level of financial leverage for companies(Rahman et al., 2020; Zaitoun & Alqudah, 2020). Several studies that examined the firm-specific determinants of profitability have reported mixed findings over time with regard to the influence of financial leverage on profitability. For instance,Taqi et al.(2020) studied the impact of financial leverage on the profitability of the oil and gas sector in India. They uncover that financial leverage is positively linked to the profitability of the sector. The evidence from prior studies implies that companies with promising investments benefit from leverage financing thus enhancing profitability.

However, Dalci(2018) investigated the impact of financial leverage on the profitability of manufacturing firms in China. The study uncovers a non-linear association between financial leverage and the profitability of manufacturing companies listed in China. Moreover, Ahmad et al.(2015) documented a significant negative association between financial leverage and profitability of companies listed in Pakistan. Moreover, Zaitoun and Alqudah(2020) investigate the effect of financial leverage on the profitability of the industrial sector for listed Jordanian companies. Their findings revealed that financial leverage had a negative effect on the profitability of the sector. Moreover, Rahman et al.(2020) examined the effect of financial leverage on the profitability of Bangladesh textile companies. Their result uncovers a significant negative association between financial leverage and the profitability of textile companies. Nguyen et al.(2019) uncover no relationship between the leverage and profitability of listed companies in Vietnam. Moreover, Le Thi Kim et al.(2021) documented an insignificant association between leverage and financial performance. This evidence suggests that sometimes companies may not benefit from leverage if the funds are not directed to better investments, thus increase in leverage increases operating costs that decline profitability. The evidence provided by prior studies is mixed; therefore this study hypothesized that;

H3: *There is a positive association between financial leverage and profitability of commercial services listed in Kenya and Tanzania.*

Liquidity and Profitability

Liquidity reflects the level of protection for lenders and suppliers. It simply indicates the ability to meet short-term maturing obligations. Higher levels of liquid signal more protection relative to low levels. Studies have linked liquidity with profitability over time. Mbekomize and Mapharing, (2017) investigated the effect of liquidity on the profitability of Botswana banks and reported a significant positive link between liquidity and profitability. Likewise, Madushanka and Jathurika, (2018) studied the influence of liquidity on the profitability of listed manufacturing companies in Sri Lanka. The study revealed that profitability and liquidity are significantly linked. Moreover, Mohanty and Mehrotra, (2018) examined the association between profitability and liquidity for Indian SMEs. The study found that liquidity and profitability are significantly positively related. Moreover, Ibrahim, (2017) investigated the link between liquidity and profitability of Iranian companies. The study uncover increase in liquidity is related to an increase in profitability. Likewise, Kajola et al., (2019) assessed the link between Nigerian bank liquidity and profitability. The study found out that liquidity and profitability are positively linked. Adelopo et al., (2022) documented a significant positive association between the profitability of European banks and liquidity. Moreover, Paul et

al., 2021) assessed the association between profitability and liquidity in commercial banks in Bangladesh. They uncover a significant positive association between profitability and liquidity. Likewise, Akhter, (2019) documented a significant positive association between liquidity and profitability of Indian banks. The results documented from prior studies suggest that liquidity give a company edge to negotiable with suppliers and lenders thus reducing operating cost hence increase profitability. However, Vintilă and Alexandra (2016) documented an insignificant positive association between liquidity and profitability of Romanian listed companies. Moreover, Alarussi and Alhaderi, (2018) reported an insignificant positive association between liquidity and profitability for Malaysian listed companies. Bintara, (2020) revealed a significant negative association between liquidity and profitability of companies listed in Indonesia. The results of prior studies imply that benefits of negotiating with suppliers and lenders sometimes may not be realized thus not enhancing profitability. Generally, their association between liquidity and profitability is mixed; therefore this study hypothesized;

H4: *There is a positive relationship between liquidity and profitability of commercial services listed in Kenya and Tanzania.*

Conceptual Framework

In line with prior studies, figure 1 below depicts the independent variables which are firm size, capital adequacy, liquidity, and financial leverage (Alarussi& Alhaderi, 2018; Abdulrahman & Musa, 2019; Mansikkamäki, 2023; Morara & Sibindi, 2021). Moreover, it presents a dependent variable which is profitability.

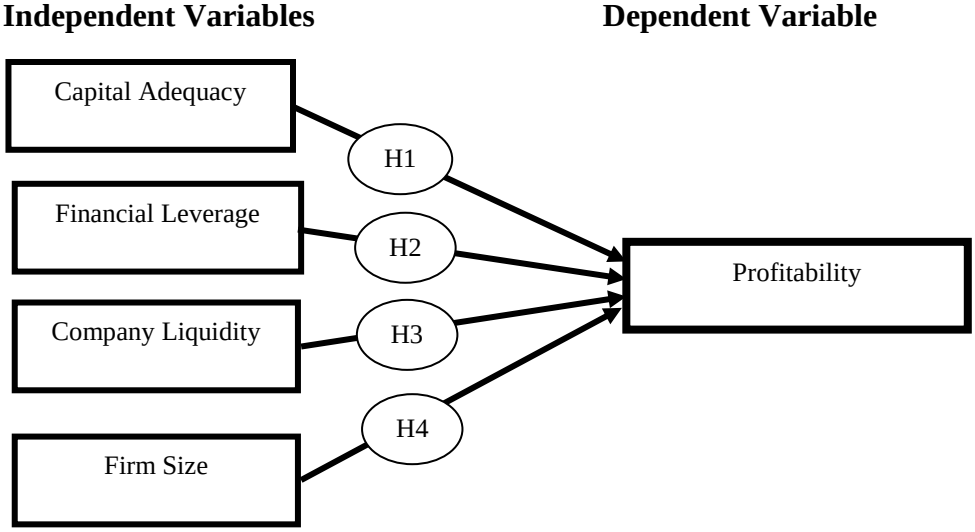

Figure 2: Conceptual Framework

Methodology

Data and Sampling

The study was conducted in Kenya and Tanzania focusing on listed commercial services companies in NSE and DSE. There were 63 companies listed in NSE that consist of thirteen sectors and a total of 28 companies listed in DSE with five different sectors. Moreover, in NSE out of 63 listed companies only eleven (11) companies belonged to the Commercial services sector. NSE listed commercial services companies include; Express Ltd, Sameer Africa plc, National Media Group, Standard Group Ltd, TPS East Africa Ltd, Scangroup Ltd, Uchumi Supermarket, Loghorn Publisher, Deacons and Nairobi Business Venture. Furthermore, in DSE out of 28 Companies, only five (5) companies belong to the commercial services sector and these commercial services companies include; Uchumi Supermarket, Swiss port Tanzania, National Media, Precision Air Services and Kenya Airways.

Thus, yielding a total of sixteen (16) commercial services companies listed in DSE and NSE. However, Uchumi Supermarket, National Media Group and Kenya Airways are listed in both stock markets (NSE & DSE), thus reducingthe number of commercial services companies to thirteen (13) companies. Moreover, the number of commercial services companies was reduced to eleven (11) commercial services companies after focusing on commercial services companies that had available data for at least six years from 2015 to 2020. The selected eleven (11) commercial services companies were Precision Air Plc and Swissport Tanzania Plc listed in DSE, and the others were National Media Ltd and Kenya Airways Plc found in both NSE and DSE. Also,Express Kenya, Longhorn Publishers, Nairobi Business Ventures, Standard Group, TPS Eastern Africa, WPP Scangroup and Sameer Africa Plcare listed at NSE. Furthermore, two companies were excluded for not having financial information over six years (2015-2020), these companies areDeacons (East Africa) and Uchumi Supermarket. Moreover, secondary data were extracted from annual reports of the aforementioned eleven (11) commercial services companies listed at NSE and DSE from 2015 to 2020.

Tests Employed

The study employed key tests in line with the requirements for panel data regression analysis (Wooldridge, 2015). Specifically, this study employed statitonary test (Levin-Lin-Chu unit-root test), serial autocorrelation test (Breusch-Godfrey LM test), descriptive statistics, multicollinearity test (VIF) and heteroske dasticity test (Breusch-Pagan and Cook-Weisberg test).

Measurement of Variables

Table 1 reports the measurement basis for the dependent and independent variables used in this study.

Table 1: Measurements of Variables

Variable	Measurement	Source
Return on Assets (ROA)	$ROA = \frac{Net\ Profit\ before\ Tax}{Total\ Assets}$	(Abdulrahman & Musa, 2019; Nguyen & Nguyen, 2020)
Capital Adequacy (CA)	$CA = \frac{Total\ Equity}{Total\ Assets}$	(Amararathne & Wanigasuriya, 2022; Camino-Mogro & Bermúdez-Barrezueta, 2019)
Financial Leverage (FL)	$FL = \frac{Debt}{Equity}$	(Nguyen et al., 2019; Taqi et al., 2020)
Company Liquidity (CL)	$CL = \frac{Current\ Assets}{Liabilities}$	(Adelopo et al., 2022; Paul et al., 2021)
Firm size (FS)	$Size = Log\ (Total\ Assets)$	(Linawati & Halim, 2017; Mansikkamäki, 2023)

Model Specification

In estimating the firm specific determinants of profitability of commercial services companies listed in Kenya and Tanzania, the model detailed below is used in line with prior studies that examined the same in other countries (Abdulrahman & Musa, 2019; Al-Homaidi et al., 2018; Zaitoun and Alqudah, 2020).

$ROA_{i,t} = \varphi_0 + \sum_{i=1}^{n} \varphi_{i,t} X_{i,t} + \sigma_{i,t}$ eq (1)

Equation one above is decomposed into,

$ROA_{i,t} = \varphi_0 + \varphi_1 CA_{i,t} + \varphi_2 FL_{i,t} + \varphi_3 CL_{i,t} + \varphi_4 FS_{i,t} + \sigma_{i,t}$ eq (2)

Where;

Dependent variable is Return on Asset (ROA) that proxy profitability. Independent variables (Capital adequacy (CA), Company liquidity (CL), Financial leverage (FL) and Firm size (FS)), $\sigma_{i,t}$ = Error term for the company i, at time t,

The process of selecting the estimators for panel data regression follows rules that may lead to the use of either pooled Ordinary Least Square (OLS), fixed effects estimator or random effect estimator (Wooldridge, 2015). Wooldridge, (2015) documented that when basic tests are satisfied like multi-collinerity, stationary test, heteroskedasticity, and serial correration pooled OLS is

efficient estimator. Moreover, Gujarati and Porter (2010) revealed that pooled OLS is ineffcicient in the presencse of serial correlation problem, heteroskedasticity problem and when variables contain unit root, thus random effect and fixed effects estimators furnish best estimation. In deciding between random and fixed effects estimators post estimation test known as Hausman test was performed (Wooldridge, 2015). The results that are discussed in subsequent sections favour the random effects estimator.

Discussion of Findings

This section presents results of tests employed and the regression results. Moreover, it covers discussion relating to the results of tests and regression results.

Descriptive Statistics

Table 2 below provides a summary of descriptive statistics of both predictor and outcome variables. The summary shows that listed commercial services companies in NSE and DSE on average generated minus ROA of 0.041. Moreover, the maximum value for ROA is 0.484 and the minimum value reported is -1.35 with a standard deviation of 0.289. This implies that averagely listed commercial services companies were generating unsatisfactory profits based on the level of assets invested. Capital adequacy among the listed companies was averaged at 0.164. The minimum amount of financial capacity was recorded at -2.666 and the maximum amount of 0.721. This implies on average that commercial services companies finance its operation extensively using debt rather than equity. This is demonstrated by a low average capital adequacy ratio of 0.164 far away from recommended cut off 0.5. Moreover, financial leverage has a mean of -0.783 with maximum and minimum values of -55.895 and 23.916 respectively. This justifies that most of the listed commercial services companies reported abnormal losses and borrowing that resulted into negative total equity over the period of the study. Moreover, the average liquidity position was 1.229 and with both maximum and minimum values of 2.99 and 0.045 respectively. This implies that the average liquidity position of commercial services companies was within the recommended cut-off of the industry which ranges from 1.2 to 2 as propounded by Johri and Maheshwari (2015). Moreover, the reported average liquidity ratio indicates that commercial companies were able to meet their current obligations. Finally, the average value of the firm size for the listed commercial services companies is 9.623 and with the lowest value of 6.942 and the highest value of 11.292.

Table 2: Descriptive Statistics

Variables	Obs	Mean	Std. Dev.	Min	Max
ROA	66	-0.041	0.289	-1.35	0.484
CA	66	0.164	0.697	-2.666	0.721
FL	66	-0.783	8.992	-55.895	23.916
CL	66	1.229	0.758	0.045	2.99
FS	66	9.623	1.269	6.942	11.292

Multi-Collinearity Test

The study employed a Variance Inflation Factor (VIF) to address the problem of multi-collinearity. Table 3 reports the result of VIF. The result indicates that the highest VFI was 1.71 for company liquidity and the lowest VFI was 1.09 for financial leverage. Therefore, the reported VIF values were far below the cut-off of 10 that was postulated by Field (2005), thus indicating that the variables were free from the problem of multi-collinearity that induce higher variance in estimating the coefficient of independent variables.

Table 3: Variance Inflation Factor

Variable	VIF	1/VIF
CL	1.71	0.586
FS	1.43	0.699
CA	1.33	0.752
FL	1.09	0.913
Mean VIF	1.39	

Heteroskedasticity Test

The study used Breusch-Pagan and Cook-Weisberg test to examine the potential problem of heteroskedasticity of independent variables. Table 4 below reports the result of the heteroskedasticity test whereby the null hypothesis of the test was constant variance (Ho: Constant variance).The reported p-value of 0.06 was greater than 5%;thus, the study failed to reject the null hypothesis of constant variance thus indicating that there was no problem of heteroskedasticity.

Table 4: Heteroskedasticity test

Details	Coef.
Chi-square test value	32.1
P-value	0.06

Stationarity Test

Panel data contains both cross-sectional and time series data, therefore conducting stationarity test help to select estimators that furnish efficient estimation(Im et al., 2003). Table 5 below reports the results of stationarity

using Levin-Lin-Chu unit-root test. The results uncover that CA (p-value =0.0.003), FL (p-value =0), and FS (p-value =0) were stationary at level. However, the results revealed that ROA (p-value =0.999) and CL (p-value=1) were not stationary at level. Since the results indicated that all variables were not stationary at level, OLS does not furnish best estimation, thus favours random and fixed effects estimators.

Table 5: Levin-Lin-Chu Unit-Root Test Results

Ho:Panels contains unit roots				**Number of panels**	**11**
Ha:Panels are stationary				**Number of periods**	**6**
	ROA	**CA**	**FL**	**CL**	**FS**
p-value	0.999	0.003	0	1	0
Unadjusted t	2.989	-2.995	-13.768	8.709	-10.551
Adjusted t*	3.775	-2.779	-14.268	9.597	-9.685

Serial Correlation Test

Theproblem of serial correlation induced bias when estimating variances of the coeffient thus furnish inefficient estimation when simple OLS is used. This study employed both Breusch-Godfrey LM test and Durbin-Watson d-statistic test for serial correlation. To conduct the Breusch-Godfrey LM test and Durbin-Watson d-statistic test requires re-setting data as time series using stata command. Tables 6 and 7 below depicts the results of serial correlation tests. The results of Breusch-Godfrey LM test reported in table 6 revealed that the p-value was 0.013 which was less that 0.05 thus we reject the null hypothesis and favour the alternative hypothesis that there was a problem of serial correlation. The results of additional test, Durbin-Watson d-statistic test depicted in table 7 below reported the value 1.364 indicating positive autocorrelation problem. The results of both Breusch-Godfrey LM test and Durbin-Watson d-statistic test reported positive autocorrelation problem that makes simple OLS inefficient estimator thus favouring random and fixed effects estimators.

Table 6: Breusch-Godfrey LM test Results

lags(p)		chi2 df	Prob > chi2
1		6.113 1	0.013
H0: no serial correlation			

Table 7: Durbin-Watson d-statistic Test Results

Durbin-Watson d-statistic(5,66)	=	1.364

Regression Results and Discussion

Both fixed and random effects estimators were used to estimate the firm specific determinants of profitability of commercial services companies listed at DSE and NSE. Table 9 reports the estimates of the regression coefficient using both fixed and random effects estimators. In order to select the efficient estimators between random and fixed effect, a post estimation test known as Hausman test was performed. Table 8 below reports the results of the Hausman test. The results of Hausman test (p-value= 0.3565) favour the random effects estimator.

Table 8: Hausman Test

Test: Ho: difference in coefficients not systematic
chi2(4) = (b-B)'[(V_b-V_B)^(-1)](b-B) = 4.38
Prob>chi2 = 0.3565

Results of Fixed Effects Estimator

Table 9 portrays the results of fixed effects estimator in estimating the association between profitability and firm-specific factors that influence the profitability of commercial services companies. The results of the fixed effect estimator describe approximately 11.88% of changes in profitability of commercial services companies. Furthermore, the results revealed that only firm size (ϕ_4=0.1754, p-value =0.03) significantly positively influenced the profitability of commercial services companies. However, the results indicated that capital adequacy, financial leverage, and company liquidity did not influence the profitability of commercial services companies listed at DSE and NSE.

Results of Random Effects Estimator

Table 9 depicts the results of random effects estimator used in estimating the association between profitability and firm-specific factors that influence the profitability of commercial services companies. The results of the random effects estimator explain roughly 24.17% of changes in profitability of commercial services companies. Moreover, the results depicted below indicated that capital adequacy (ϕ_1=0.178, p-value =0.015) was significantly positively linked with profitability at a 5% level of significance. The result signified the relevance of having enough capital to stimulate the profitability of commercial services companies listed in NSE and DSE. Prior studies have supported the role of capital adequacy in enhancing growth and profitability. For instance, using listed insurance companies in Ecuado, Camino-Mogro and Bermúdez-Barrezueta (2019) documented significative positive association between profitability and capital adequacy. Likewise, Irawati et al.(2019)using

pooled OLS, revealed a significant positive link between capital adequacy and profitability of Indonesia-listed banks.

Moreover, focusing on panel data of listed enterprise in Vietnam from 2014 to 2017;Nguyen and Nguyen(2020) uncover a positive association between profitability and capital adequacy. In addition, the result revealed an insignificant positive association between profitability and financial leverage (ϕ_2 =0.0011, p-value =0.771). The result implies that there is no significant link between financial leverage and the profitability of companies. In this regard, the finding adds to the debate about the optimal level of debt that enhances growth and profitability which is yet to be resolved. Prior studies have documented mixed findings over time with regard to optimal financial leverage (Dalci, 2018; Rahman et al., 2020). Moreover, a study conducted by Dalci(2018) that uncovers an insignificant positive relationship existing between profitability and financial leverage for manufacturing companies listed in China, supports the finding of this study. Moreover, the result revealed an insignificant positive association between the liquidity (ϕ_3 = 0.0765, p-value = 0.192) and profitability of commercial services companies. This implies that companies cannot enhance profitability by having a good liquidity position which may be contributed to management's failure to invest resources in the short term. The result is similar to those conducted by Alarussi and Alhaderi(2018) which documented an insignificant positive link between the profitability and liquidity using listed Malaysian companies from 2012 to 2014. Moreover, the finding is in line with those reported by Vintilă and Alexandra (2016) that uncover an insignificant positive relationship between liquidity and profitability using panel data of listed Romanian companies from 2005 to 2014.

Furthermore, the findings revealed a significant positive relationship between the firm size (ϕ_4 = 0.0913, p-value =0.016) and profitability of commercial services companies. This implies that large companies benefit from economies of scale thus enhancing profitability. Large firms enjoy economies of scale such as managerial, transport, financial, security, information, market, labour and technology economies of scale. A large firm is likely also to experience economies which in turn lower the operational costs hence an improvement of its profitability. Likewise, small companies lack the benefits of economies of scale thus leading to higher operations thus lowering profitability. The finding is supported by several prior studies that examined the firm specific determinants of profitability of companies. For instance, Abdulrahman and Musa (2019) revealed that firm size is significantly positively linked with the profitability of listed consumer goods companies listed in Nigeria. Likewise, Morara and Sibindi(2021) documented a significant positive influence of size

on the profitability of listed insurance companies in Kenya. Furthermore, Zainudin et al.(2018) uncovered a significant positive relationship between firm size and profitability in the cross-country study.

Table 9: Results Fixed and Random Effects Estimators

	Fixed Effects Model Estimator			Random Effects Estimator		
Variables	Coef.	t	P>t	Coef.	z	P>z
CA	0.1511	1.42	0.162	0.178*	2.44	0.015
FL	-0.0017	-0.41	0.681	0.0011	0.29	0.771
CL	0.0656	0.88	0.382	0.0765	1.3	0.192
FS	0.1754*	2.24	0.03	0.0913*	2.4	0.016
Constant	1.8361	2.54	0.014	1.0415	2.71	0.007
R-square-overall	11.88%			24.17%		
No. observation	66			66		

Notes: The result of the Random and Fixed effects Estimators of regressing ROA on firm-specific determinants. Values in parentheses indicate p-values attached to the coefficient. *, ** and *** indicate significant coefficient at 10%, 5% and 1% levels respectively.

Conclusion and Recommendations

This study examined the firm- specific determinants of profitability of the commercial services companies listed at DSE and NSE. This study was motivated by the debate on whether firm-specific determinants i.e. capital adequacy, financial leverage, company liquidity and firm size influence the profitability of the listed commercial services companies at DSE (Tanzania) and NSE (Kenya). The study used panel data set with 66 firm-year observations spanning from 2015 to 2020. The study employed random effect GLS regression to examine the firm specific determinants of profitability of commercial services companies listed in DSE and NSE. The findings revealed a significant positive link between the size and profitability of commercial services companies listed at NSE and DSE. Moreover, the study found capital adequacy is statistically significant and positively associated with the profitability of the listed commercial services companies at DSE and NSE. Moreover, the study revealed an insignificant positive association between both financial leverage and liquidity and profitability of commercial services companies listed at DSE and NSE. Generally, capital adequacy and firm size are the firm-specific determinants of the profitability of listed commercial services companies at DSE and NSE. Therefore, corporate managers are advised to promote equity investment to enhance profitability by selling more

equity to both general public and private shareholders. Moreover, they are advised to expand the firm size to enhance profitability.

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Decision making Practices on the Implementation of Curriculum in Community-Based Secondary Schools in Tabora Region, Tanzania

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ABSTRACT

The main purpose of this study was to examine the opinions of educational stakeholders concerning the practices of decision-making on the curriculum implementation in community-based secondary schools in Tabora region in Tanzania. Thirty interviewees took part in the study. A qualitative research methodology was used in the investigation. Purposive sampling was utilised as a method of sampling. Thematic data analysis was used to analyse the data after they had been acquired using a semi-structured interviewing method. Findings found out that most community-based secondary schools used decision-making techniques that did not conform to every step and procedures that needed to be followed in order to make rational decisions about teaching, learning, and evaluation in schools. The findings thus corroborated the main argument of the bounded rationality model of decision-making, which assert that whenever a leader engages in decision-making without adhering to proper procedures starting with problem identification and ending with review and evaluation, the decisions made frequently fail to address the real problems that exist in an organization. Finally, the study makes the following recommendations for Tanzania's local authorities who are in charge of overseeing the community-based secondary schools: ensure that heads of schools regularly participate in training on school pedagogical leadership; ensure that there is effective monitoring and evaluation of how heads of schools make daily decisions regarding teaching and learning; and ensure that there are effective mentorship programmes in place.

Keywords: *Decision making practices, decision-making, curriculum implementation, community-based secondary schools*

INTRODUCTION

Different academics have provided several definitions of decision-making. According to Kerry (2011), decision-making is the process of selecting one choice from a variety of alternatives in order to reach a desired outcome. Armstrong (2006), defined decision-making as a process that contains multiple

steps that are set up by the leader in order to find relevant information about the problems that are already there and decide what to do to resolve them. While Lunenburg and Ornstein (2009), defined decision-making as the process of selecting a course of action after considering many options and acquiring relevant information. According to Kerry (2011), decision-making is typically defined as the cognitive process that leads to the choice of a belief or a plan of action from a variety of viable alternatives. Based to the definitions given above, reasoning that is founded on the values, preferences, and beliefs of the decision-maker constitutes the process of making decisions. A final decision is thus reached at the conclusion of every decision-making process, which may or may not result in action. The strategies used by school leaders are similar to those used by leaders of non-academic organisations, but they concentrate more heavily on teaching, learning, and assessment. Because of the strategies they used, they might not have made rational or irrational decisions, which might have affected how the curriculum is implemented (Lewis, 2014).

There are two main categories of decision-making practices used in schools and in other non-academic organisations: rational decision-making practices and irrational decision-making practices. A systematic process for making decisions that requires a leader to think more clearly before acting can be referred to as a rational decision-making practice. In this decision-making practice, in a school context, a leader first determines the nature of a problem, seeks out potential solutions, implements the best ones, then reviews and assesses the entire process in collaboration with other education stakeholders like teachers, students and parents (Draft, 2010). While an irrational decision-making practice is referred to as an unsystematic plan of decision-making whereby a leader make decisions without adhering to the crucial steps of making coherent decisions, which are: forming a goal(s), identifying the criteria for making the decision, identifying alternatives, performing analysis and coming to a final decision (Draft, 2010). Thus, in a school setting the choice made by school leaders between rational and irrational decision-making practices will have a significant impact on how the curriculum is implemented in schools. In schools the task of implementing an authorized study course and syllabi is known as the curriculum implementation process (University of Zimbabwe, 1995). This procedure entails the use of a structured set of learning experiences that students should be able to achieve through the school. Parents, in particular, have a crucial role to play because the school is unable to provide those learning opportunities on its own therefore, a large number of stakeholders, both inside and outside the school's facilities, should be involved in the implementation of the curriculum (Cross & Johnson, 2009). The heads of the schools, the teachers, the students, the parents and the communities around the schools make up those essential stakeholders (Bishop, 1986). For the benefit of all parties involved, schools should consult with teachers,

students, parents and the local community whenever making decisions about teaching, learning and assessment. In Tanzania, by 2006, the Government of the United Republic of Tanzania (URT) decided to build a community-based secondary school in each administrative ward on the country's mainland in order to politically renew the 2004 Secondary Education Development Plan (SEDP).

The primary goal of the Government was to ensure that after finishing standard seven, all qualified children may access secondary school education. The Government also sought to guarantee that the curricula at those schools had been effectively implemented so that the students would acquire an excellent education and the knowledge and abilities necessary to survive in an era of globalisation. However, a number of studies carried out in Tanzania, including Mtui (2009), Edgar (2011), Mjungu (2016) and Haki Elimu (2017), revealed that most of community-based secondary schools are characterised by a variety of factors that prevent the efficient implementation of the curriculum. Insufficient teaching and learning resources, low student attendance, low parental involvement in school concerns and low teaching morale among staff members were all highlighted as barriers to curriculum implementation. This is so that effective curriculum implementation processes can be either ensured or hindered, according to the review literature, about how decision-making practises were carried out in schools. Thus, the aim of this study is to examine the opinions of education stakeholders on the practises of decision-making and evaluate if they are appropriate or not for the implementation of curricula.

Literature Review

The core objective of a school is to ensure that the students who are admitted receive a quality education in accordance with the curriculum that is in place at a specific level of education (Marco & Hellen, 2009). Heads of school should practice rational decision-making practices so that the curriculum may be implemented efficiently. By using rational decision-making practices, a school can ensure that many school stakeholders are included in the identification of what to do, by whom, and how in order to achieve the desired curriculum objectives (Anne, 2012). In the past, making decisions in a school was considered to be solely the responsibility of the leader of the school. However, in this day of globalisation, it has been found out that the managerial duty of the school leader has changed because most tasks are now carried out by the school leader in collaboration with other school stakeholders, particularly parents and the school community (Somech, 2010). Michael et al. (2014) found out that school leaders are in charge of making daily decisions that ensure all extracurricular activities and programmes are carried out in accordance with the school's short- and long-term goals. Thus, the school leader's decision-making practices have a significant impact on whether the

curriculum implementation process is successful or unsuccessful. As seen by Elizabeth (2013), the choice of instructional strategies, instructional materials and assessment tools is made at the school level; as a function, school leaders need to be able collaboratively with other stakeholders to determine the best way to carry out that task.

Therefore, teachers and the head of school should apply their professional skills and knowledge to make smart decisions that will benefit the school's educational programme and instructional system. As a tool to make rational decisions, it is necessary to encourage the participation of significant stakeholders, including teachers, students and parents (Anthony, 2009). Lewis (2014) discovered that education organisations that set up time and space for staff meetings and discussions have a very good likelihood of successfully implementing the curriculum. Also, the study found out that organisational commitment, work satisfaction and organisational transformation all have strong links to decision-making and the outcomes of curriculum implementation in schools. Apart from that Sifuni and Joel (2015) found out that involving students in school decision-making, increases communication between teachers and other important stakeholders like parents, enhances the standard of teachers' working lives and contributes to the professionalization of teaching and the democratisation of education. Rational decision-making practices are an organised and chronological approach to making decisions with the goal of employing precise procedures to find precise answers to well-defined problems. When a decision needs to be made in an uncertain scenario, the school leader who uses rational decision-making practices is the one who uses participative strategies (Levina & Kerr, 2009). Meshack (2009) on the other hand, asserted that the decision-maker who chose rational decision-making practices is the one who adhered to seven crucial steps, including identifying the problem for the decision, gathering pertinent information about the problem, identifying the alternative solutions, weighing the evidence on the alternative solutions, choosing among the best alternative solutions and implementing the best alternative solutions, as well as reviewing and evaluating the decision. The first step in a rational decision-making process for a school leader is to identify the ideal problem for the decisions. A school administrator must acknowledge that a choice must be made. A leader should then provide a precise definition of the problem, which could affect how well the decision is made. A school leader must also rank the problem in order of priority, look for cause-and-effect relationships and decide who will participate in the decision-making process (Innocents, 2011). The second step in making a rational decision is to gather pertinent information about the problem. A school administrator should first identify the issue and then acquire some relevant information before thinking about potential solutions.

A school leader should now specify who should be involved in the decision-making process because the information necessary may require input from internal or external school stakeholders (Blincken, 2012). The third step in rational decision-making is the finding of alternative options. As a school leader gathers knowledge, he or she will probably find a number of potential answers or alternatives. By leveraging their creativity and new facts, a leader can also come up with new solutions. A leader should now compile a list of all feasible and desired options (Mosses, 2008). The fourth step is comparing and evaluating alternatives in accordance with a decision's predetermined objective is to weigh the evidence regarding those alternatives. A school leader must use knowledge and emotion to visualise what it would be like to carry out each option through to the very end. Determine whether each option would be able to satisfy or otherwise address the need that was discovered in the first phase. A leader starts to favour specific alternative options as they go through this challenging internal process: those that appear to have a higher likelihood of achieving their goal (Michael, 2018). Choosing the best alternative options is the fifth step in the rational decision-making process. A school leader is prepared to choose the alternative options that seem to be the best fit for him or her once they have considered all the available evidence. He or she might possibly select a mix of several options (Anastazia & Kelvin, 2019). Implementing the optimum alternate options is the sixth step in making rational decisions. A school leader is now prepared to begin putting the alternative solutions they have selected into practise. At this point, it's critical to keep in mind that even the best idea can backfire if it's carried out improperly. Consequently, it makes sense to consider certain implementation ideas (Anastazia & Kelvin, 2019). Making a review and evaluation of the decision-making process is the seventh step in the rational decision-making process. The last stage is when a school leader assesses the effects of his or her choice and determines whether or not the issues mentioned in the previous stage have been fixed. A school leader may choose to re-examine significant issues from earlier stages of the process if the decision does not address the indicated need before coming to a new conclusion (Innocents, 2011). Adherence to education and training policy is another factor that should be taken into account to ensure that decisions made in schools are sensible.

Mtaka, (2017) observed that when it comes to applying curriculum in classrooms, school leaders who adhere to national education and training policy requirements make sound decisions, while Lewis (2014) study shown that when schools make decisions that go against the guidelines of a country education policy, they typically fall short of the standards set for the execution of the nation's curriculum. In a nutshell, a school can create policies and procedures that raise the bar for wise decision-making in educational settings by adhering to education policy while making decisions. Paul (2011)

discovered, however, that administrators who follow education policy and training can help a school create a participatory decision-making environment where students, teachers, parents and other stakeholders can focus on how to improve teaching, learning and assessment methods in classrooms. On the other side, World Bank (2019) discovered that a school leader who respects a nation's education policy helps learners make wise decisions about their own teaching and learning. This is due to the fact that the school maintains students' safety, upholds the law constantly and offers the greatest education available. However, Rindsley (2010) found out that school leaders who adhere to education policy and training help a school to create a productive learning environment where students, teachers and parents can concentrate on lessons rather than getting bogged down in arguments over things that are not particularly significant. Also Cranston and Ehrich (2009) observed that a school leader cannot build rules and procedures that produce standards of quality for learning and safety as well as expectations and accountability if decision-making in the school disregards the norms of the existing education policy. Without these schools, it would be impossible to make the arrangements and carry out the tasks required to meet the educational needs of the children. Generally, according to the literature review, it has been discovered that a school leader's decision-making practices mostly impact how successfully the curriculum will be implemented. The identification of the decision's problem, gathering pertinent information about it, identifying potential solutions, weighing the evidence supporting those solutions, selecting the best alternatives, implementing the best alternatives and reviewing and evaluating the decision-making process are the seven key steps that rational decision-making practices have been found to include. Additionally, the reviewed literature indicates that while making important decisions, teachers and administrators should follow the directives of the education and training policy. However, the reviewed literature shows that schools' decision-making would be irrational in the sense that it would attempt to solve the ideal problem that triggered the decisions if they did not go gradually, in steps, and involve numerous education stakeholders along the process.

Theoretical Framework

A theoretical framework is a review of accepted theories that acts as a guide for the study's own arguments. Once the study has established its main research findings, a theoretical framework enables consideration of the theoretical contribution(s) to recent scholarly work in the study discipline. Adow (2015); Adebayo and Francis (2009) and Grant and Osanloo (2014), recommend that the study examine its theoretical foundations when describing the theoretical contribution(s) of the study findings. In this study the rational model of decision- making and the bounded rationality model of decision-

making were used as the two theoretical descriptions of a decision-making process used as the study's primary informants. The rational decision-making model is a practice for removing emotion from decision-making and using logical stages to go towards a resolution. The model entails contrasting many possibilities or alternatives while making a decision utilising factual information and other non-biased investigation (Bernard, 2009). While the bounded rationality model of decision-making emphasises how humans deviate from perfect economic rationality, our ability to be rational is restricted by our capacity for thought, the information that is available to us, and the amount of time that we have. We frequently choose actions that are pleasant rather than choices that are the "best" (Amandina, 2007). According to March (2010) and Towler (2010), A school leader who adopts a rational model of decision-making is one who is aware of the alternatives, outcomes and decision criteria before implementing the chosen alternative solutions. In addition, Grant (2011); Hastle (2010); Mendel (2011); Ahmed (2011) and Schoenfeld (2011), suggest that a leader who utilises a rational model of decision-making should indeed perform seven crucial steps: identifying the problem that needs to be resolved, gathering relevant information about it, identifying potential solutions, weighing the evidence for those solutions, choosing the best alternatives, implementing the best alternatives and reviewing and evaluating the decision.

On the other hand, according to Hellriege and Slocum (2011), a leader is a person who searches for important details about a problem before making decisions for a workable solution as opposed to an ideal one has chosen the bounded rationality model of decision-making. Instead of choosing an ideal goal or decision, the main purpose of a decision maker who uses the bounded rationality model of decision-making is to be satisfied. Kourdi (2003) and Lunenburg (2010) assert that when it has been stated that a decision should be acceptable, this could suggest that it is simpler to determine and implement, less contentious, or in some other way safer than the best alternative. Managers feel comfortable making decisions without considering all viable options for resolving the current problem. Thus, according to Hellriege and Slocum (2011); Thaler and Sunstein (2009) and Lunenburg (2010), organizational leaders that choose a bounded rationality model of decision-making process make non-programed decisions quickly and without input from a variety of organisational members, which makes the process to be unplanned and unsystematic. In order to determine the practise of decision-making pertaining to curriculum implementation in community-based secondary schools in the Tabora region, this study generally concluded its findings with specific reference to the rational model of decision-making and the bounded rationality model of decision-making process.

Methodology

This study employed a qualitative research approach which entailed gathering and studying non-numerical information in order to comprehend ideas, viewpoints, or experiences. Creswell (2014) claims that qualitative research is "a way of examining and comprehending the value that individuals or groups assign to a social or human problem. The data were provided by 30 respondents who were dispersed over six districts in the Tabora region in Tanzania. Methods known as purposeful sampling were employed to make sure that each demographic group was fairly represented and selected for the sample. A total of five respondents from each of the six districts in the Tabora region were chosen, with two teachers, one District Educational Officer (DEO), one parent, and one Quality Assurer (QA) making up the sample. Semi-structured interviews were used as the main tool for gathering the data for this investigation. This tool (See appendix 1) includes questions that frequently have multiple options, allowing for flexibility. It's simple to compare responses when questions are asked in a specific order. In this study, a thematic data analysis method was used. Due to its primary focus on identifying, assessing, and capturing patterns or themes within the data, it is one of the most often used methods for qualitative data analysis (Braun & Clarke, 2006).

Data Presentation, Analysis and Discussion of Findings

The main objective of this study was to assess the practices of decision-making practices for curriculum implementation in community-based secondary schools in Tabora region. Below are a presentation and discussion of the study's findings, which are divided into six major themes in accordance with specific questions and the study's main objective.

The Identification of Teaching, Learning and Assessment Problems

This section presents the opinions of the respondents regarding the involvement of education stakeholders in identifying problems with teaching, learning and assessment. Different responders from different backgrounds offered their opinions, which are presented below.

One teacher had this to say:

> *I think it is crucial for a school administration to collaborate with a variety of education stakeholders to identify problems with teaching, learning, and assessment, but at our school, things aren't moving in that direction, thus teaching and learning are in turmoil*.

An additionally respondent, a retired teacher, provided the following suggestions:

> *In my experience, numerous school leaders understand the value of working with different stakeholders to identify issues with teaching, learning, and*

evaluation. But they do so in violation, and that's why we will continue to witness ineffective teaching and learning in our schools.

Similar comments were made by another respondent who served as a district education officer.

Although our school leaders are aware of the importance of working with various stakeholders, they frequently act in a different way because they want their decision-making process to go as quickly as possible.

Thus, this study discovered that school leaders frequently failed to work effectively with teachers, students and parents to identify the issues affecting teaching and learning in schools. These findings supported those of Johnathan and Mery (2018), who found out that schools ultimately fail to deliver the intended curriculum when a variety of school stakeholders are not heavily involved in the process of identifying problems that impede teaching and learning. This is because most decisions made do not address the ideal problem. The study's findings are also consistent with those of Anderson (2013), who revealed that parents' involvement in the identification of teaching and learning problems facilitates classroom instruction and learning as well as parents' involvement in monitoring students' learning in a home environment.

Searching Alternative Solutions on Teaching, Learning and Assessment

In this section, the respondents' opinions on the participation of education stakeholders in the search for alternate solutions to the problems affecting teaching, learning and assessment are presented and discussed.

What I keep observing is that leaders in my schools do not foster a culture of working with stakeholders like parents to find alternative solutions to issues affecting teaching, learning, and evaluation. (District Education Officer).

Alike, One quality assurer had this to say:

Every time we visited a school, we observed that the majority of school leaders did not make decisions about teaching and learning in a collaborative manner. Nevertheless, we have persisted in encouraging them to do so because we recognise the value of collaborative decision-making when it comes to the problem of coming up with alternative solutions.

On the other hand, One teacher had this to say:

When the school head asks me and my other teachers to help develop alternate solutions to the identified teaching and learning problems we occasionally participate, but sadly, our opinions are generally disregarded. This, in my opinion, is not an appropriate way to decide how to improve the effectiveness of the school's curriculum implementation.

This study discovered that, as a result of these responses, the majority of community-based secondary schools' heads made decisions without effective

consulting key stakeholders like teachers, students and especially parents. Additionally, the study indicated that even when important stakeholders are somewhat involved, their opinions are typically not very well implemented. These findings correspond with those of Elwood and Julius (2018), who discovered that school administrators never succeeded in fixing problems in a school when they disregarded parents' and students' involvement in searching for alternative solutions. Additionally, the findings are comparable with those of Kelvin and Kennedy (2017), who found that schools more frequently failed to accomplish their intended goals without effective collaboration with teachers, students and parents in looking for alternative solutions to problems related to curriculum and instruction.

The Selection of best Alternatives on the Identified Teaching, Learning and Assessment Problems

The opinions from the study respondents pertaining the selection of best alternatives on the identified teaching, learning and assessment problems are presented and discussed in this section. The narratives that follow provide further details on the respondents' views.

> *We don't have that time to waste often we don't have that tendency of involving stakeholders such as students and parents in searching alternative solutions but likewise in choosing best alternative solution for implementation also we skipped them but we know it is not a good practice*.(A head of school)

> *We are already aware that present-day school leaders do not value participative decision-making, which is why they frequently overlook important stakeholders when looking for and choosing the best alternative solutions to obstacles with teaching and learning* (A regular teacher)

> *It is usual for us to select the options that, as a leader, we thought may be effective rather than calling another meeting to discuss and select the best option. Despite not being the greatest option among several available options, we still put into practise what we believe might work.* (A head of school)

According to these narratives, it shows that key education stakeholders believed that school leaders had not yet formed a habit of working together with different school stakeholders to discover best alternate solutions for problems with curriculum and instruction. Meanwhile, heads of schools occasionally choose the option that they believe will work even though it is not the ideal one. They also believe that holding frequent meetings is a waste of time because it delays the decision-making process. These findings are comparable with Hood (2015) study, which found that while decentralisation of publicly owned schools aimed to ensure that local communities participated closely in school decision-making, problems arose at the schools when heads of schools neglected the role of local communities in school decision- making,

which led to ineffective curriculum implementation in schools. Additionally, the similar to the study conducted Julieth (2018) study, which showed that schools are more likely to make poor decisions when different stakeholders are not included in the process of looking for ideal alternate solutions to problems.

The Review and Evaluation of Decision-Making Process

The respondent's opinions on the significance of the school doing a review and evaluation of the decision-making process are presented and discussed in this part. Below is further information regarding the opinions of the respondents. One head of school had this to say:

> *School administrators have to evaluate their decision-making process to see whether the various solutions they have chosen and put into practise have been successful or unsuccessful. If they find that they have failed, they have to begin the decision-making process over again.*

Another head of a school had a similar insight:

> *The head of the school may determine what goes well and what needs to be improved by evaluating the decision-making process. A head of school can gain a lesson by evaluating the outcomes of a decision-making process that will help him or her become better at making decisions in the future that will benefit the school.*

In contrast, one teacher had a different perspective:

> *In my opinion, school leaders still need to monitor and evaluate how decisions are made, even though they are aware of how important it is to do so. And even if it is done, heads of schools typically do it on their own, which indicates that the majority of recently built secondary schools that call themselves community-based do not have very effective teaching and learning strategies.*

These views show teachers don't witness their school leaders reviewing and evaluating previously made decisions about curriculum and instruction in classrooms. According to heads of schools, they are aware of the importance of reviewing and evaluating their decisions, but they choose to do so alone without consulting other parties involved in education. These findings support Tompson (2018) finding that school leaders who developed a habit of isolating themselves from other stakeholders during the reviewing and evaluation of decision-making processes more frequently fail to achieve the objectives of the curriculum. The decision-making process is therefore reviewed and evaluated if the school leader is to be effective. On the other hand, Theopister (2001) contends that if the decision-maker does not review and assess the entire process, the decision-making process is not complete. By reviewing the decision-making process, the leader can amend some procedures while the chosen alternatives are being put into effect, ensuring that the decision-making process produces the desired outcomes.

A Step-by-Step Decision-Making Procedure

In this section, the respondent's views on whether the decision-making process should be carried out step-by-step are presented and discussed. This is what one district education offer said:

> *Based in part on what I observed in my district, heads of schools made decisions in an orderly way. However, they frequently skip a crucial stage, which is performing a review and evaluation. However, in my view, it is preferable for a school leader to make decisions while paying attention to all essential criteria.*

In addition, parallel advice was given by a different respondent who was a regular teacher:

> *Although it is necessary for the decision-making process to proceed step by step, our leaders frequently disregard this rule, which indicates that the majority of decisions taken in our schools throughout the years have fallen short of ideal outcomes. Therefore, I advise school leaders to adhere to all necessary procedures when making decisions, but to remember to conduct a review and evaluation.*

One quality assure officer, In the meantime, offered comparable observations and advice.

> *With regard to what I know, a step-by-step decision-making procedure is required. Some school leaders choose the best option and put it into practise, but they don't have the habit of including key stakeholders like parents and pupils throughout the entire process. But in my opinion, it is critical that all parties with an interest in education be involved in the process of making decisions relating to instruction and learning in schools.*

These viewpoints believed that their schools' decision-making procedures mainly adhered to the norms for making reasonable decisions, but frequently they failed to do reviews, evaluations, and involve a range of stakeholders. These results are consistent with those of George (2018), who discovered that whenever crucial decision-making steps were skipped, from the identification of the problem that prompted the decision to be made to the final step of conducting a review and evaluation, a leader frequently failed to achieve the ideal objective that he or she desired. In addition, Anthony (2015) found out that one of the many reasons why improper decision-making processes occur in Kenya's public middle schools, is that some school administrators fail to make decisions that follow a step-by-step process and this raises concerns about how the curriculum is implemented in those schools.

Aligning Decision-Making Practices with Educational and Training Policy

The respondent's opinions on how well the school's decision-making process adhered to education and training policy are presented and discussed in this section. Below is more details on the respondents' opinions.

> *I have been a school leader for ten years; I have made several decisions by referring to our education policy in Tanzania emphasizes that school decision-making should involve parents and the school community. I succeed in my leadership, so I advise my fellow heads of schools to adhere to the directives of education policy if they want to succeed in their leadership* (A head of a school)

Furthermore, one teacher put it:

> *Every aspect of school decision-making is covered by the education policy of every nation. Therefore, if a school leader wants to be successful, they should review it.*

In connection with that, another school leader said the following:

> *When education policy is respected at school, it should succeed in everyday operations since it instructs school leaders on what they should do in their roles as educational leaders.*

On the other hand, one teacher concured with school administrators that adherence to the educational policy was essential for good decision-making in school. He said the following:

> *A school leader who adheres to the principles of education policy should be successful in the planning process because, when he or she plans and makes decisions on numerous issues, he or she already has a direction that outlines the objectives the school will work towards, the resources that will be employed, and who will carry out each necessary task.*

Based to the testimony of the above respondents, it has been determined that, in order for a school leader to be successful in the entire process of implementing the curriculum, alignment of decision-making processes with education and training policy is extremely important. These findings support Richard's (2011) observation that schools that fail to make decisions that yield better results frequently do not follow the country's education and training policy guidelines. As a result, in most cases, they failed to make significant decisions regarding curriculum and instruction in schools. Samson (2016), on the other hand, came to the conclusion that a school leader who is found to be not abiding to the country's education policy is likely to fail in his or her leadership. As a result, the study advised school leaders to abide by the country's education policy for the benefits of all parties involved in education since the daily decision-making process will be successful, leading to successful curriculum implementation in schools.

Conclusions

The findings of the study led to the conclusion that the vast majority of community-based secondary schools in Tabora's region do not follow the guidelines of rational decision-making in their school administration. It has been observed that school leaders frequently make decisions without taking students' and parents' input into account at all stages, from problem

identification to review and evaluation. Additionally, according to the study's findings, school administrations frequently make decisions without carefully considering what is required under Tanzania's current education and training policy requirements. As a consequence, in relation to the rational model and the bounded rationality model of decision-making examined in this study, it is discovered that school leaders make decisions without adhering to the correct procedures in order to produce rational decisions, which is why the implementation of the curriculum is still in doubt. However, the study concluded that most school administrators were unaware of the importance of the local community in school affairs, which was why parents and the local school community were largely excluded from key decisions like planning for teaching, learning, and assessment. If, however, parents were included, they could help the school combat school dropout, prevent low classroom student attendance, and the provision of teaching and learning materials in terms of labour and material.

Recommendations

This study recommends the Ministry of Education, Science and Technology (MoEST) to continue its efforts to recognise the significance of having school leaders who have received training in both practical and theoretical domains. Since a well-prepared school leader understands the benefits of utilising the proper decision-making practices when planning for teaching, learning, and assessment. The study further recommends local authorities in Tanzania, who are in charge of supervising community-based secondary schools, to regularly plan workshops and seminars to help newly appointed heads of schools become familiar with their daily responsibilities. Additional local quality assurance offices should frequently examine and evaluate the heads of schools. They should also provide feedback to all parties involved in the education system and offer rescue practises whenever a problem is found. Thus, by doing so, the practises for implementing the curriculum would be improved, and it would be ensured that secondary students admitted to community-based schools receive the best education possible, which is in line with the Tanzanian government's intended goal when community-based secondary schools were established since 2006.

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Appendix 1
Interview schedule for District Educational Officers (DEO), teachers, parents and Quality Assurers (QA)

1. What are the importance for the head of your school collaborates with different school stakeholders in decision-making process pertaining teaching and learning and assessment matters?
2. Does the head of your school continually search for alternative solutions to problems with teaching, learning, and assessment in collaboration with significant stakeholders like parents? If yes, or if no, please explain.
3. Why it is thought that the school head should select the best alternative solutions to school problems and engaging in the implementation by working with significant school stakeholders.
4. Do you think it is essential for a school head to regularly review and evaluate the decision-making process? If you answered yes or no, please explain why.
5. It is commonly claimed that making decisions should be done in stages; could you help explain this?
6. Do you think it is important for a school's head to continuously follow the existing Tanzania's education and training policy while making decisions? If either yes or no, please explain.

Design of Strategic Planning in Improving Public Sector Organization Performance at TANESCO Morogoro, Tanzania

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ABSTRACT
The study was based on the design of strategic planning for improving public sector organizations. The study employed a case study as the research design to examine design of strategic planning on organizational performance in Tanzania. Strategic management theory was applicable in the study because it showed the rationale that influences the relationship between the theory and the problem under study. The collection of data was done using questionnaires and documentary reviews and based on quantitative data analysis.The inferential analysis was used as a method of data analysis to draw a conclusion. The study findings revealed that the data drawn from the case study of TANESCO Main Office indicated that the design of the strategic planning process was positive and significantly correlated with the dependent variable (performance), thus, design of strategic planning is a major part of the wider activities that influence public institutions' performance. The recommendation is that there should be greater effort on the design of strategic planning for the public sector, but there are some barriers that hinder the implementation of the design of strategic planning, like a lack of information concerning strategic planning. Also, employees must participate in the design of strategic planning and others stakeholders.

Keywords: *Strategic planning, Public sector, Organizational Performance, TANESCO*

INTRODUCTION

Globally, strategic planning was first introduced in business firms in the mid-1950s (Steiner 1979), in a similar vein that emanates from Western countries and the United States in particular (Whittington & Mayer, 2000), whereby the design and use of the setting for deliberation must include an awareness of effective deliberation (Bryson, 2011). Furthermore, it is a set of concepts, procedures, and tools that organizations use to determine their overall strategic direction and the resources required to achieve strategic objectives. In the same vein, it is usually associated with the performance and future of the business as well as making sure that the business is headed in the right direction (Obaje 2020). A successful strategic plan will examine and make informed projections about environmental realities to help organizations

anticipate and respond to change by clarifying their mission and goals, targeting spending, reshaping their programs, fundraising, and other aspects of operations (Petro, 2013). In Tanzania, strategic planning was first initiated in 1991 (Petro, 2013). Most of the firms in Tanzania engage in various strategic plans for the purpose of achieving organizational goals. Various applications of strategy are put in place in different firms; however, these strategy applications are useless if not well planned.

It is a strategic planning and management system that is used extensively in business and industry, government, and nonprofit organizations worldwide to align business activities to the vision and strategy of the organization, improve internal and external communications, and monitor organization performance against strategic goals Bana & Shitindi (2009). In the same vein, various reforms were established, like the Civil Services Reform Programme (CSRP) from 1993-1999, Public Service Reform Programme (PSRP) from 2000-2009, Financial Sector Reform (FSRP), Legal Sector Reform Programme (LSNP), Local Government Reform Programme (LGRP), and the National Strategy for Growth and Reduction of Poverty (NSGRP), commonly known in its kiswahli translation as *Mkakati wa Kukuza Uchumi na Kupunguza Umaskini* (MKUKUTA) (Petro 2013). All those reforms and others brought various significance to the public sector, like, it assisted in providing organization direction (Bryson 2018); tends to make organizations more systematic (Stoner 1994); shapes a company's strategy choice, and has other significance. But in a similar vein, there are some challenges encountered in the design of strategic planning in the public sector, like the inappropriate shading of the Gantt chart to show the implementation schedule of activities. Oliver (2001), also fails to determine the kinds of inputs and resources needed and other challenges that may hinder the design of strategic planning in the public sector. In order to provide direction to an organization, strategic planning is applicable and this helps stakeholders understand the direction the organization is taking and which areas require additional effort. As a result, it helps the organization define its goals and explore the methods that will lead to the accomplishment of those objectives.

Literature Review

Theoretical Literature Review

The study was guided by a strategic management theory. A strategic management theory may be said to be a supposition, proposition, or system of ideas intended to explain the origin, evolution, principles, and applications of strategic management. Strategic management theories actually stem mainly from the systems perspective, contingency approach, and information technology approach to corporate management. In light of this background, following David (2005) and Mohd (2005), among the common strategic

management theorists noted and applicable to modern industrial and governmental organizations are profit-maximizing and competition-based theory, resource-based theory, survival-based theory, human resource-based theory, agency theory, and contingency theory. In addition to strategic planning design and processes, a strong commitment from top-level leadership is an essential element of successful strategic planning and execution because it signals the commitment of the organization to strategic planning (Ramanujam & Venkatraman, 1987). Furthermore, strategic management theory holds that the chief executive officer (CEO) or the top management team (TMT), as it is called in organizations, carries out the responsibilities of the CEO and is responsible for the overall direction, performance, and effectiveness of the organization (Hax & Majluf, 1984). The strategic management theory is applicable in this study because it shows the rationale that influences the relationship between the theory and the problem under study.

Empirical Literature Review

Kidere's (2012) research on the study titled "The Role of Strategic Planning in Organizational Performance, Especially in Relation to Parastatals in Kenya" confirms that all the human resources aspects are vital in defining staff morale and the general performance of individual members of an organization. Therefore, organizations need to create a state of equilibrium regarding the welfare of human resources in order to maintain an energetic work force that is enthusiastic to perform at their best. On the other hand, Mgombere (2017) conducted a study on the use of strategic planning in enhancing public sector performance in Tanzania: a case of the National Housing Cooperation (NHC) and the Tanzania Metrological Agency (TMA). The study revealed that the organizational culture of the public sector affects strategic plans. The inappropriateness of government policies affects strategic planning; thus, their implementation is not impressive compared to the private sector.

Conceptual Framework

This research was guided by conceptual frameworks in relation to problem identification and based on the design of strategic planning for the performance of public organizations. Strategic planning is the independent variable that impacts firm performance, and performance is the dependent variable. This is diagrammatically illustrated in the Figure 1 below.

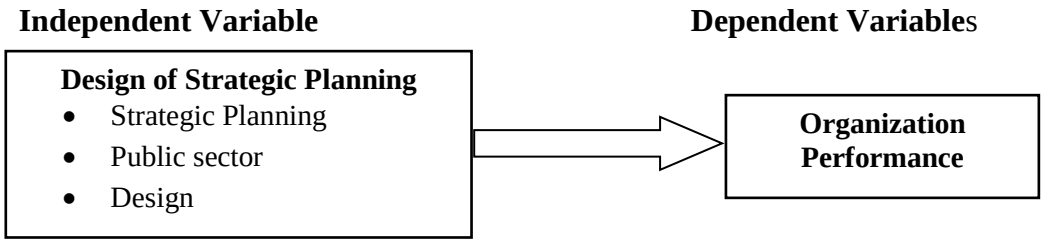

Figure 1 Conceptual Framework
Source Author Construct (2023)

Research Methodology

The study engaged in a case study as the research design. The data was gathered from one hundred and fitly three (153) respondents from TANESCO main office Morogoro. The data collection used two methods namely questionnaires and documentary reviews. The sample selection was based on probability sampling in which simple randomly sampling was applicable in the study whereby everyone had an equal chance of being selected.

Results Findings and Discussion

Descriptive Analysis for Design of Strategic Planning

Design of strategic planning in improving public sector organization performance in this objective found out that the design of strategic planning was related to the public sector performance at TANESCO Morogoro Main Office. The researcher formulated a questionnaire with statements coded B1, B2, B3 and B4 as illustrated in Table 1. The researcher presented the findings in summarized form by combining agreed (A) and disagreed (D) to as strong agreed (SA) and strong disagreed (SD) and neutral (N). According to the findings in table 1, it showed that, 90% of the respondents agreed whereas 7% disagreed, 3% of the respondents were strong disagreed on the statement with code B1 that stated awareness on the different designs of strategic planning. On the memory statement with code B2 that stated design of strategic planning effectively implemented in organization, the respondents were of the view that 73% agreed, 18% disagreed and only 9% were neutral. On the memory statement coded B3 that stated design of strategic planning commitment was relevant to the implementation of strategic plan, the findings indicated that 73% agreed, 21% disagreed and 6% were neutral on the statement. The findings on the statement with code B4 was 71% who agreed, 18% disagreed and 11% were neutral on the statement design of strategic planning guide priority use and allocation of resources human, financial, or material in the particular organization.

Table 1: Descriptive Statistics for Design of Strategic planning

Code		SD	D	N	A	SA	Total
B1	Frequency	5	10	-	138	-	153
	Percentage	3	7	-	90	-	100
B2	Frequency	-	27	14	112	-	153
	Percentage	-	18	9	73	-	100
B3	Frequency	-	32	9	112	-	153
	Percentage	-	21	6	73	-	100
B4	Frequency	-	27	17	109	-	153
	Percentage	-	18	11	71	-	100

***Key**: SD=strongly disagree D=Disagree N=Neutral A=Agree SA= strongly agree, and Total (frequency Percentage).*

Table 2: Correlation Analysis Results

		DSP	PSP
DSP	Pearson Correlation	1	.663**
	Sig. (2-tailed)		.000
	N	153	153
PSP	Pearson Correlation	.663**	1
	Sig. (2-tailed)	.000	
	N	153	153

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

Key: DSP=Design of Strategic Planning, PSP=Public Sector Performance

Regression Analysis

Design of Strategic Planning in Improving Public Sector Organization Performance Model Summary

The coefficient of determination (R squared) of 0.440 showed that 44.0% of TANESCO Morogoro performance had positive relationship with design of strategic planning. The adjusted R square of 43.8% depicts that design of strategic planning in exclusion of the constant variable explained the change in public sector organization performance by 43.8%. The remaining percentage can be explained by other factors excluded from the model. The R showed the correlation coefficient of the design of strategic planning, an R =0.663 showed that there was a positive relationship between design of strategic planning and public sector organizational performance. The standard error of estimate (1.09) showed the average deviation of the independent variables from the line of best fit.

Table 3: Design of Strategic Planning in Improving Public Sector Organization Performance Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.663[a]	.440	.438	1.09598

a. Predictors: (Constant), Design of Strategic planning

b. Dependent Variable: Public Sector Organizational performance

Source: Field Data (2022)

Design of Strategic Planning and Public Sector Organization Performance ANOVA

The F statistics was used as a test for the model goodness of fit, in Table 4 below (F=275.857, p value =0.000) showed that there was a significant relationship between Design of Strategic Planning and Improving Public Sector Organizational Performance.

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	331.349	1	331.349	275.857	.000[b]
	Residual	421.608	151	1.201		
	Total	752.958	152			

a. Dependent Variable: Public Sector Organizational performance

b. Predictors: (Constant), Design of Strategic planning

Source: Field Data (2022)

Design of Strategic Planning and Public Sector Organization Performance Regression Weights

The study findings depicted that *design of* strategic planning had significant relation with improving public sector performance at Tanesco Morogoro whereby (β=0.663 and p value=0.000). Therefore, a unit increases in *design of* strategic planning leads to an increase in public sector organization performance by 0.180. Therefore, we can conclude that *design of* strategic planning had significant relation with improving public sector performance at TANESCO Morogoro.

Table 5: Design of Strategic planning and Public Sector Organization Performance Regression Weights

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.688	.307		2.241	.026
	DSP	.180	.011	.663	16.609	.000

a. Dependent Variable: Public Sector Organizational performance

Source: Field Data (2022)

Conclusion and Recommendation

It was found out that the design of strategic planning had a positive influence on the performance of the public sector. The study findings showed that strategic planning is concerned with recognizing goals and designing a process to meet those goals, which can help an organization better utilize its resources and improve competence and accountability. Study leadership and poor communication at various levels in the organization. There should be a greater effort in the design of strategic planning for the public so that they can adopt it and see that it is very possible that they lack information concerning strategic planning. Also, employees must participate in the design of strategic planning. It is crucial that these people are equipped with the necessary information concerning the process for them to make the best use of it.

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Factors for Pricing Decision of Food Products in Mbeya City, Tanzania

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ABSTRACT
This study examined factors in the pricing decision of food products in Mbeya City. It employed non- experimental research design where every participant had an equal chance of being selected in which a sample of 100 food vendors through a cross-sectional time dimension was collected using questionnaires at Mwanjelwa, SIDO and Soweto markets in Mbeya City. Multiple regression techniques were employed in data analysis using both SPSS and STATA packages. Variable inflationary factors and link tests were used to predict multi-collinearity and model specification. Findings showed that dependents of food dealers were inversely correlated with the pricing of food products. Furthermore, the income level of customers was inversely related to the price of food products while the type of customers and customer beliefs were both positively related to the price of food. Study concluded that vendors' dependents, income level of customers, type of customers, and customer beliefs on food vending services influence the pricing decision of food products. It is, therefore, recommended that local government authorities should empower food dealers on pricing decision of food products services.

Keywords: *Food Vendors, Pricing Decision, Pricing Knowledge, Food Products.*

Background of the Study

Sustainable food consumer evaluation is based on product values and credibility to health and ethical concerns (Kovacs & Kreszetes, 2022). The motivations to consume available and accessible food products include benefits for human health contrary to higher prices (Guiné *et al*., 2022). On the other hand; the benefits, costs, opportunity costs and risk aspects of food products describe the condition of the food industry (Suhel *et al.*, 2022). Accordingly, Yang *et al.* (2022) believe that quality-based pricing decisions and information disclosure improve profits than actual levels. Thus, most superior aspects in food products include innovation, product, promotion, price, and collusion strategies (Suhel *et al.*, 2022). As a result, Yang *et al.* (2022) observed that quality-based pricing strategy yields lower prices than a pricing strategy that does not consider quality. Subsequently, Sutaguna *et al.* (2023) argue that promotions on social media, prices, and menu variety simultaneously have effects on purchasing decisions of food products. He *et*

al. (2020) found that food products' deterioration rate and quality dropping rate affects the delivery time as well as the pricing decisions.

Conversely, Mensah *et al.* (2021) observed that low-income groups spent a greater proportion of their household food expenditure on street foods. Thus, the benefit of value-added food products services remains important to maximize the profit of the food dealer and the customer value at the same time (Rajabu, 2015). Consequently, pricing decisions as the value which users compare with the price of a competitor's product is an important element of the marketing product mix that determines the business. Little is known about factors that influence pricing decisions on food products by food dealers that will ensure profit realization and sustainability despite of having more customers. This study, therefore, investigated factors that influence pricing decision of food products in Mbeya City.

Statement of the Problem

It is argued that market supply and demand of food products affect price pattern and the sales volume in relation to the delivery systems, e-commerce and advertisement (Liu *et al*., 2022). Wei *et al*. (2020) found out that the ratio of online and offline profit to the total dual-channel profit of food products depends on the location of customers and the values of the logistics costs. As a result, the overall profit of the food products supply chain obtained by pricing food products through a decentralized decision-making model is lower than that created under centralized decision-making (Wang *et al.*, 2022). Similarly, Liu *et al*. (2019) found out that when organic food products do not dominate the initial market, green subsidies do not affect the prices of the two products. Food products services have a substantial sensitivity due to its highly competitive nature of the industry and the direct relationship with different levels of income of consumer groups (Deljouyan *et al*, 2019). Subsequently, Yang *et al.* (2022) observed that lower prices drive demand, thus improving profits and reducing food waste. Additionally, Yang *et al.* (2022) argue that, when an information strategy is employed, the prices in a quality-based pricing strategy of food stay the same or even increase during the selling season. Thus, price decision is a critical component for any business and crucial to its survival. Consequently, pricing decisions among food dealers differ from one dealer to another depending on different factors that are considered during pricing decisions (Cant *et al.*, 2016). However, little information is available on what influence pricing decisions of food products in the food sector. Therefore, this study therefore investigated factors that influence the pricing decision of food products in Mbeya City.

Research Methodology

Study Location

This study was conducted at Mwanjelwa, SIDO and Soweto markets in Mbeya City. Mbeya City is within Mbeya District. It is located between latitudes 80 50' and 80 57' South of the equator and between longitudes 330 30' and 350 35' East of the Greenwich meridian. It has a total land area of 214 sq. km and borders Mbeya District Council on all sides. Mbeya City is the headquarters of Mbeya Region. Administratively the City has two divisions (Sisimba and Iyunga), 36 wards, and 181 streets with a population of 640, 320 and growth rate of 4.68% per annum. The study locations were chosen because of the availability of data as Food Vendors who were available so as to achieve the study objectives. To achieve the study objective, a stratified proportionate number of heterogeneous food vendors were investigated.

Research Design

The present study employed non - experimental research design in which each respondent from different food products and customers who purposively had knowledge in food products were selected (Krysik & Finn, 2010; Neuman, 2014). The present study used a sampling frame of food vendors from Mwanjelwa where data was collected at once from Food Vendors to determine the pricing decision of their food products.

Sample Size Determination

The proportion of target study levels of food vendors with desirable characteristics was 10% of the population who were assumed to be food dealers in the z –statistic from which 1.96 were chosen, and the desired accuracy of margin error was at the 0.05 confidence level. The proportion of respondents who were sampled was denoted by p = 10%, and those who were not sampled was denoted by q = 90%, confidence level = 95%, and tolerance of error = 5%. A confidence level of 95% means that if the same study were conducted 100 times with random samples drawn from the same population, it would have represented the true population value 95 times. This definition implies that 5 times out of 100, the sample would not represent true population value.

Consequently, the sample size n was given by:

$$n = \left(\frac{Z}{e}\right)^2 .p.q \quad \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

$n = \left(\frac{1.96}{0.05}\right)^2 (0.1)(0.1) = 138.2976$. The adjusted minimum sample size was computed using the formula:

$$nf = \frac{(n)}{1+\left(\frac{n}{N}\right)} \quad \text{..... (2)}$$

Where n= 138.2976, N = 400

Therefore, $nf = \frac{138.2976}{1+\left(\frac{138.2976}{400}\right)} = \frac{138.2976}{1.3457} = 102.77$. Therefore, a minimum sample of 100 food vendors were interviewed (Saunder *et al*., 2009).

Sampling Strategies

Stratified proportionate and purposive sampling plans were used because there was a possibility that the outcome of interest could vary among subgroups and avoid over or under-representation. Also, systematic random sampling was used where the class size of particular strata was large. Therefore, the sampling interval was computed to get the required number of food vendors while university graduates in each stratum were purposively included to avoid them being underrepresented (Neuman, 2014; Saunders *et al.,* 2009; Tracy, 2013).

Data Collection Instruments

Cross-sectional data were collected from food dealers at Mwanjelwa market. However, the pre-test for the research questionnaires was done on 10 food vendors and found how effective the questionnaires were since respondents were given room to recommend on questionnaires and corrected. Cross-sectional data collection was done as the simplest and least costly approach (Neuman, 2014; Krysik & Finn, 2010). Questions were asked in the same manner for both graduates and non-graduates. Cross-sectional data sought to describe the pricing of food products by self-employed food vendors in their location (Saunders *et al*., 2009).

Analysis of Factors Influencing the Pricing Decisions of Food Products

The relationship between factors influencing the prices of food products with socio-economic characteristics towards the food vending model of business was ascertained. The present study used a linear regression model, specified as pricing decisions of food products as a function of: vendors' dependents, income level, experience, customers' beliefs, and pricing knowledge, attracting customers and satisfaction of customers on services offered by food vendors. Thus, the food vending model was expressed as follows:

$$\text{Pricing decision of food products(Y)} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \varepsilon \quad (3)$$

β_0 = constant term; $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ & β_7 are coefficients of variables that were estimated;

X_1 = number of dependents; X_2 = income level; X_3 = Experience in business; X_4 = Customers' believes ; X_5 = Pricing knowledge, ;
X_6 = Attract customers; X_7 = Satisfaction of customers; and
ε = Error term of variables not included in the regression model.

The model was tested for multi-collinearity problems, model specification, and adjusted R-Square to estimate the model fit. Also, t-statistics was employed to estimate the degree of relationship and its extent of association between the dependent variable and predictor variables.

Data Analysis

Both SPSS and STATA packages were employed to analyze data in which descriptive information were obtained. Adjusted R- square, t-statistic, link test, and variance inflation factors (VIF) were used to determine the goodness of fit of the model, measures standard errors the estimate is, model specification (variable of prediction, _hat, and the variable of squared prediction, hatsq.) and to detect the extent of multi-collinearity problem, respectively (Greene, 2018; Wooldridge, 2009).

Results and Discussions

Demographic Information of Food Vendors

Gender of Food Vendors

Research findings in Figure 1 showed that 51% and 49% of food vendors were female and male, respectively. This is because of the nature of business, most Tanzanians believe that women are the ones responsible for cooking activities hence, most women are more involved in the food vending business than men. Present findings are similar to observations made by Juma (2018) who supports that females engage more in food vending activities than males on compliance of food vendors to food vending regulations in Tanzania. Study findings (Figure 1) showed that 65% of food vendors were aged between 23-32 years followed by 15% aged between 13-22 years while 7% of food vendors were aged between 43-52 years. The majority (65%) of participants were engaged in food vending activities.

The reason for this age comprised of graduates from school and due to lack of employment opportunities people try to employ themselves and engage in businesses that need low capital as food vending businesses. Present findings are similar to observations made by Papulova (2020) that entrepreneurship behavior is centered in the eyes of the young generation to changing customer requirements. Findings in Figure 1 showed that 36% followed by 35% of food vendors in Mbeya City have attained secondary and diploma education, accordingly while 12% had attained a degree and above level of education. Results indicated that most of the food vendors in Mbeya City have secondary

education levels. This is because people who have a secondary education are many when compared with the degree and above graduates. This is caused by a challenge in employment opportunities for secondary graduates that is why they employ themselves.

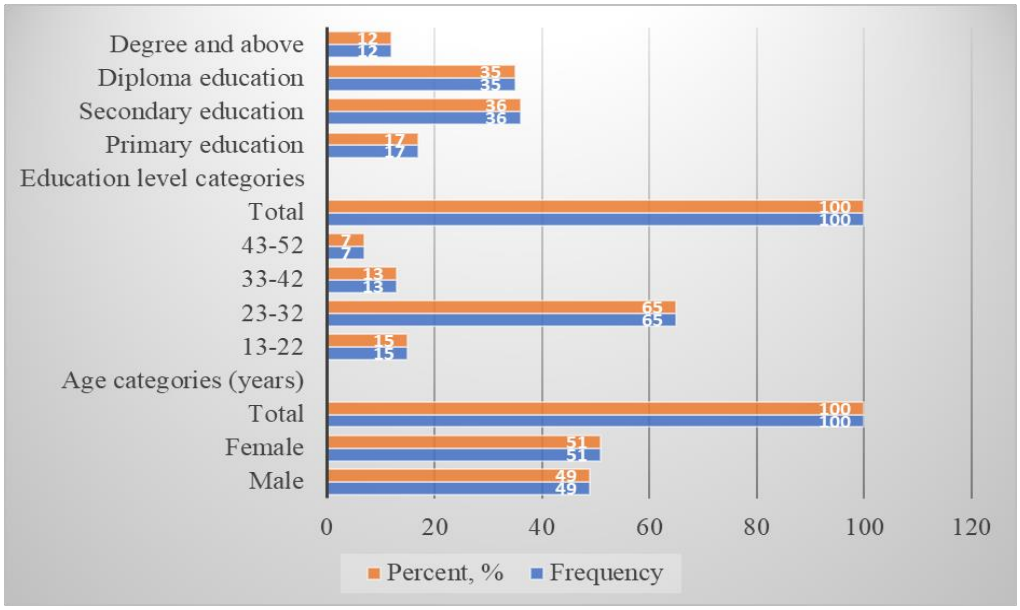

Figure 1: Gender, Age Categories, and Education Level of Food Vendors

Marital Status, Household Size of Participants and Dependents of Food Vendors

Study findings in Figure 2 showed that 46% followed by 45% of food vendors in Mbeya City were married and single, respectively while 1% of them were divorced. Results indicated that food vendors in Mbeya City most of them were married. This is because married people have a responsibility to make sure that the family receives its basic needs so they are more focused on finding money. Study results (Figure 2) showed that 67% followed by 22% of food vendors in Mbeya City had household sizes between 5-8 and 9-12, respectively while 11% had a household size between 1-4 of family members. Results indicated that most of the food vendors had 5-8 household sizes. The findings were above the National Census (2012) which reported that Mbeya City Council had a 4.2 average household size. This difference could be associated with time variation since 2012 of long-run family generation. Furthermore, research findings (Figure 2) showed that 72% followed by 25% of food vendors in Mbeya City had dependents between 0-3 and 4-7, accordingly while 3% of them had 8-11 dependents. This indicated that the majority of food vendors had less than three (3) dependents. This is because many of them were young so they had fewer dependents than old people.

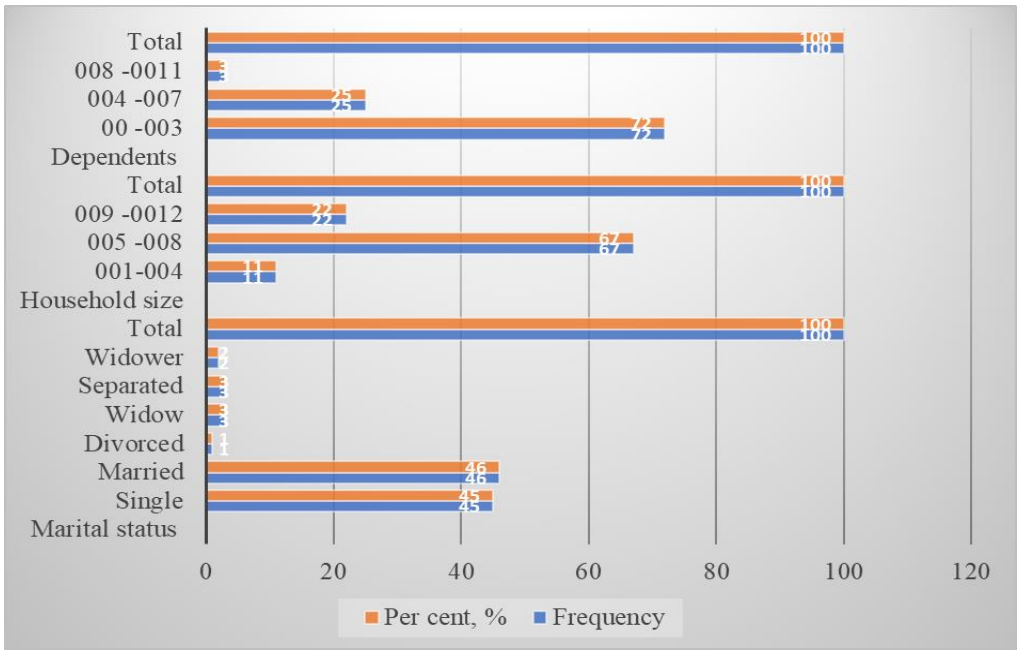

Figure 2: Marital Status, Household Size, and Dependents of Vendors

Income Level, Experience, and Pricing Knowledge of Food Vendors

Present findings in Figure 3 showed that 71% of food vendors had income level between 60 000-560 000 followed by 25% with income level between 561 000-1 061 000 while 2% had income level between 1 062 000 - 1 562 000 and 2 064 000 – 2 564 000. Results indicated that majority of food vendors in Mbeya City had income levels between 60 000 - 560 000. This is because the majority (71%) of food vendors lacked pricing decision knowledge as a reason why they failed to sustain their business activities resulting into low-income levels (Acs & Kallas 2020). Study findings (Figure 3) showed that 72% of food vendors had an experience between 1-5 years, followed by 24% with experience between 6-10 years while 4% of them had an experience between 11-15 years. Results indicated that most of the food vendors had low experience as a result they failed to ensure their business sustainability in the food vending market due to different challenges (Justino, 2015). Present findings (Figure 3) showed that 92% of food vendors faced challenges with pricing decision knowledge while 8% did not. Results indicated that majority of food vendors lacked pricing knowledge as a result, they got low profits and sometimes lost and failed to sustain their businesses. Findings (Figure 3) indicated that majority of food vendors lacked pricing knowledge as a result they had low monthly income. Study findings were similar to observations made by Cant *et al*. (2020) that pricing decision setting was influenced by competitors' information in the food vending market.

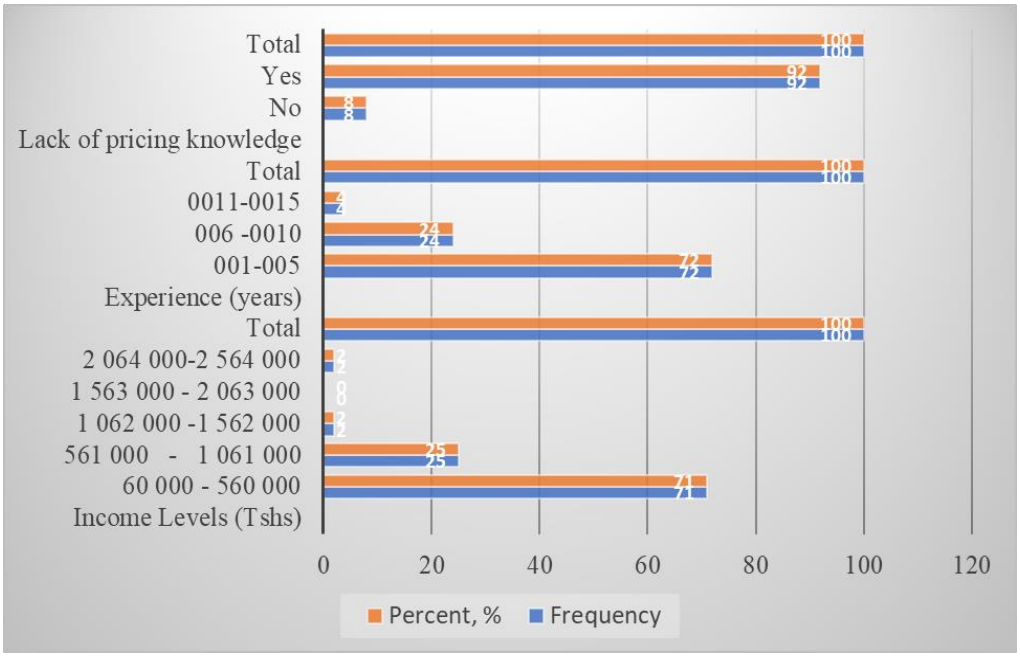

Figure 3: Income Level, Experience, and Pricing Knowledge of Food Vendors

Value/Quality of Food Products

The study assessed whether food vendors determined the price of food products by considering how much the customer believed the value of food products they sold. Findings (Figure 4) showed that 91% of food vendors considered the value of their food products during price determination while 9% did not. Results indicated that majority of food vendors value their food products during price determination of their food services in order to meet what their customer believed and their expected income level. Research findings (Figure 4) showed that 75% of food vendors lacked knowledge of 8ps while 25% had knowledge of 8ps. Results indicated that the majority of food vendors lacked knowledge of pricing decisions of food products. As a result, the majority of food vendors did not sustain themselves despite having more customers due to a lack of pricing knowledge. Knowledge help business to perform within business objectives because it is concerned about what product to produce, price, place, promotions, people, process, physical evidence, and philosophy that guide business. Similarly, Ahmed (2020) found out that businesses use the marketing mix to determine how to promote and position their products so as to appeal to their target audiences. Findings (Figure 4) showed that 97% of food vendors' customers were satisfied when using food from food vendors while 3% did not. This indicates that the majority of food vendors produced food with high quality that meets customers' satisfaction. As a result, customers increase to a specific food vendor(s) because they get what they want at a specific period of time.

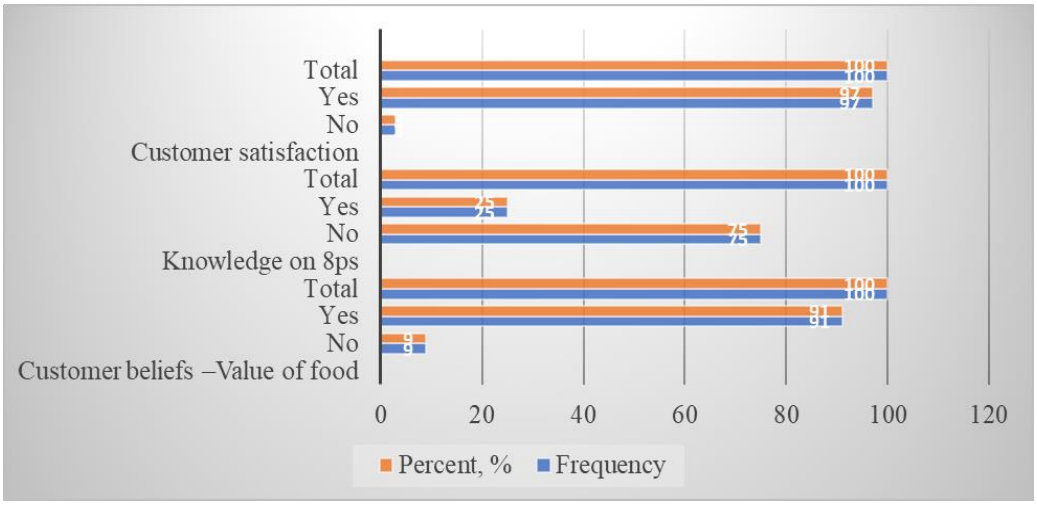

Figure 4: Customer Beliefs, Knowledge on 8ps and Satisfaction of Customers

Analysis of Factors Influencing Pricing Decisions of Food Products

Multiple linear regression analysis was used in which multi-collinearity problems and link tests for model specification were tested. Results showed that there was no multi-collinearity problem since the mean-variance inflationary factor was 1.17 (Greene, 2018). Furthermore, model specification (variable of prediction, _hat, and the variable of squared prediction, _hatsq) was not significant at $p>0.05$ signifying that the model was correctly specified (Table 1).

Table 1: Link Test of Model Specification

Variable	**Coef.**	**Std. Err.**	**T**	**P>|t|**
_hat	1.876031	.4175258	4.49	0.000
_hatsq	-.5990027	.2759745	-1.17	0.062
_cons	-.2785673	.1639143	-1.70	0.092

Results in Table 2 showed that vendor dependents were inversely correlated with the price for food products and statistically significant at $p<0.01$ level. Results meant that the price of food decreases by 3.9% with an increase of one dependent. This suggests that as dependent as manpower to serve in food vending activities, charges that were paid to supporting laborers were saved and reduce costs in food processing hence the price of food declines (Hafeez *et al*., 2020; Singh, 2019). Also, findings in Table 2 showed that the income level of customers was inversely related to the price of food products at $p<0.05$ level. Results meant that the income level of customers' increase by one unit, which keeps them away from consuming food from food vendors by 7.8%.

This suggests that the more income level of consumers increases the more the broad choice of food varieties other than food vendors which becomes inferior to them due to financial freedom (URT, 2018). However, results as shown in Table 2 showed that the type of customer was statistically significant and positively related to the price of food at p<0.01 level. This suggests that as one unit of customers increased, the price of food increased by 100% due to the demand law (URT, 2018). Similarly, customers' beliefs were statistically significant and positively correlated with the price of food at p<0.01level. Results meant that as customer beliefs increased by one unit on the food vendors' service, the price of food tends to increase proportionately by 37.8% (Mensah *et al.*, 2021).

Table 2: Estimation of Determinants of the Price of Food Products

Variable	Coef.	Std. Err.	t	P>|t|
Number of dependents	-.0392789	0106047	-3.70	0.000
Income level of customers	-.0785844	.0286215	-2.75	0.007
Experience	.0668532	0409683	1.63	0.106
Type of Customers	1.047663	.1851075	5.66	0.000
Customer beliefs	.3780682	.0683749	5.53	0.000
Pricing Knowledge	.0435063	.0459033	0.95	0.346
Attract customers	-.330405	.1947184	-1.70	0.093
Satisfaction of customers	-.021712	.1079347	-0.20	0.841
_cons	.0250589	.2850393	. 0.09	0.930

R-squared = 0.4625; Adj. R-squared = 0.4152; Mean VIF = 1.17; Number of obs = 100

Conclusion and Recommendations

Findings showed that number of dependents were inversely correlated with the pricing of food products and were statistically significant at p<0.01 level. Furthermore, the income level of customers was inversely related to the price of food products at p<0.05 while the type of customers and customer beliefs were both statistically significant and positively related to the price of food at p<0.01 level. The present study concluded that number of dependents, income level of customers, level of customers, and customer beliefs/taste on food vending services influenced the pricing decisions of food products. It is therefore recommended that local government authorities should empower food dealers with pricing decision knowledge and customer care on food products services so as to improve their livelihoods.

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Comparison between Hospital Brand Images of Public versus that of Private Hospitals in Kinondoni – Dar es Salaam, Tanzania

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ABSTRACT
The study compared the brand image of public and private hospitals in Kinondoni Municipal Council, Dar es Salaam, Tanzania. The study used a sample size of 384 respondents. Quantitative analysis was used to analyze data using SPSS whereby descriptive analysis and compared mean test was used in interpreting the study results. The study revealed that people didn't have a good idea of how well-known, well-equipped, and comfortable public hospitals are. Public hospitals don't have good enough reputation for people to trust them and for doctors to act in the right way. Concerning the brand image of the services offered by private hospitals in Kinondoni Municipal, it was said that there was an inadequate image of advanced medical equipment, facilities, a comfortable environment, trusting doctors, and an inadequate attitude on advanced medical equipment. The study recommends that in order to improve patient loyalty both public and private hospitals need to strengthen communication between their patients and service providers.

Keywords: *Hospital, Brand image, Public hospital, Private hospital*

INTRODUCTION
Hospital brand image is observed as the beliefs, thoughts or imitation that a patient holds towards a hospital (Cham*et al*, 2016). Thus, for a hospital to attain a good or bad image it depends on the imitation that patients have towards that hospital. (Sibarani & Riani, 2017) mentioned that brand image plays a great role in business strategic planning since it represents the tangible and intangible aspects of the firm. The tangible includes the buildings and products while the intangible includes the perception, perception identity of the patients Assila (2019) mentioned that patients often produce their own picture of a brand image of a hospital from their own medical examination and treatment experiences. In developed nations where the technology is well advanced the brand image of the hospital are well considered. Patients who attend both private and public health facilities feel the same as referred to

(Sajjad & Maqsood, 2018). (Naik & Bashir, 2015) from India mentioned that competition in health industry have made the service provider to consider their customer in product development processes hence establishing a good relation with the patients.

Ahmed (2017) added that in well-developed hospitals brands image depends on the ability of the hospital to maintain repeating customers and attracting new customers. These prove that in order to have good brand image then customers' needs have to be considered. Jandavath & Byram, (2016) further explain that comfort is more important than technical skill in health facilities, it is crucial for healthcare providers to constantly put the needs of their patients first when providing services. However, the WHO insists on health institutions to provide correct care at appropriate time in response to the requirements and preferences of the service users while minimizing injury and resource waste (WHO, 2008). In Tanzania the Brand Image of health facilities depends on patient's opinion, since they have different views on the way they receive treatment from those facilities. Some of the hospitals are well recognized while others are not even known in spite of providing quality services (Manongi, 2017). Some of the hospitals have attained their brand depending on the services that they provide which may not be available in other areas. For example, Ocean road hospital is well known for treating cancer. Kibong'oto hospital has created its brand by being the specialist of treating TB diseases. CCBRT is well known for performing eye site operation for this case it has been difficult for other hospital to compete with this hospital thus it has been difficult to identify patient satisfaction depending on the services they are given. The health care industry in Tanzania is one of the country's top priorities because of the positive impact it has on the local population. Throughout reality, public and private hospitals serving the same purpose are allowed to operate in the country. For this reason, both public and private organizations have put in significant efforts to build hospitals in various locations. However, it is overlooked that patients also require consideration, in addition to the construction of healthcare facilities. Inadequate infrastructure, a shortage of drugs, a lack of medical supplies, and a manpower shortage are just a few of the problems. Assila (2019) mentioned that both public and private hospitals face variety of issues that affects services they offer to their clients, such as insufficient infrastructure, lack of pharmaceuticals, medical supplies and shortage of human resources. Meanwhile, healthcare professionals have struggled to achieve high levels of patient satisfaction. Some patients don't get the right treatments or drugs, while others grumble about the high costs associated with getting those services. Basing on this, the study focused on drawing the comparison between hospital brand images of public versus that of private hospitals in Kinondoni – Dar es Salaam, Tanzania.

Literature Review

Hospital Brand Image/Hospital Image

A hospital is a residential establishment which provides short term and long-term medical care consisting of observational, diagnostic, therapeutic and rehabilitative services for persons suffering from a disease or injury and for parturient (baby delivery). It may or may not also provide services for ambulatory patients on an out-patient basis (WHO Expert Committee,1963) or the hospital is a an integral part of a social and medical organization, the function of which is to provide for the population complete healthcare, both curative and preventive and whose out-patient services reach out to the family in its home environment; the hospital is also a center for the training of health workers and for bio-social research(WHO Expert Committee,1956). A brand is not simply a name or logo which differentiates a product from its competitors, but is a set of associations that satisfies both the functional and emotional demands of target customers (Nguyen and Nguyen, 2003). In the health care context, Kotler & Clarke (1987) suggested that hospital brand image is the sum of beliefs, ideas and impressions that a patient holds towards a hospital. The patients often produce their own picture of a brand image of a hospital from their own medical examination and treatment experiences (Kim *et al*., 2008). Hospital brand images refer to a set of perceptions about a brand, and it reflects a customer's overall impression of the brand (Keller, 1993). Khosravizadeh (2017) explain key dimensions of healthcare branding as a set of variables considered in branding patterns of healthcare in hospitals and medical centers each of which has a series of sub factors that are described in details:

Comparison between Hospital Brand Images of Public versus that of Private Hospitals

Sheikha *et al* (2017) analyzed on the factors that influenced patients to go to private hospitals against public hospitals of Oman and to analyze the expectations of patients from the integrated public hospitals in Oman. A well-defined questionnaire was used to conduct the study, and 251 survey samples were obtained based on random sampling. It employed the selection cost service model. The study showed that there was a relationship between the hospital and services chosen and the cost of the hospital's services, and it was discovered that the cost of services incurred affects the hospital chosen for medical treatment. The study also demonstrated that patients in private hospitals may readily approach anyone, even the reception staff, who is all nice and helpful. Additionally, private hospitals have current equipment, and doctors treat their patients with respect. Mtasiwa., *et al* (2003) compared the quality of public and private first-tier antenatal care services in Dar es Salaam, United Republic of Tanzania, using defined criteria. Structural attributes of quality were assessed through a checklist, and process attributes, including

interpersonal and technical aspects, through observation and exit interviews. A total of 16 health care providers, and 166 women in the public and 188 in the private sector, were selected by systematic random sampling for inclusion in the study. The study's findings indicated that in terms of the structural and interpersonal facets of quality of care, both public and private providers were pretty excellent. Technical components of quality were subpar in both public and private hospitals.

Research Methodology

The study used descriptive design, whereby the researchers gathered information concerning the service quality, level of patient satisfaction and the level of patient loyalty in public and private hospitals. Also, descriptive design helped researcher in making comparison between hospital brand images of public versus that of private hospitals. Thus, descriptive design helped in presenting the results and figure out what it means so that the main goal of the study was understood. With a descriptive research design, the researcher gathered information about the population of interest at a given time. The study was conducted in Kinondoni Municipal which is located in the Northern part of Dar es Salaam city. The area is selected because the majority of Roads within the municipal council are in good condition and passable in all seasons with reliable transportation to all urban areas where public and private transport are used to carry passengers from one area to another with exception of few rural areas which could be reached by Motorcycle transport popularly known as Bodaboda and Bajaji, Water and Electricity are available in almost all parts of the municipal the Municipal have registered 5 Public and 22 Private hospitals.

Population of the study involved all the patients who are aged 18 years old and above. The selected patients must have visited once or more than five times the selected public or private hospital in Kinondoni Municipal, in Dar es Salaam, for their own or their family's needs before/within the past 12 months during this study period. The researcher collected information from the patients who were found at the hospitals where the study was taking place, as well as at their places of employment, schools, colleges, universities, public or private transportation, homes and other social gatherings. The study used questionnaire and in-person interviews to gather information and draw conclusions. Participants were classified simply by their level of hospital-image knowledge. Also, the study selected those who have received medical care in either a public or private hospital which were the focus of the study. A sample calculation formula known as the Andrew Fisher’s Formula was used with the following assumption: the patients’ level of satisfaction (Standard deviation) in Dar es salaam was 50% (0.5), margin error (confidence interval) of 5% (0.05), and non-response rate of 10% and the desired level of

confidence interval at 95%(equal to Z score of 1.96).A sample size of 384was used, after being calculated by using Andrew Fisher's Formula as follows;

$$\text{Sample size} = (\text{Z} - \text{Score})^2 \times STD \times \frac{(1-0.5)}{(\text{Confidence interval})^2}.$$

$$Samplesize = (1.96)^2 \times 0.5 \times \frac{(1-0.5)}{(0.05)^2}$$

$$Samplesize = 3.8416 \times 0.5 \times 200$$

$$\underline{Samplesize = 384.16 \approx 384}$$

The Statistical Package for Social Sciences (SPSS) version 26 was used to analyze the collected data. Descriptive statistics and paired t-test was used to describe the data collected from the research. In this case, the measures of central tendency were used to determine the mean score from the group of scores in the study. Validity and reliability testing of instruments were conducted. To ensure the validity of the instrument, a questionnaire was piloted to ascertain whether the designed questionnaire tool was valid enough to be asked and capture enough and valid information in relation to the study to evaluate the validity and viability of the research instrument before the actual administration of questionnaires to the study respondents. The purpose of pre-testing was to assess the clarity of the items on the instrument so that those items that were found to be inadequate in measuring the variables was to improve the quality of the research instrument. In the proposed study, the researcher tested the reliability of the collected data to ensure the results of the study were trustworthy. This was done by conducting scale analysis in which Cronbach's alpha was considered. The Cronbach alpha was used to determine the dependability of the data instruments; a value equal to or higher than 0.7 (70%) was be deemed reliable (George & Mallery, 2003). The study focused on making comparison between hospital brand images of public versus that of private hospitals. The study had six items which were: good reputation of the hospital, excellent facilities, comfortable environment, trust in the hospital, proper attitude of doctors, the most advanced medical equipment. with Cronbach alpha of 0.905 these results confirms that the study objective was reliable since the obtained values were higher than 0.7.

Findings and Discussion

The study compared the brand image of public and private hospital at Kinondoni municipal. The study had six variables which were good reputation of the hospital, excellent facilities, comfortable environment, trust in the hospital, proper attitude of doctors and the most advanced medical equipment.

Table 1: Variables on Hospital Brand Image

Code	Variables
HBI1	Good reputation of the hospital
HBI 2	Excellent facilities
HBI 3	Comfortable environment
HBI 4	Trust in the hospital
HBI5	Proper attitude of doctors
HBI6	The most advanced medical equipment

Cross Tabulation of Hospital Brand Image

The study involved both public and private hospitals across tabulation in explaining the hospital brand image towards the services provided by public and private hospitals. The frequencies and percentages were used to express the study results. Also, study responses were arranged in a Likert scale of 1 - 5 response whereby 1-Strongly disagree, 2-Disagree, 3-Neutral 4-Agree, 5-Strongly Agree as illustrated in Table 2.

Table 2: Cross Tabulation of Brand Image in Public and Private Hospital

		1	2	3	4	5	Total
HB1	Public	53(13.8%)	66(17.2%)	48(12.5%)	52(13.5%)	24(6.3%)	243(63.3%)
	Private	21(5.5%)	29(7.6%)	21(5.5%)	40(10.4%)	30(7.8%)	141(36.7%)
HB2	Public	125(32.8%)	27(7.1%)	24(6.3%)	42(11.0%)	23(6.0%)	241(63.3%)
	Private	56(14.7%)	8(2.1%)	11(2.9%)	35(9.2%)	30(7.9%)	140(36.7%)
HB3	Public	30(7.8%)	64(16.7%)	72(18.8%)	38(9.9%)	39(10.2%)	243(63.3%)
	Private	19(4.9%)	26(6.8%)	21(5.5%)	40(10.4%)	35(9.1%)	141(36.7%)
HB4	Public	10(2.6%)	24(6.3%)	112(29.2%)	60(15.7%)	37(9.7%)	243(63.4%)
	Private	5(1.3%)	10(2.6%)	43(11.2%)	32(8.4%)	50(13.1%)	140(36.6%)
HB5	Public	11(2.9%)	26(6.9%)	97(25.7%)	63(16.7%)	42(11.1%)	239(63.2%)
	Private	6(1.6%)	9(2.4%)	43(11.4%)	34(9.0%)	47(12.4%)	139(36.8%)
HB6	Public	113(29.5%)	35(9.1%)	32(8.4%)	36(9.4%)	26(6.8%)	242(63.2%)
	Private	49(12.8%)	14(3.7%)	19(5.0%)	27(7.0%)	32(8.4%)	141(36.8%)

Source: Field data (2022)

Table 2 reveal that good reputation of the hospital (HBI1) in public hospital presented 63.3% while private hospital presented 36.7%, Excellent facilities (HBI 2) in public hospital presented 63.3% while private hospital presented 36.7%, Comfortable environment (HBI 3) in public hospital presented 63.3% while private hospital presented 36.7%. Trust in the hospital (HBI 4) in public hospital presented 63.4% while private hospital presented 36.6%, Proper attitude of doctors (HBI5) in public hospital presented 63.2% while private

hospital presented 36.8% The most advanced medical equipment (HBI6) in public hospital presented 63.2% while private hospital presented 36.8%.

Compared Mean Test of Hospital Brand Image

Compare mean test was used in the study to obtain the mean scores and the standard deviation of the study results. Therefore, the hospital brand image variables were compared against the public and private hospital responses. However, in interpretation, the mean score (1.00-2.00) presented inadequate, (2.01-3.00) presented moderate, (3.01-4.00) good image, (4.01-5.00) presented excellent image (Norasmah & Sabariah, 2007; Norasmah, 2011).

Table 3: Compared Mean of Brand Image in Public Hospital

N/Pairs	Variable	Mean	Std
Pair 1	Reputation of the hospital - Public	1.70370	1.29313
Pair 2	Excellent facilities – Public	1.21577	1.46171
Pair 3	Comfortable environment - Public	1.96708	1.24936
Pair 4	Trust in the hospital – Public	2.37037	0.99309
Pair 5	Proper attitude of doctors - Public	2.41423	1.04518
Pair 6	The most advanced medical equipment – Public	1.28512	1.44516
	Weighted Mean 1.826045		
1.00-2.00 Inadequate image 2.01-3.00 Moderate image 3.01-4.00 Good image 4.01-5.00 Excellent image STD > 1.5 = Significance variation			

Source: Field Data (2022)

Table 3 reveal that inadequate image on reputation of the public hospitals with score of 1.7037, inadequate image on excellent facilities in public hospitals with mean score of 1.21577, inadequate image on comfortable environment in public hospital with mean score of 1.96708. Moderate image in trust in public hospital with mean score of 2.37037, moderate image in attitude of doctors in public hospital with mean score of 2.4142 and concerning the inadequate image in advanced medical equipment had a mean score of 1.28512. Generally, the study results revealed that there was inadequate brand image in public hospital with weighted mean of 1.826045. Brand recognition is intangible assets that can help a company succeed in today's competitive market. Patients have an easier time imagining and understanding products with strong brands, and they are willing to take a chance on new services. Sajjad (2018) mentioned that customer satisfaction, service quality, loyalty, and the likelihood of repeated purchases are just few of the many positive outcomes that can result from a well-received brand. The reputation of the

hospital as a brand is a primary factor in the overall model. Patients are more likely to return to a hospital with a strong brand image because it not only encourages loyalty among existing patients but also improves their perception of the quality of care they receive.

Table 4 Compared Mean of Brand Image in Private Hospital

N/Pairs	Variable	Mean	Std
Pair 1	Reputation of the hospital - Private	1.94326	1.35105
Pair 2	Excellent facilities - Private	1.60432	1.54460
Pair 3	Comfortable environment - Private	1.22695	1.31132
Pair 4	Trust in the hospital - Private	1.67376	1.02467
Pair 5	Proper attitude of doctors - Private	1.68116	1.03222
Pair 6	The most advanced medical equipment - Private	1.67857	1.51381
	Weighted Mean 1.63467		
1.00-2.00 Inadequate image 2.01-3.00 Moderate image 3.01-4.00 moderately good image 4.01-5.00 Good image STD > 1.5 = Significance variation			

Source: Field Data (2022)

Table 4 revealed that inadequate brand image on reputation of the private hospitals with score of 1.94326, inadequate image on excellent facilities in private hospitals with mean score of 1.60432, inadequate image on comfortable environment in private hospital with mean score of 1.22695, inadequate image in trusting private hospital with mean score of 1.67376. Inadequate image in proper attitude of doctors in private hospital with mean score of 1.68116 and lastly inadequate image in advanced medical equipment with mean score of 1.67857. Generally, the study results revealed there was inadequate brand image in private hospital with weighted mean of 1.63467. Effective brand management was not the primary emphasis of a hospital's marketing strategy in health care industry. Managers in healthcare facilities failed to focus more on improving their institutions' reputations. Sajjad (2018) suggest that Managers need to be aware of how important it was to build a strong hospital brand image in order to boost patients' opinions of the quality of care they receive and keep their business. In addition, a number of different forms of advertising, public relations, patient communication, service training, and online marketing need to be used to establish and sustain a positive brand identity.

Conclusion and Recommendations

Conclusion

The study concludes that the patients were satisfied and expected to return to public and private hospitals. Also, several patients returned to the public and private hospital because they were satisfied with the treatments provided. Finally, there was an inadequate image of advanced medical equipment, amenities, a comfortable setting, trusting doctors, and an inadequate attitude of health providers, according to some of respondents from both public and private hospitals.

Recommendations

The study recommends that, in order to improve hospital brand image there was a need of providing training and professional exposures to all hospital attendants. Hospital owners/administrators especially from private hospitals should be ready, positively and flexible towards ongoing research activities that involves their health facilities for service improvements purposes.

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