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Editorial Note

We are happy to bring before you the second issue of the fifth volume of the Pan-African Journal of Business Management (PAJBM), which is hosted at the Faculty of Business Management (FBM) at the Open University of Tanzania (OUT).

This issue was supposed to be published in December 2021. However, due to delays from our reviewers we could not manage to process the issue on time. However, as the old adage goes "It is better to be late than never." Herewith is PAJBM Vol.5 issue 2 of December 2021.

We continued to receive a lot of article contributions from all over the world. We are processing an incentive system for reviewers to speed up the review processes. In addition, we hope at the end of this year to have managed to include our journal in the available international indexes with high visibilities.

Note that to improve the performance of our journal, the management of PAJBM has made some changes in our editorial team. The management has appointed Dr. Nasra Kara to be the Associate Editor of PAJBM. We are confident that Dr. Nasra Kara will be a very resourceful member of the editorial team, especially with the task of overseeing the most complex articles review section of the journal.

On the other hand, the outgoing Associate Editor, Dr. Raphael Gwahula has assumed other responsibilities in the Faculty of Business Management. Indeed, the outgoing Associate Editor has set high standards through his insightful editorial advice and unfailing courtesy in his dealing with the authors and reviewers.

This issue contains eleven articles which cover the following; Linkage between product line strategy and competitive advantage in Nigeria, the moderating role of age in the relationship between job satisfaction and organizational commitment among employees of special mission organizations in Rwanda, finance growth nexus in Eastern and Southern African Countries: Insights from a panel ARDL analysis, factors influencing the ethnocentric tendencies of Tanzanians consumers towards purchasing domestic anti-malarial remedies, Africa's readiness to host travellers with disabilities, the effect of marketing mix on the marketing performance of grapefruit in Tanzania, the nexus between capital structure and financial performance of banks, the effects of merger and acquisition of deposit money banks on Nigeria's economic growth, the effect of brand experience and brand loyalty, the mediating role of word of mouth in mobile money service brands, the contribution of education policy reforms towards formalization of domestic work sector and effect of monetary policy shocks on domestics and foreign banks' lending in Tanzania. We hope our esteemed readers will find the articles in this issue useful in their respective areas.

We thank all the authors, reviewers, advisors and editorial board members for supporting the PAJBM. We have a backlog of articles to process and we promise again to speed up the processes. We look forward to continuing to work together.

Dr. Bukaza Chachage
Chief Editor

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 in a wide range of topics on business management concerning Africa. It also accepts cases, book reviews and summaries of dissertations.

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Linkage Between Product Line Strategy and Competitive Advantage: Does Environmental Dynamism Matter?

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Abstract: *Changes in the operating environment normally force many firms to reconsider and adopt new strategies in search of new techniques and innovative management philosophies that can improve their competitiveness. This study is aimed at investigating the link between product line strategy and competitive advantage taking into consideration frequency and intensity of change in the operating environment, and enhancing the literature on strategic management and competitive advantage. The study involved a questionnaire-based survey of managers from a variety of manufacturing firms in Nigeria. A total of 215 responses were received and subjected to multiple regression analyses. Findings of the study revealed that product line strategy, which involves vertical and horizontal line extension line modernization and line pruning strategies constructs, has a significant effect on the firm's competitive advantage. Further, that the relationship between product line strategy and firm competitive advantage was influenced by the environmental dynamism construct including changes in industry, competition and consumer. This study can help managers to understand the role of changes in environmental factors when formulating strategies concerning their product line. We, therefore, concluded that managers and other decision-makers can make informed decisions on the product line by paying attention to the firm's external environment.*

Keywords: Product line strategy, Environmental dynamism, Competitive advantage.

INTRODUCTION

Nigeria has a dynamic market environment with a wide range of products, where consumers are offered with different alternatives to choose from. According to National Bureau of Statistics (NBS), (2019) report over the last few years shows that the Nigerian economy has experienced a series of reforms and restructuring of its key sectors. The size of the Nigerian economy as measured by the Gross Domestic Product (GDP) has increased with the high contribution from the non-oil sector particularly the agriculture and manufacturing sector. Yet, in today's modern world, for firms operating in a turbulent environment like the manufacturing industry to improve its competitiveness and survive in the global economy, there is a need to adopt appropriate marketing strategies that will ensure organizational success (Draganska & Jain, 2005; Allman, 2013). It is obvious that, companies that operate in a turbulent business environment must be able to withstand market competition through sustainable strategies. Business firms can be able to create low-cost and differentiation strategies that will make their products unique and more popular than the competitors' products. According to NBS (2019) GDP report, the manufacturing sector of the Nigerian economy has faced a lot of challenges in the last five years and no significant improvement has been experienced until late last year. The challenges which were brought about by unfavourable macro-economic factors have obviously reduced this sector records of losses by most key factors such as; falling oil prices, rising inflation, dwindling exchange rate and the effects of the Covid 19 pandemic. Despite these trials, however, the Nigerian manufacturing sector remains a vital component of the economy. It is still one of the largest contributors to the country's economic growth as measured by its contribution to the gross domestic product (GDP) which stood at 11.32% as contained in GDP report, (NBS, 2019). Manufacturers lament that the operating environment in the country is poor and the cost of business operation is on the increase, thus impacting negatively on their performance. Thus, poor management of macro-economic variables such as; interest rate, exchange rate, import, export and deterioration of essential infrastructures account for the challenges in this regard. The performance of firms in this industry is inextricably linked to the aggregate spending power in the economy, and with the Nigerian economy hit by these macro-economic factors while manufacturing firms have mainly been affected badly (Oladimeji, Amida & Essien, 2019).

Nigerian manufacturing firms are in a sorry state, as a result of many or all of the aforementioned problems (Akpoyomare, Adeosun, & Ajao, 2012), thus, the conclusion that the country's manufacturing sector is among the worst within the West African sub-region (Oghojafor, Aduloju, & Olowokudejo, 2012). As a result of this, the manufacturer's relevance in Nigeria has been seriously questioned in providing the required products needed by the country. This is evidenced by the clear mismatch between societal needs and products offered by these firms. In a competitive and dynamic environment of this nature, it is crucial for manufacturing firms to be strategically sound so as to cope with the uncertainty. However, it is still common to see consumers complaining about products that perform below expectations, mainly due to the inability of the firm to get the right combination of product variety for all kinds of consumers. The purpose of a firm's competitive strategy such as cost leadership, differentiation, and focus depends to a considerable extent on the performance of its product line (Abubakar & Mohammad, 2019). In fact, one of the major objectives of marketing planning is offering ideal products to the selected market segment. However, many manufacturing firms find it difficult to achieve this objective mainly due to the complexity of the problem, environmental factors, the number of decision-makers involved, frequent lack of information among others.

Most of the empirical studies on product management have largely focused on new product development, product innovation, product line extension, among others (Allman, 2013; Drakanska & Jain, 2005; Heath, Del Vecchio & Michael, 2011), thus, neglecting other product line decisions such as product modernisation and elimination. Additionally, most of the studies were conducted in the turbulent environment of developed countries (Allman, 2013), neglecting emerging economies (Akpoyomare, Adeosun, & Ajao, 2012), which is characterized by rapid and unpredictable environmental changes (Mohammad, 2019). It is obvious that manufacturing firms in developing countries need to adapt to today's changing environment, and thus the research question on the impact of product line strategy on competitive advantage. In essence, the need for firms to achieve competitive advantage in this twenty-first century requires organizations to be flexible and in tune with changing times. Hence, the need to consider the role of frequency and intensity of change in manufacturing firms to ascertain their effects on firm's product decisions and how they influence firm's competitive advantage. Thus, this study attempts to fill the identified gap by examining the effect of product line strategy on the competitive advantage of manufacturing firms in Nigeria and examine how environmental dynamisms affect this relationship. The structure of the paper is as follows. In the next section, the theoretical framework and the hypotheses are presented followed by a description of the study methods, then comes the presentation and discussion of the results. The final section contains the conclusion, implications and suggestions for further research.

Theoretical Foundation and Hypotheses

Dynamic capability approach is the main theoretical foundation that contributed to this study because it is an extension of resources based theory which suggests that firms can strategically offer products through proper utilisation of their capability to improve competitiveness. Dynamic capability has been defined by Peteraf, (1993) as a firm's processes for integrating, reconfiguring, gaining and releasing resources that match and even build market amendment and "organizational and strategic routines by which firms achieve new resources and configurations as markets emerge, collide, split, evolve, and die". Firms can use dynamic capabilities, as means of incorporating, reconfiguring, recommencing, and reinventing resources and capabilities in reaction to environmental changes, in order to achieve sustainable competitive advantage (Peteraf, 1993: Grant, 1991: Miller & Shamsie, 1996). Most related studies (Amit & Shoemaker, 1993) have agreed that the development of capabilities is capable of strengthening firm's competitive advantage in a turbulent environment. According to Amit & Shoemaker, (1993) dynamic capabilities are the major contributors to sustainable competitive advantages for firms. (Haas & Hansen, 2005), as well as (Long & Koch, 1995) elucidate the role of capabilities and suggest that a firm can gain competitive advantage from its ability to apply its capabilities to provide products and perform other vital activities within the firm.

Firm's dynamic capabilities are its ability to organise resources along with the process to achieve its objectives (Amit & Shoemaker, 1993: Ferreira, Cardim & Coelho, 2020). They are information-based, physical or mental processes that are specific to the firm. These capabilities are usually developed over time by way of intricate interactions among resources of the organisation on one hand and the business environment on the other. Grant, (1996) identified four distinct categories of capability. These are "cross-functional, broad-functional, activity-related, and specific capabilities". The importance of product improvement has been stressed by (Allman, 2013: Putsis & Bayus, 2001: Wan, Evers & Dresner, 2012). They suggest that capabilities and product development are implicitly and visibly part of any strategy within a firm. The main goal of the firm's capability is that competitive advantage is based on valuable and unique internal resources and capabilities that are costly for competitive rivals to imitate (Wernerfelt, 1984; Barney, 1991). This implies that competitive advantage is an outcome of resources and capabilities residing within the firm, but these capabilities can be "directed" towards the environment of the firm. Thus, if the firm can exercise this capability faster than its rivals it can give the firm a competitive advantage (Lee, Lee, & Pennings, 2001).

Product Line Strategy and Competitive Advantage

Many studies have demonstrated a linkage between the environment and firm innovation and strategy. A study by (Tan & Tan, 2005) revealed a positive relationship between environmental dynamism and the prospector behavioural type, while (Li, Tse, & Zhao, 2009) found a positive link between environmental changes and environmental scanning, which is an action seen as linked to firm strategy and innovative behaviour. Available literature also showed empirical studies were conducted over the years suggesting that for any manufacturing company to record any meaningful achievement, the right kind of product must be offered to the target market. In today's dynamic business environment, a firm can be situated at the finest location and offer the best price yet not achieving its set objectives as a result of not offering the right kind of products to the target market (Cant, Kallier, & Wild, 2016). Therefore, the ideal decision on firm's product line can be worthy strategies that can enable it to achieve competitiveness in the market. Past studies indicate a significant relationship between product line decisions and a firm's performance measures such as brand performance (Shrestha, 2016), consumer purchasing decisions (Akpoyomare, et al, 2012), market share (Allman, 2013) and profit (Wan, Evers & Dresner, 2012).

As a result, we predicted that a relationship exists between product line strategy and competitive advantage. Specifically, a study conducted by (Shrestha, 2016) to analyse the product line decisions and their effect on brand identity in Dabur Nepal, Pvt ltd. identified product differentiation strategy as a determinant of a firm's success. Similarly, findings of the study carried out by (Akpoyomare, et al, 2012; Bauer & Turcinkova, 2020) on the influence of product attributes on consumer purchase decisions revealed a significant positive correlation between the two variables implying that product line modernisation strategy leads to better market outcomes. Product line extension strategy was also found to be a major determinant of a firm's market outcomes as indicated by findings from (Allman, 2013) which indicate an interactive effect among product line extension both vertical and horizontal with regards to sales volume and value. As such, we hypothesize thus:

H1: There is a relationship between product line strategy and competitive advantage.

Product Line Strategy and Environmental Dynamism

For any manufacturing firm that seeks to compete successfully in the dynamic and competitive business environment, it must continuously develop products and product lines to satisfy the ever-increasing changing needs of customers (Joshi, Reibstein & Zhang, 2016). In fact, it is necessary for these firms to adopt an effective product line strategy by modifying the existing products, introducing new ones or eliminating products that are unsuccessful base on the current environmental realities. Product line strategy encompasses product planning as well the technical activities of product research, engineering design, among others to take advantage of potential opportunities facing a company's product idea in a market. These mixed results showed that, one cannot conclude a definitive market performance brand effect from the existing literature either. For instance, a study by (Draganska & Jain, 2005) showed a negative correlation between brand equity levels as measured by price premium and vertical line extensions into lower quality levels.

The result also indicates a positive correlation between brand performance and vertical line extensions into higher quality levels. Other studies like (Putsis & Bayus, 2001) show that vertical line extensions increase the market share of the brand. It also showed that higher quality extension improves total evaluation of brand while lower quality extension decreased overall evaluation of the brand. Conversely, a recent study by (Heath et al, 2011) indicates that higher-quality extensions improve brand evaluations to a much greater extent than lower-quality extensions damage them. Again (Muir, & Reynolds, 2011) opined that understanding what influence the changes in a brand's performance over time is another subject of interest to management. Because, the markets for consumer goods evolve so rapidly, some interesting dynamics in the performance of the key brands are observed. These dynamics could also be due to environmental factors and the changing attributes in a firm's product line. Finally, (Bayus & Putsis, 2001) found a relative influence of product line strategy and intrinsic brand preferences on the nature of a firm's environmental dynamism. This, therefore, suggests that environmental dynamism, which refers to rate of changes in a firm's external environment depends to a considerable extent on product line strategy in the manufacturing sector. We, therefore, hypothesize thus:

H2: There is a hypothetical link between product line strategy and environmental dynamism.

Environmental Dynamism and Competitive Advantage

Environmental dynamism is among the critical aspects for strategy development and source of firm competitiveness. Researchers in the field of organization theory and strategic management realized the importance of environmental dynamism in adopting effective strategy (Luo & Park, 2001). A pool of studies has shown that managerial perceptions of the firm's external environment influence strategy which in turn influences firm competitive advantage (Verdu-Jover et al. 2006). Again, many empirical studies (Luo & Park, 2001: Keats & Hitt 1988) linked environmental dynamism to organization strategy and organizational "postures" toward product innovation (Zahra & Pearce, 1990). These studies and others indicate the importance of the environmental dynamism construct in explaining firm-level phenomena such as competitive advantage. However, Extreme states of environmental dynamism can lead to 'hyper competition', where the paybacks derived from almost all forms of competitive advantage are momentary (Bierly and Daly, 2007). Iansity (1995) suggests that emergent levels of environmental dynamism lead to more uncertainty in product development, which also reduces the predictability and effects of change the changes. Empirical studies linking firm competitive advantage to the environmental complexity and dynamism has shown mixed results. A study by (Andretti, 2008) adopted intensity and frequency of changes as dimensions of complexity and dynamism and concluded that both had a positive effect on firm competitive advantage. Yet a study carried out by (Dess & Beard, 1984) only detected this association in some of the companies in a sample. Again, (Wang & Ang, 2004) investigated the impact of environmental dimensions on the competitive advantage whose results confirmed that more munificent environments lead to improved competitive advantage in firms. Relating these findings to the context of manufacturing firms, we hypothesize thus:

H3: There is a relationship between environmental dynamism and competitive advantage

Product Line strategy, Environmental Dynamism and Competitive Advantage

Organizational theory and strategic management literature have long argued that a firm's external environment has effects on the linkage between strategy and performance outcomes (Jiao, Alon & Cui, 2011; Mohammad, Daniel, Usman & Ahmed, 2019). For a business organization to achieve success, a strategic decision-making process needs to spin around examining a firm's reactions to environmental changes such as, rival's activities (Mohammad, 2019; Keats & Hitt, 1988). This, in turn, aids a firm to position itself in an industry in such a way as to best defend itself from competitive actions (Kaliappen, Chuah, Gorondutse & Moktar, 2019). Therefore, environment and strategic change have become strongly connected and management should address it proactively (Mohammed, 2019; Jiao, et al, 2011). An important topic in the field of strategic management is the issue of how to match a firm's internal resources and capabilities to the external environment (Mohd, Idris & Momani, 2013). In this process, environmental dynamism is the most important contingent variable. The relevant literature indicates that environmental dynamism, typified by rapid change and a state of crisis, affects the relationship between innovation strategy and dynamic capabilities (Petrus, 2019; Zhang, 2006). In differing degrees, the relationship between the innovation strategy and dynamic capabilities may vary. Generally, environmental dynamism describes the rate and instability of changes in a firm's external environment (Dess and Beard, 1984). Across industries, there are significant differences in terms of the impacts of environmental characteristics on firms. Therefore, where there are environmental dynamism increases, it will be difficult for all involved parties, such as the top management team, stakeholders, and others, to accurately assess both the present and future state of the environment.

If firms within industries exhibits greater environmental dynamism, such as rapid changes in technologies, markets, and competition, the top managers must make quick strategic decisions. That can be done by developing creative and innovative strategies to build a rapid response capability to cope with the changing external conditions and thereby to survive and/or prosper in the new environment (Jiao, et al, 2011; Mohammad, 2019). An innovation strategy will increase the effectiveness of communication and planning, and will dynamically enhance the ability to respond. As the environment changes more rapidly, a higher level of dynamic capabilities is required to meet customers' needs (Covin & Slevin, 1989). However, when the external environment is stable, customer preferences are relatively fixed and the increased costs of innovation will not be necessary (Mohammad, 2019). We, therefore, hypothesize that:

H4: Environmental dynamism is mediating the relation between product line strategy and competitive advantage.

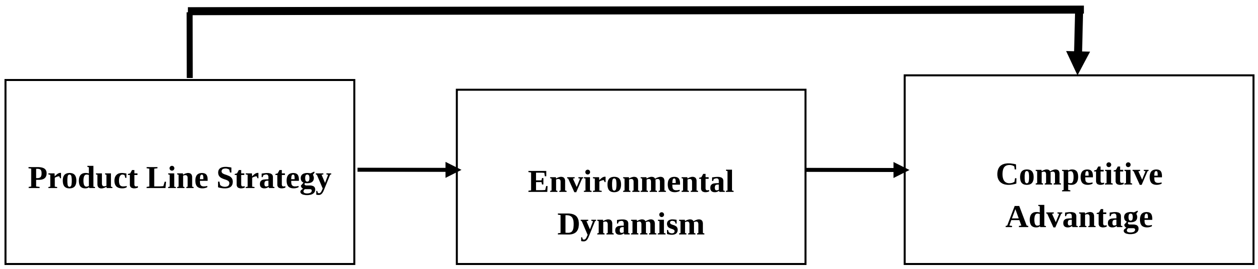

Figure 1: Conceptual Model and Hypothesized Relationships

Methodology

Sample and Data Collection

The study adopted a cross-sectional method in which manufacturing firms in different industries was considered. A sample of 460 was derived from Nigerian manufacturing firms which were classified as small and medium-sized enterprises. The sample size is based on the 15:1 sample-to-item ratio method of sample determination suggested by (Costelo & Osborne, 2005) in Memon, Ting, Cheah, Ramayah, Chuah & Cham, 2020). Cluster sampling technique was used to collect the data through a structured questionnaire to ensure a high rate of return. The selection of the firms was informed by the assumption that they alter their product line in the last five years and demonstrated potential and related capabilities. The structured, mainly closed-ended formatted questionnaire was addressed to the managers of the companies via e-mailin few cases by self-administer.

Measurement

The instrument consisted of five points Likert scale where one represents strongly disagree and five for strongly agree. All the variables had a varied number of items in the questionnaire. Product line construct comprises fourteen items adapted from (Abubakar & Mohammad, 2019), whereas Competitive Advantage holds eight items adapted from (Bratic, 2011) and (Abubakar & Mohammad, 2019). Similarly, environmental dynamism resides with six items adapted from (Halim, Ahmad, Ho & Ramayah, 2017) and (Mohammad, 2019). Primary sources were used to collect data where managers of manufacturing firms filled the surveys. Statistical tests, such as Reliability analysis, and Regression, were used to analyse the collected data.

Table 1: Profile of Firms by Industry

Industry	**Frequency**	**%**
Food beverages	37	17
Textiles manufacturing	21	10
Rubber and plastic	20	9
Furniture	28	14
Chemical & Petroleum product	18	8
Metal and Aluminium product	19	9
Paper and printing	15	7
Leather product	18	8
Household products	15	7
Form manufacturing	13	6
Others	11	5
Total	**215**	**100**

Analysis and Results

Data was collected on product line strategy and competitive advantage result for firms representing several industries. The sample included companies involved in food and beverages, furniture, textiles, chemical and petroleum product as well as range of industrial grouping within the Nigerian manufacturing sector.

Table 2: Factor Loading

Code	**Statement**	**Loading**
1	**Competitive Advantage**	
CA1	We offer competitive prices	**.866**
CA2	We offer products that are very durable	**.865**
CA3	We respond well to customer demand for new features	**.852**
CA4	We are first in the market in introducing new products	**.811**
2	**Product Line Strategy**	
PL5	We introduce higher quality-higher priced product category to increase our profit.	**.895**
PL4	We introduce higher quality-higher price products to target a particular market segment	**.876**
PL8	We introduce new product category to attract higher income earners.	**.872**
PL3	We introduce lower quality-lower priced products to increase our sales	**.859**
PL2	We introduce lower quality-lower priced products to induce customer trial	**.831**
PL7	We introduce lower quality-lower priced products to reduce the cost of launching a new product	**.826**
PL9	We introduce medium quality-medium priced products to maintain our market share	**.817**
PL6	We introduce medium quality-medium priced products to create brand awareness	**.791**

PL1	We introduce medium quality-medium priced products to increase brand loyalty	**.783**
3	Environmental Dynamism	
ED3	Changes in production technology are very fast	**.861**
ED2	Changes in technology are difficult to predict	**.855**
ED1	Changes in competitors' actions are difficult to predict	**.851**
ED4	Changes in mix of products/brands carried in the industry are very fast	**.833**
ED5	Changes in consumer demand are difficult to predict	**.792**

The profile of the companies shows that majority were in food and beverages industry with household manufacturing closely following them. Having 25% and 14% of the sample respecting others with a higher percentage are rubber and plastics, textile manufacturing and furniture products manufacturers. A detail of the distribution of companies is contained in Table 1.

Table 3: Reliability Analysis

Variables	No. of Items	Reliability (α)
CA, PL, and ED	Table = 18	.962
Competitive Advantage	4	.909
Product Line Strategy	9	.958
Environmental Dynamism	5	.917

The items loading of each variable in the pattern matrix is represented in Table 2. The reliability analysis manifests the value of Cronbach's Alpha is 0.962, which is higher than the minimum degree of 0.70, and it showed that the items as per this research were internally consistent, as represented in Table 3. Correlation analysis showed that the correlation of the variables was significant at the level below 0.01, as indicated in Table 4.

Table 4: Correlation Analysis

Correlation	**PL**	**ED**	**CA**
PL	1	.	
ED	.695**	1	
CA	.674**	.653**	1

Note: n = 215, Correlation is significant at .001

Regression Analysis

The correlation and regression were carried out to achieve the study objectives. Table 4 is the correlation matrix showing inter-correlation of the variables used in the study. The result indicated that product line strategy had significant impact on firm's competitive advantage (β= 0.674 $p < 0.01$), product line strategy also had a significant effect on environmental dynamism (β= 0.695, $p < 0.01$), this signifies that H1 and H2 were supported. The result also showed that environmental dynamism had a significant effect on firm competitive advantage (β= 0.653 $p < 0.01$). Thus, H3 is also supported. A simple explanation of mediation steps by (Ramayah, Samat & Lo, 2011) based on (Baron & Kenny, 1986) four steps method is presented in Table 6. An indirect effect between product line strategy and competitive advantage exists through environmental dynamism. The finding revealed that the indirect effect was .2367, which exhibited environmental dynamism was taking ahead 23.67 percent impact of product line strategy to competitive advantage as shown in Table 6. The Upper Limit Confidence Interval (ULCI) and Lower Limit Confidence Interval (LLCI) did not contain 0, which meant that the mediation was intense.

Table 5: Regression Analysis

Variables	Model 1	Model 2	Model 3
Product Line Strategy	.674**		
Environmental Dynamism		.695**	
Competitive Advantage			.653**
R^2	.454	.482	.427
F-value	13.321	14.088	12.594
P-value	.000	.000	.000

Note: n = 215, Correlation is significant at .001

This suggests that mediation effect existed, and the results were statistically significant. The relation of product line strategy and firm competitive advantage was still significant after the direct influence of environmental dynamism on competitive advantage was controlled. Product line strategy had significant influence on firm competitive advantage, even though it decreased from β= 0.642 to 0.2367. This showed a significant mediation. Therefore, H4 also was supported.

Table 6: Mediation Analysis

Hypothesis	Effect	P-value	LLCI	ULCI
PL, ED & CA				
Total Effect	.642	.000	.5473	.7374
Direct Effect	.4057	.000	.2816	.5298
Indirect Effect	.2367	.000	.1062	.3714

Discussions

The findings of the study gave emphasis to the importance of product line strategy and environmental dynamism on the competitive advantage of manufacturing firms in Nigeria. The study provided empirical support for the four hypotheses proposed in the conceptual framework. The overall implication for the manufacturers was that both product line strategy and environmental dynamism provided a strong foundation for enhancing their competitive advantage.

Based on the findings, product line strategy had a significant impact on the firm competitive advantage which provided sufficient support for the hypothesis that an effective product line strategy pursuing by manufacturing firms, would lead to a competitive advantage (Abubakar & Mohammad, 2019). This is consistent with earlier studies that confirm product line strategy as an important contributing factor of firm competitive advantage (Abubakar & Mohammad, 2019; Draganska & Jain, 2005; Heath et al, 2011). Furthermore, the study also found that the product line strategy has a significant impact on Environmental Dynamism agreeing with (Luo & Park 2001; Jiao et al, 2011; Mohammed, 2019) finding which argued Marketing Strategy are key components of Environmental Dynamism. Again, this research discovered that environmental dynamism had a significant positive impact on the competitive advantage that supports the hypothesis that environmental dynamism has a significant effect on competitive advantage. Previous studies support consideration of the environment in formulating and implementation of strategies as it influences organisational performance (Luo & Pack, 2001; Wang & Ang, 2004). Finally, the result of the mediation effect has shown that environmental dynamism plays a significant mediator role in the relationship between product line strategy and firm competitive advantage. It is accurate that ever since product line strategy has been a business level strategy that leads to attaining competitive advantage (Porter 1980; 1985). Therefore, with environmental dynamism, product line strategy will give a better competitive advantage to manufacturing firms. Hence, this finding supports the necessity of linking the right strategy based on the prevailing environmental conditions which could enhance competitive advantage (Wang & Ang, 2004). Product line strategy is critical for manufacturing firms to set a strategic direction to survive in a current hyper-competitive business environment. Manufacturing firms should pursue product line strategy as their business strategy, as it has previously been linked to firm competitive advantage. Findings of this study have also suggested that environmental dynamism should be incorporated as a tool to evaluate product line strategy efforts in the manufacturing industry. This in turn could be used to determine the effectiveness of the manufacturer's product line strategy in achieving competitive advantage.

Limitations and Future Research

The current research only concentrated on manufacturing firms classified as small and medium-sized enterprises. Future research should examine this issue on large scale manufacturing companies. This study only examined environmental dynamism as a mediator between product line strategy and competitive advantage nexus. Future research could focus on the impact of other factors like organisational culture, organizational learning and dynamic capability as potential mediators on the above-mentioned relationship.

Conclusion

This research examines the link of product line strategy and environmental dynamism on the competitive advantage of manufacturing firms in Nigeria. The study found out a strong linkage between product line strategy and environmental dynamism. As a result, manufacturing firms in Nigeria give relative emphasis on product line strategy as their core business activity even though not too frequent. Also, the research found out that environmental dynamism partially mediates the association of product line strategy and competitive advantage. It can be said that product line strategy would enhance the competitive advantage if the manufacturing firms put environmental dynamism into consideration when deciding on product line strategy.

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Moderating Role of Age in the Relationship between Job Satisfaction and Organizational Commitment among Employees of a Special Mission Organization in Rwanda

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Abstract: *The study assessed the role of age in the relationship between employees' job satisfaction and organizational commitment among employees of a special mission organization in Rwanda. A cross-sectional survey design (N = 119) was used. The Hayes' process macro v.3.5 (Model 1) was chosen over the ordinary least square techniques to run the moderation analysis. Job satisfaction was found to have a significant and positive effect on continuance and normative commitment, but a had significant negative effect on affective commitment. Age significantly positively affected overall organizational commitment, continuance and normative commitment. Age further significantly moderated the relationship between job satisfaction and overall organizational commitment, continuance and normative commitment but not affective commitment. The relationships were significant and positive for the younger employees but positive and insignificant for the older employees. The results implied that for the organization to enhance employees' commitment overall, the management should adopt measures that enhance job satisfaction among younger employees.*

Keywords: job satisfaction, organizational commitment, age, moderation, special mission organization

INTRODUCTION

Employees' organizational commitment has attracted research interest over decades. One possible explanation is the belief that committed employees are viewed as a source of organizational performance and efficiency which in turn lead to productivity enhancements (Gunlu *et al*., 2010), organizational effectiveness (Maiti *et al.,* 2020), and competitive advantages (Bashir and Gani, 2020). However, achieving an appropriate level of organizational commitment among employees requires organizations' managers to focus on its antecedents and ensure that they maintain these antecedents at a balanced level within the organization. The antecedents of organizational commitment have been identified in the literature, ranging from job attitudes to personal factors. Job satisfaction is an example of such job attitudes (Robbin and Judge, 2019). Past studies have shown a significant relationship between job satisfaction and organizational commitment, covering different subsectors. Examples include; Abebe and Markos (2016) and Yucel and Bektas (2012) in education; Oztuck *et al*. (2014) in the hotel industry in Turkey; Mehdi *et al*. (2013) in medical services; Lumley *et al*. (2011) in IT industry; Azeem (2010) in the service industry; etc.

Other studies such as Markovits *et al*. (2010) have compared the relationship between public and private organizations, while others like Chordiya *et al*. (2017) compared the same across national cultures, e.g., the United States and India. Yet other studies have investigated the same in special contexts. See for example, Sikorska-Simmons (2005) in assisted living employees and Rai (2012) in long-term care staff. Besides, past studies have also shown significant age differences in both job satisfaction, e.g., Matolo and Ngatuni (2018) and organizational commitment, e.g., Elkhdr and Aimer (2020) and Gasengayire and Ngatuni (2019), in which older employees reported significantly higher job satisfaction and organizational commitment than their younger counterparts. Thus, it is posited that employees' reaction in terms of job attitudes to their evaluation of various job aspects may differ across age groups. For example, older employees may respond differently when dissatisfied with their job, because of lack of job substitutes compared to the younger ones. This phenomenon raises a question on how differently older and younger employees may respond to the negative experiences at work. This question suggests that the relationship between job satisfaction and organizational commitment may be moderated by employees' age. There is a growing body of literature on the relationship between job satisfaction and organizational commitment, and between age and organizational commitment. However, the investigation into how age moderates the former relationship is lagging, especially in Africa but more specifically in special mission organizations. Understanding how different employee age groups respond with a commitment to job satisfaction or dissatisfaction is useful to managers because it would help them tailor their job satisfying measures to the group in which more positive outcome (commitment) is expected.

Therefore, this study investigated the moderating role of age in the job satisfaction - organizational commitment relationship, using a sample of employees from the National Commission for the Fight Against Genocide (CNLG) in Rwanda. CNLG is a Government organization constitutionally created in 2008 as a National Commission, an independent and permanent institution, with legal status, administrative and financial autonomy. Its mission is to prevent, fight against Genocide, and to address its consequences both inside and outside Rwanda. More details on this organization can be found on its website:https://www. cnlg.gov. rw/index.php?id=10. The main reason for choosing this organization is that it provides special services to citizens who were affected by the genocide and are dealing with its aftermath; hence it is a special mission organization. Its operations provide a unique environment in which high commitment is required. Besides, the age profile of the workforce which reflect the post-genocide age distribution makes it important to investigate whether such age differences contribute to the strength of the relationship between job satisfaction and organizational commitment. For example, Saridakis *et al*. (2018) point out that "employees who work for a charity that supports disadvantaged children may be committed to the organization in part because they identify themselves with the group that they seek to support" (p.2). Age has been shown to moderate the relationship between job satisfaction and other job attitudes, e.g., intent to leave the organization (Hellman, 1997), in the mediation of work engagement in the job crafting-occupational satisfaction relationship (Ren et al., 2020), and in the relationships between performance expectancy, effort expectancy, social influence, and behavioural intention (Hussein and Abdelhamid, 2021). The present study first determined the relationship between job satisfaction, age and organizational commitment. Secondly, it determined how this relationship was affected by employees' age. The present study adds empirical evidence on the link between the two work attitudes and the moderation effect of age, not only from a frontier market but also from an organizational with a special mission, extending the works of Rai (2012) and Sikorska-Simmons (2005).

Literature Review

Mowday, Steers, and Porter (1979) define organizational commitment as an attitude that exists between the individual and the organization representing a relative strength of the individual's psychological identification and involvement with the organization. Angle and Perry (1981) added the dimension of continuance commitment in which they asserted that an individual becomes committed to the organization because of extraneous interests (pensions, family concerns, etc.) and not because of his/her general positive feelings about it. These extraneous interests are what Becker (1960) referred to as "side-bets" or simply the investment one makes to an organization, the value of which grows over time, and would be lost if the employee quits. Subsequently, Meyer and Allen (1991) viewed organizational commitment as a three-dimensional concept - affective commitment (the feeling of being affectionately and emotionally attached to the organization); normative commitment (remaining in the organization as an obligation); and continuance commitment (remaining in the organization for the fear of having to incur the perceived costs associated with quitting). Job satisfaction is defined by Locke (1969) as "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating one's job values" and job dissatisfaction as the unpleasurable emotional state resulting from the appraisal of one's job as frustrating or blocking the attainment of one's job values" (p.317).

It is an employees' self-assessment about the extent to which actual outcomes of various aspects of the job match their expectations. The degree of any mismatch triggers various positive and negative behavioural responses by employees, such as commitment, turnover intentions and absenteeism (Meyer *et al*., 2002). These two concepts are among the many job attitudes (Robbin and Judge, 2019), the relationship between which can be explained by the Social Exchange Theory (SET) (Blau, 1964; Homans, 1958). SET posits that a set of interactions exists between two parties that generate obligations and a high-quality relationship, in which the action of one part leads to a response by the other, leading to the development of trust, loyalty and mutual commitment by this other person (Emerson, 1976). Thus, in an organizational context, the theory suggests that employers who take a good care of their employees are reciprocated by beneficial consequences in return (Cropanzano *et al*., 2001). A related theory – the Psychological Contract Theory (PCT) (Argyris, 1960) - also advocates that perceptions exist among employees regarding employment agreement between them and their employer beyond what is formally agreed upon. Employees develop beliefs about what they are entitled to receive or should receive because they perceive that their employer conveyed promises to provide those things (Taylor *et al*., 2006). From the two theories, it is suggested that when the employees' actual job outcomes exceed their expectations, they become more satisfied with it, which increases the likelihood that they will reciprocate with a higher commitment to the organization and its mission. A positive relationship is therefore hypothesized between job satisfaction and organizational commitment. The hypothesized relationship has been debated in the literature endlessly, regarding whether the two job attitudes are the same or different, the direction of its causality, and the universality of the empirical evidence to support each. A rich discussion is found in Gunlu *et al*. (2010, pp. 697-8). On the causality, Ogulana *et al*. (2016) showed support to both directions in their canonical correlation study but demonstrated stronger support for the job satisfaction causing organizational commitment than for the opposite. However, even within job satisfaction causing organizational commitment studies' group, the empirical evidence is far from being conclusive, especially when the different dimensions of organizational commitment are examined. For example, Gunlu *et al*. (2010) using a sample of managers of large-scale hotels in Turkey reported a significant positive effect of job satisfaction on both normative and affective commitment. Miarkolai and Miarkolai (2014), based on a sample of staff from Red Crescent Society's textile industry in the Islamic Republic of Iran, also reported a significant positive effect of job satisfaction on overall organizational commitment as well as on each of its three dimensions. Filiana (2016) reported the strongest correlation between job satisfaction of generation Y employees in Malaysia and affective commitment followed by normative and continuance commitment. Kaplan *et al*. (2012) reported a significant impact of job satisfaction on affective and normative but not continuance commitment in a sample of hospital employees. Yet another study by Bennett (2019) used a sample of fast-food restaurant employees in the Caribbean and reported a significant positive relationship between job satisfaction and organizational commitment. From special mission/service organizations, Sikorska-Simmons (2005) reported a significant positive effect in a sample of assisted living staff while Rai (2012) reported similar results in a sample of long-term care facility staff even after controlling for the effects of demographic variables (i.e., age, gender, marital status, education, tenure, workload and ethnicity). Despite these variations, the present study, therefore, hypothesizes that:

H_1: Job satisfaction will positively and significantly affect (a) organizational commitment and its dimensions of (b) affective, (c) continuance, and (d) normative commitment.

Different arguments suggest age to influence organizational commitment. For example, older employees may commit more to the organization because; they (i) lack alternative employment as some employers may avoid hiring them for fear of their diminishing ability to contribute to the organization (Kitchen, 1989, cited in Al-Kahtani, 2012); (ii) fear to lose the side bets (Becker, 1960), e.g., pension-related benefits, seniority, connections, work networks, ease of doing work, skills and status development, the value of which grows with age (Ritzer and Trice, 1969); and they (iii) fear to incur the cost of adjusting to a new job, or of moving and settling their households. It is also argued that the emotional attachment of employees to the organization grows with age (Riordan, Griffith and Weatherly, 2003). However, research on this link, despite covering many countries and sub-sectors, report mixed and inconclusive evidence. For example, while most of them reported older employees to commit more to the organizations than their younger counterparts (Allen and Meyer, 1993; Finegold *et al*., 2002; Gasengayire and Ngatuni, 2019; Meyer *et al*., 2002; Salami, 2008), the opposite is reported in Pourghaz *et al*., (2011). Moreover, a U-shaped relationship has also been reported in Cohen (1993). This study took the positive effect stand and hypothesized that:

H_2: Age will positively and significantly affect (a) organizational commitment and its dimensions of (b) affective, (c) continuance, and (d) normative commitment.

Most evidence suggests that employees' job satisfaction and age have a significant effect on their level of organizational commitment despite the unresolved debate as to whether the relationship is linear or u-shaped (Cohen, 1993). However, the life-span psychology theory suggests that older employees are more focused on positive experiences, have better emotional regulation, and have more realistic expectations than younger workers (Carstensen *et al*., 1999). Lang and Carstensen (2002) add that as employees grow older, their future time perspectives decrease while their feeling that time is running out become more salient. Older employees consider themselves as having fewer job opportunities outside the organization and therefore are more concerned with how the organization treats them than younger employees (Hedge *et al*., 2006). The theory suggests, therefore, that the way employees will reciprocate with commitment as a consequence of their feeling of satisfaction with the job will be stronger or weaker depending on, their age. That is, the strength of the relationship between job satisfaction and organizational commitment is likely to differ between younger and older employees. Besides, the Becker's (1960) side bets theory posits that employees accumulate side bets in form of pension-related benefits, seniority, connections, work networks, ease of doing work, skills and status development, the value of which grows with age. Older employees may, therefore, commit to the organization not because they feel satisfied with the job and its aspects but because of the fear of losing the value of these side bets should they decide to quit. Like the life-span theory, the side bets theory suggests that the strength of the relationship between job satisfaction may differ between younger and older employees. Research also suggests that employees who have stayed with the organization for a long time, or are older, are more likely to become emotionally involved with the organization (Riordan *et al*., 2003). This position suggests that older employees may commit to the organization, not necessarily because of high job satisfaction, and therefore, the strength of the relationship between the two job attitudes may differ with age. Age has been shown to moderate in the relationship between job satisfaction and organizational commitment elsewhere, although such studies are scarce. An example of such studies is Yucel and Bektas (2012) who reported teachers' age differences in Turkey to moderate the non-linear relationship between the two job attitudes. The present study, therefore, hypothesizes that:

H_3: Age will moderate significantly the relationship between job satisfaction and (a) organizational commitment and its dimensions of (b) affective, (c) continuance, and (d) normative commitment, such that the relationship is weaker for older employees compares to younger ones.

The conceptual framework is presented in Figure 1.

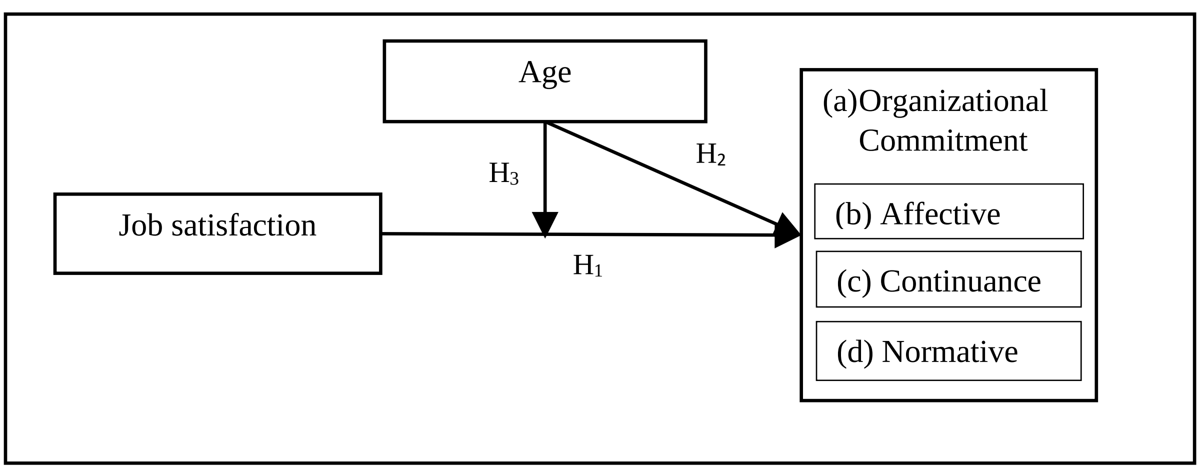

Figure 2: Conceptual Framework

Methodology

Participants

The study adopted a quantitative cross-sectional survey design and targeted all of CNLG's 135 employees with a questionnaire. A total of 119 usable questionnaires were returned equal to 88.1% response rate. This sample was higher than the 74 which would have been recommended for three independent variables in a multiple regression analysis (Tabachnick and Fidell, 2019). About two-thirds (66.1 percent) of the respondents were 35 years old or younger, consistent with the post-genocide social-political situation in the country. The remaining 33.9 percent were aged above 35 years.

Measures

Job satisfaction was measured using the widely validated, accepted, and used scale - the short form of the Minnesota Satisfaction Questionnaire (MSQ) of Weiss *et al.* (1967) with 20-items. The MSQ tool is now available for free under the Creative Commons Attribution – Non-Commercial 4.0 International License and can be used for research without prior consent subject to proper acknowledgement to the Vocational Psychology Research (VPR) of the University of Minnesota. Participants rated their level of agreement with the items on a five-point Likert-type scale ranging from 1 = totally dissatisfied to 5 = totally satisfied. The scale has excellent internal consistency ($\alpha = .91$) (George and Mallery, 2020). Index (mean) scores were computed across all 20 items for each participant. Organizational commitment was measured by the organizational commitment questionnaire (OCQ) originally developed by Mowday *et al.* (1979) with 15 items. The choice of this scale was based on the ease of access. Respondents rated their agreement with each item on a 7-point Likert-type scale ranging from 1 = strongly disagree to 7 = strongly agree. Dropping one item on the continuance commitment scale in the scale test for reliability analysis, both overall and dimensional scales had acceptable internal consistency (George and Mallery, 2020), i.e., $\alpha = .721$, .780, .777, and .797 for overall, affective, continuance and normative commitment, respectively (Table 1). Index (mean) scores were computed for each scale and subscale. Age was measured either as a continuous or a categorical variable. For categorical measure, however, the cutoff points have been debated but unresolved regarding who is and who is not, an older employee (Yucel and Bektas, 2012). While other studies e.g. Ng and Feldman (2008) used 40 years as a cutoff point, this study adopted the African Union's definition of Youth ranging from 15 to 35 years of age (AU, 2006). Thus, the age of the respondents was captured dichotomously with 1 if > 35 years, 0 otherwise to represent older and younger employees respectively.

Analysis

Descriptive statistics were used to describe both the sample and the study's variables. Before running the hypotheses testing model the underlying assumptions were assessed. The no-multicollinearity problems in the independent variables were checked by both Pearson correlation and variance inflation factor (VIF), linearity by Pearson correlation between organizational commitment and the two predictors, while outliers were checked by the Mahalanobis Distance, Cook's Distance, and Leverage values. Normality was checked by visually inspecting the histogram of regression standardized residuals (Normal P-P plot), and finally the homoscedasticity assumption by visually inspecting the scatter plots. Four moderation models were run based on the following standard equation depending on the type of commitment tested.

$$Y_i = b_0 + b_1 JS_i + b_2 Age_i + b_3 JS_i \times Age_i + \varepsilon_i \tag{1}$$

where Y was the dependent variable taking the values of organizational commitment (OC) (Model 1), affective commitment (AC) (Model 2); continuance commitment (CC) (Model 3), and normative commitment (NC) (Model 4). b_1 to b_3 were the coefficients of interest which were used to determine whether an independent variable had a significant effect of the organizational commitment or its dimensions at statistical significance at .05 level holding the other variables constant. Moderation occurs when the relationship between the predictor variable and the outcome variable changes as a function of a third variable (the moderator), i.e. the interaction variable coefficient (b_3 in Equation 1) is statistically significant (Field, 2018). The Process macro v.3.5 (Hayes, 2018) was used to run the models. The tool was preferred over the normal regression tools because (i) it mean-centres the predictor variable; (ii) it computes the interaction term automatically; and (iii) it performs simple slope analysis necessary to present the results based on categories of the moderator (Field, 2018).

Results

Descriptive statistics

The results, see Table 1, indicate that all mean scores were above 4.9 with standard deviation varying from .47 to .95. Based on the cutoff points adapted from Albdour and Altarawneh (2014), the participants' commitment to the organization were rated as "high" irrespective of how organizational commitment was measured, with affective commitment recording the highest commitment score. The correlations of normative commitment with organizational commitment and continuance commitment were rated as "high" but not as high as their correlations with affective commitment were much higher. These results were consistent with the suggestion by Cohen (2014). Mean overall satisfaction score was 3.24 (SD = .38), indicating moderate job satisfaction among the employees. Older employees (> 35 years) constituted about 33 percent of the sample (n = 118).

Table 1: Descriptive Statistics, Intercorrelations and Reliability Statistics

		Mean	SD	1	2	3	4	5	6
1	OC	5.72	0.47	**0.721**					
2	AC	6.07	0.55	.104	**0.780**				
3	CC	5.59	0.95	.775**	-.373**	**0.777**			
4	NC	5.47	0.78	.862**	-.172	.602**	**0.797**		
5	OJS	3.24	0.38	.143	-.362**	.274**	.253**	**0.910**	
6	Age	–	–	.395**	.148	.241**	.332**	-.138	1.00

*. $\rho < 0.05$ level (2-tailed); **. $\rho < 0.01$ level (2-tailed).

OC = Overall organizational commitment, AC = Affective commitment, CC = Continuance commitment, NC Normative commitment, OJS = Overall job satisfaction

Multiple Regression Results

The Pearson correlation coefficient between the predictor variables (age and job satisfaction) was *r = .138, p = .143, n = 115)* (Table 1) and the regression's variance inflation factor (VIF) was 1.02. Both results were respectively lower than the recommended levels of ($r > |.7|$) (Pallant, 2020), and VIF < 5.0 (Menard, 2002) above which multicollinearity would have been a concern. About 38 percent of the coefficient of correlations between the predictor variables and the dependent variables were $r > |.3|$, the highest having $r = |.395|$, suggesting that the linearity assumption was not violated (Pallant, 2020). Using a combination of Mahalanobis distance, Cook's distance and Leverage values, none of the cases had at least two of the values higher than the respective cutoff points for an undue influence of outlier values to be suspected. The histogram of regression standardized residuals (Normal P-P plot), portrayed a roughly normal distribution curve. Homoscedasticity was suspected from the scatter plot. Subsequently, heteroscedasticity consistent standard errors (HC3) were requested for as part of the Process macro v.3.5 (Hayes, 2018), and formed the basis for reporting the estimates (Table 2).

Results as show inTable 2 indicate that all models 1- 4 fitted the data well. See, organizational commitment in Model 1 with $F_{(3,110)} = 11.29$, $p < .001$, $R^2 = .21$; affective commitment in Model 2 with $F_{(3,111)} = 4.49$, $p = .005$, $R^2 = .145$, continuance commitment in Model 3 with $F_{(3,110)} = 6.36$, $p < .001$, $R^2 = .17$, and normative commitment in Model 4 with $F_{(3,111)} = 9.26$, $p < .001$, $R^2 = .213$. The three predictor variables – age, job satisfaction and their interaction were responsible for between 14.5 and 21.3 percent of the variance in the employees' organizational commitment depending on its type. Employees' age positively and significantly affected the overall organizational commitment (b = .39, $t_{(110)} = 5.76$, $p < .001$), continuance commitment (b = .50, $t_{(110)} = 3.8$, $p < .001$), and normative commitment (b = .57, $t_{(111)} = 5.22$, $p < .001$), but not affective commitment (b = .13, $t_{(111)} = 1.51$, p = .13). Job satisfaction insignificantly positively affected the overall commitment (b =.15, $t_{(110)} = 1.72$, p = .09), but significantly negatively affected the affective commitment (b = -.54, $t_{(111)} = -3.6$, $p < .001$), and significantly positively affected both the continuance commitment (b = .60, $t_{(110)} = 4.28$, p = < .001) and normative commitment (b = .50, $t_{(111)} = 3.71$, p <.001).

Table 2: Regression Analysis Results

Variable	**OC(1)**		**AC(2)**		**CC(3)**		**NC(4)**	
Constant	5.71	***	6.06	***	5.58	***	5.46	***
Age	0.39	***	0.13	Ns	0.50	***	0.57	***
Job satisfaction	0.15	ns	-0.54	***	0.60	***	0.50	***
Job satisfaction x Age	-0.49	**	-0.13	Ns	-0.86	***	-0.58	*
R^2	21.26		14.49		16.54		20.57	
ΔR^2	1.65	**	0.08	Ns	1.27	***	0.83	*
F	11.29	***	4.49	**	6.36	***	9.26	***

.ρ< .05; **. ρ < .01; *. ρ < .001*

Notes: coefficient are based on heteroskedasticity-consistent standard errors (HC3)

OC = Overall organizational commitment; AC = Affective commitment; CC = Continuance commitment; NC = Normative commitment.

The interaction or job satisfaction x age was significantly negatively related to the overall organizational commitment ($b = -.49$, $t_{(110)} = -2.94$, $p = .004$), continuance commitment ($b = -.86$, $t_{(110)} = -3.86$, $p < .001$) and normative commitment ($b = -.58$, $t_{(111)} = -2.29$, $p = .02$), but not the affective commitment ($b = -.13$, $t_{(111)} = -.42$, $p = .68$). For the younger employees (Figure 2a), an increase in job satisfaction significantly increased their overall organizational commitment ($b = .31$, $t_{(110)} = 2.72$, $p = .007$), but not for the older group ($b = -.18$, $t_{(110)} = -1.47$, $p = .15$). This implies that for older employees, being satisfied did not matter in terms of their level of commitment to the organization. For the younger group (Figure 2b) an increase in job satisfaction decreased their level of affective commitment ($b = -.50$, $t_{(111)} = -2.67$, $p = .009$) and so was that of older employees group ($b = -.63$, $t_{(111)} = -2.5$, $p = .014$). Thus, it did not matter which age group the employee belonged to; their level of affective commitment was negatively affected by an increase in their level of satisfaction with the job. For younger employees, seeFigure 2c, job satisfaction significantly positively affected continuance commitment ($b = .88$, $t_{(110)} = 4.34$, $p < .001$) but it did not in the older group ($b = .02$, $t_{(110)} = .22$, $p = .82$). Similarly, for the younger group (Figure 2d), an increase in job satisfaction positively and significantly affected normative commitment ($b = .69$, $t_{(111)} = 3.81$, $p < .001$), but not for the older group ($b = .11$, $t_{(111)} = .63$, $p = .53$). In summary, age significantly moderated the relationship of job satisfaction with overall organizational commitment, continuance and normative commitment but not with affective commitment.

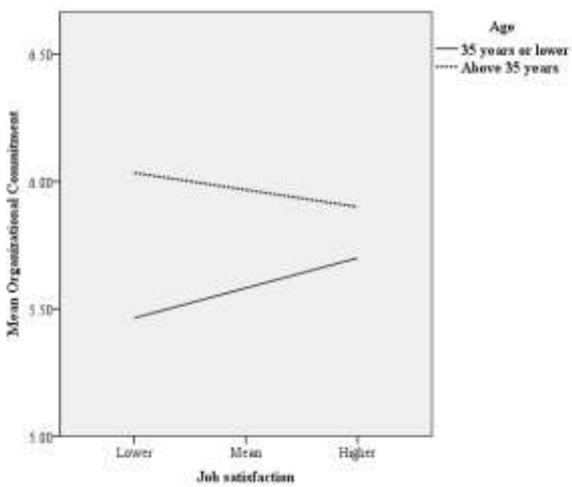

Fig. 2(a) Overall organizational commitment

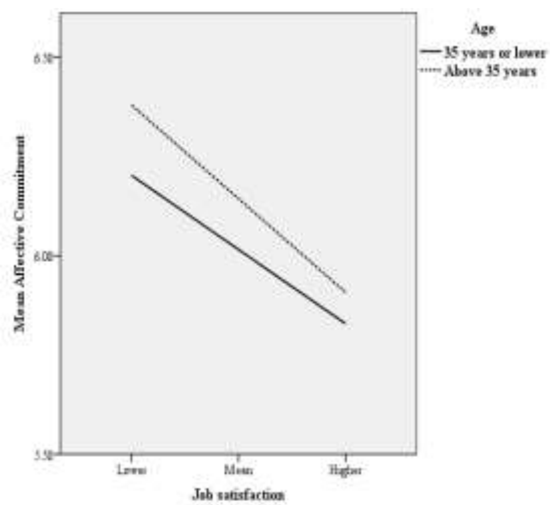

Fig. 2(b) Affective commitment

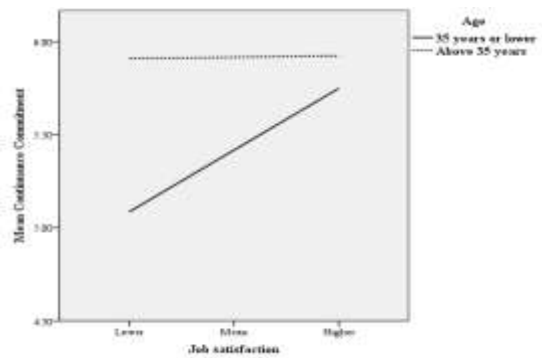

Fig. 2(c) Continuance commitment

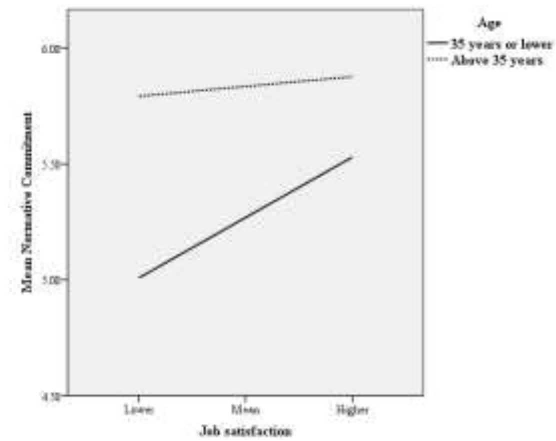

Fig. 2(d) Normative commitment

Figure 3: Visual Portrayal of the Interaction Effect of Age in the Relationship Between Job Satisfaction and Organizational Commitment

Discussion

This study investigated, firstly, the effects of job satisfaction and age on organizational commitment and its three dimensions, and secondly, whether age moderated such effects. It used a special mission organization (CLNG) in Rwanda as its context. Job satisfaction significantly positively affected the continuance (H_{1c}) and normative commitment (H_{1d}), but negatively the affective commitment (H_{1b}). Job satisfaction had an insignificant positive effect on the overall commitment (H_{1a}). Age significantly affected the overall (H_{2a}), continuance (H_{1c}), and normative (H_{1d}) commitments positively but not the affective commitment (H_{1b}). Age was found to moderate significantly the relationship between job satisfaction and the overall organizational commitment (H_{3a}), continuance commitment (H_{3c}) and normative commitment (H_{3d}) but not the affective commitment (H_{3b}). That is, job satisfaction significantly predicted the organizational commitment overall, continuance and normative commitment for younger employees. No such evidence was found for affective commitment. Job satisfaction was significantly negatively related to affective commitment irrespective of employees' age group.

The results are similar to the those of Yucel and Bektas (2012) who also found age to be a significant moderator in the relationship of job satisfaction of a sample of Turkish teachers with their organizational commitment (continuance). However, the Yucel and Bektas' results differ in terms of the nature of the interaction. Their relationship between teachers' job satisfaction and their level of organizational commitment was U-shape for younger but inverted U-shaped for the older teachers. The results of the present study show that the relationship was linear. The results also shed some light on our understanding of the side bets theory of Becker (1960) which views continuance commitment as a result of employees' evaluation of these side bets, which they would lose should they decide to quit. The value of these side bets increases with employee's age. Based on the social exchange theory (Homan 1958), employees reciprocate with commitment the more they feel satisfied with their job. From the results of the present study, it would appear that this reciprocation is a function of age and that it is for the younger than for the older employees. These results taken together with those of Yucel and Bektas (2012) suggest that further research is needed in different contexts to better understand the nature of the relationship between job satisfaction and organizational commitment when employees' age is considered, especially in the context of special mission organizations.

Conclusion, Implications and Recommendations

The present study concludes that while job satisfaction predicts the components of organizational commitment, age moderates these predictions significantly for overall, continuance and normative commitment. The effect is positive and significant for the younger rather than for the older employees. One important implication is that for CNLG managers to achieve greater employees' organizational commitment, they should focus more on the job satisfiers of the younger employees. The findings, however, should be interpreted with care because of several limitations. First, the data was collected from the respondents at a single point in time. The cross-sectional approach used limits the opportunity to explore how organizational commitment and job satisfaction change over time. Longitudinal study design may shade more light to this end. This study focused on age as the only moderator. There could be other demographic and non-demographic variables which also moderate the job satisfaction relationship with organizational commitment. For example, according to Becker's (1960) side bets theory, tenure is also an indicator of side bets which may also affect mostly the employees' level of continuance commitment. Other demographic characteristics may also influence the relationship. Controlling for their effect in the estimation of the coefficient may also add value. Finally, the study involved a single organization with a special mission. Future research needs to consider a bigger sample from diverse organizations to achieve a better understanding of the relationship and enhance the generalizability of the findings.

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Finance-Growth Nexus in Eastern and Southern African Countries: Insights from a Panel ARDL Analysis

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Abstract: *This study analysed the finance-growth nexus for countries in the East African Community (EAC) and the Southern Africa Development Community (SADC). This was done an attempt to identify countries where Financial Sector Development (FSD) has the largest/least growth effect and the regional bloc moderation in such effect based on panel Error correction ARDL model. The aggregate data were obtained from the World Development Indicators (WDI) for a total of 14 countries, five (5) of which being in the EAC and the rest being in the SADC. The observations suggested that the regional bloc moderation effect transforms an otherwise insignificant effect of FSD on growth into a positive one specifically for broad money growth among the EAC member countries. This is a signal that a monetary union for EAC member countries could spur an overall welfare gain. Growth-finance nexus however, exhibited short and long run trade-offs in countries within the SADC. In the short run there have been significant GDP growth responses as a result of FSD but such effect turns out to be detrimental in the long run. As such difficult choices had to be made between addressing short run GDP volatility and achieving higher GDP growth in the SADC.*

Key words: Monetary policy; economic growth, broad money, domestic credit, monetary expansion, regional integration

INTRODUCTION

Despite Schumpeter's (Schumpeter, 1911) emphasis on the positive role of Financial Sector Development (FSD) on economic growth, empirical evidences on such effect across the globe have been contradictory (Levine, 1997; Levine, 2003). Mathenge & Nikolaidou, (2018) suggests that the finance-growth nexus is at best weak unless the growth is at the intermediate level, where financial sectors are relatively well developed. Within the Geographic regions of Africa, there are empirical evidence indicating that FSD is detrimental to economic growth and stability (Mathenge & Nikolaidou, 2018; Zerbo, 2015; Mahawiya, 2015). Similarly, Saxegaard (2006), Zerbo, (2015) and Nketcha Nana & Samson (2014) argue that in some Sub-Saharan African (SSA) countries, Financial Sector Reform (FSR) policies that encourage credit rationing causes many banks to hold a large amounts of liquid assets which this in turn encourages overinvestment (Menyah, Nazlioglu, & Wolde-Rufael, 2014; Gries, Kraft, & Meierrieks, 2009). Such FSR may be considered detrimental to economic growth. From economic integration theory, specialization and income differences are at the centre of the potential gains or losses from economic integration i.e., per capita growth (Marinov, 2015). Contrary to low-income countries integrations, the higher supply of liquidity through FSD can reduce investment and employment uncertainties thus attracting more capital into productive sectors leading to higher per capital growth in integrated developed countries. This is evident in cross-country studies across SSA where FSD have been observed to have insignificant effect on growth specifically in the Southern Africa Development Community (SADC) Region (Bara, Mugano, & Pierre, 2016; Mahawiya, 2015). A certain minimum per capital growth is therefore needed across a regional integration for FSD to have a positive growth effect.

The economic integration further posits for trade diversion if an integration curtails a country from a low-cost supplier outside the integration in favour of a high-cost supplier within the integration. This is common when the regional bloc specifies trading partners. In this case FSD might be inflationary as the opportunity cost of real resources tend to be relatively higher as resource owners are better-off retaining whatever they have than trading. These effect reversal and the countries where it is likely to happen is the subject matter of this study. The classical economic integration theory underly the benefit-cost principle under competitive markets where bloc into which competitive markets resides will be efficient as resources are efficiently moved from less productive areas into a more productive areas without the legal hurdles associated with geographic borders. For integration to create trade, information, transport and multiple producers must be accompanied with homogeneity of goods being traded. In practice however, this ideal situation is improbable but second-best solutions are often considered.

The gap that this study bridges relate to the moderating effect of regional integration in the finance-growth nexus. It is argued that effect reversal is likely in countries where FSD attract GDP growth when that country is in an integration (bloc of countries) that does not create trade. The main objective of the study was therefore, to analyse the finance-growth nexus of countries in the EAC and SADC bloc of countries in order to identify specific countries where FSD has the largest/least growth effect and whether such effect was moderated by the bloc effect. Policy-wise many countries bloc themselves in and undertake FSD policies that are incompatible with the nature of their bloc. This studywas therefore meant to address this challenge. A part from the above policy contribution, this study was also meant to contribute to the theoretical debate over the Schumpeterian hypothesis. Notably and for many African countries FSD has limited effect on growth. This is one of the areas that was not touched is the effect of regional blocs. We hypothesised here that the limited effect of FSD on GDP growth in EAC and SADC countries was related to the fact thay these countries bloc themselves in trade diverting integration and thus were better-off openning up their borders globally i.e, udertaking further trade openness.

Theoretical and Empirical Literature

Insights from Economic Integration Theory

The limited effect of finance on growth could partly be attributed to geographic factors (Acemoglu, Johnson, & Robinson, 2001). The link between geographic regions and economic growth can be traced in the theory of economic integration. The economic integration theory is benchmarked upon by the theory of customs union which was first expounded by Viner (1950) and later extended by Lipsey (1957). Viner's (1950) work suggests that customs union could be both trade creators and destructors. Trade is created when members state abandons high-cost suppliers in favour of low-cost suppliers within the union. According to Viner's (1950), trade is diverted when member countries upon integration are forced to abandon their low-cost non-member suppliers in favour of high-cost member States. In this theoretical construct, the likelihood of trade creation through customs union is rather low and what is important is a world-wide elimination of trade barriers. Balassa (1967) refers to economic integration as "the abolition of discrimination within an area" while Kahnert, Stoutjesdijk, & Thomopoulos, (1969) suggest that an economic integration is "the process of removing progressively those discriminations which occur at national borders". In a neo-classical microeconomics and Keynesian/monetarist macroeconomic tradition, integrations may be conceived as (i) a tariff arrangement, specifically Free Trade Area (FTA) or customs union (ii) the complete or partial liberation of factor movements (iii) the cooperation in the field of economic policy, ranging from loose forms of coordination to complete unification or any combinations of i, ii and iii (Haak, 1983).

The welfare extension of Viner's (1950) analysis was first carried out by Lipsey (1957) who suggested that production-based analysis of custom union cannot accommodate overall welfare changes in economic integrations. To do so one requires an analysis of the effect of price changes on the consumption of tradable. For that matter, the analysis must consider both "inter-country substitution" where one country is substituted by another as Viner's (1950) original trade creation and diversion analysis and "inter-commodity substitution" where one commodity is substituted by another as a result of the relative price changes. As such trade diversion's welfare effect does not automatically emanate from customs union rather intra-trade relationship that ensue thereafter. Johnson (1965) suggest that trade-diversion may actually be welfare-increasing if the welfare losses resulting from the diversion to a high-cost supplier country is more than compensated by the welfare gains resulting from the reduced prices to consumers due to the elimination of tariff on imports. Although the trade effect of integration on growth is a well-researched topic (Calderón & Castro, 2019; Menyah, Nazlioglu, & Wolde-Rufael, 2014; Polat, Shahbaz, Rehman, & Satti, 2013; Zerbo, 2015), there are still debates around the area. Linder (1961) observes that economic integrations have a greater potential to contribute to growth if it consists of countries with similar demand preferences or similar income per capita. This is in sharp contrast to Heckscher-Ohlin (H-O) model which propound that, differences in factor proportions or comparative advantage induces countries to specialize on goods they can produce cheaply and thus benefit the most. These two seemingly opposing views provide an important juncture for the examination of regional bloc effect in the finance-growth linkage. That is while on one hand countries with significant differences in factor endowment and level of development are likely to significantly benefit from economic integration, on the other, theoretical effects of FSD on economic growth lies on a well-developed and functional financial system which enhances the efficiency of financial intermediation by reducing transaction and information costs and minimizes the associated risks (Beck, Demirgüç-Kunt, & Levine, 2009). The effects of FSD on growth are likely to be higher only if the regional bloc is based on similar aggregate demand conditions alongside Linder (1961) rather than factor endowment as propounded in the Heckscher-Ohlin (H-O) model. As such the causal-effect of FSD onto growth in economically integrated countries with homogenous demand preferences may be reversed in response to expanded FSD in one of the countries. This is because expanded FSD in some countries such as; Croatia, Australia, Ireland, Japan, Korea, New Zealand, Canada, and the United States, have proved to have a direct consequence on the real economy of the other countries (i.e. European Union and the rest of the world) in response to the H-O factor equalization effect(Bilas & Bošnjak, 2015; Brecher & Choudhri, 1993; Clifton & Marxsen, 1984) but other countries such as Israel, Kenya, and the United Kingdom do not follow the H-O hypothesis (Clifton & Marxsen, 1984). It is the perverse of this research to expound the geographic dimension i.e. regional bloc of the finance-growth link with the aim of understanding the underlying mechanics of the finance-growth puzzle.

Empirics on Integration and Economic Growth

The preceding discussion provides different perspectives through which regional economic integration may explain disparities in the effect of FSD on long-run GDP growth. Hanson (1996) observes that deeper economic integration increases market access pulls for Mexican firms. As a result, most local production has relocated towards the bordering regions with the US. The US-Mexican example highlights that economic proximity between a developed and a developing area may influence both the geographical distribution of economic activities through market access considerations as well as the location of different stages of production across countries and regions (Ascani, Crescenzi, & Iammarino, 2012). On the empirical side of the Finance-growth relationship in Africa, Adusei, (2013) has noted that FSD induce economic growth in both SADC and ECOWAS in the long run though the impact on SADC was greater than in ECOWAS potentially reflecting a stronger cherry-picking behaviour in the ECOWAS than the SADC (Mahawiya, 2015). That is how most of the FSD effect in the ECOWAS ended-up being inflationary rather than contributing towards real GDP growth. Within the SADC Region, Dzikiti (2017) observes both unidirectional and bidirectional finance-growth causal relationship in Zimbabwe and concludes that there is a unidirectional short-run causality running from economic growth to FSD. For certain FSD indicators such as banking credit to private sector (BCP) and value traded (VTR) Dzikiti (2017) noted a neutral causality between GDP and FSD. Similar support to the DFH in the SADC member countries are provided by Muyambiri & Chabaefe, (2017) for Botswana and Matadeen, (2015) for Madagascar. The majority of studies in the SADC regional bloc however, favour the

Supply Leading Hypothesis (SLH). These include Tyavambiza and Nyangara (2015) and Dzikiti (2017) for Zimbabwe, Sibindi (2014) for Lesotho, Muyambiri & Chabaefe, (2017) in South Africa, and Matadeen (2015) in Madagascar. There are also a limited number of studies supporting the neutrality and bidirectional causality in the SADC. Dzikiti (2017) suggest that for the majority of FSD proxies in South Africa, a bi-directional causality exists between FSD and economic growth. Furthermore, Chirwa and Odhiambo (2016) observed that the speed of adjustment towards the long-run equilibrium path was around -0.30% per annum for Malawi, -0.22% for Zambia. Similarly, in South Africa, Nyasha and Odhiambo(2015) established a long-run conditional convergence at a rate of 73% per annum. Dingela & Khobai (2017), observe that adjustment towards long-run equilibrium is around 24% per annum. Hashikutuva (2016) suggests that the South African economy converges towards long-run equilibrium at a rate of 3% each quarter but Chirwa and Odhiambo (2016) posits a different figure i.e., 7%. Polat, et al. (2013) notes that it will take almost 6 years to reach the long run equilibrium path of growth function in South Africa. The Zimbabwean economic disequilibrium is corrected by changes in FSD at the speed of 4.5% (Dzikiti, 2017). Evidence of the finance-growth causal direction in EAC has been well investigated in Kenya whereby the 'Demand-following' Hypothesis (DFH) has been strongly supported (Arayssi & Fakih, 2017; Waiyaki, 2016).

In Tanzania, studies conducted by Fille, (2013) and Hyera & Mutasa, (2016) have noted evidence of DFH whereby causality runs from Real GDP per capita growth to Domestic Credit to the Private Sector (DCPS) but the relationship reverses in the long run. There are also contra observations when the interaction between FSD and FDI are included in the analysis whereby Arayssi & Fakih, (2017) note evidence of the SLH. The SLH is also supported when DCPS is used as an indicator of FSD whereby the DCPS ratio granger causes economic growth in Kenya (Qin & Ndiege, 2013). This is also evident in Hyera & Mutasa, (2016) and Fille, (2013) who noted that FSD granger causes economic growth in the short-run. Arayssi & Fakih, (2017) provide evidence of the existence of bidirectional Granger causality between FSD and economic growth in Kenya. Similar observations are also noted by Urgaia, (2016) and Waiyaki, (2016). Qin & Ndiege, (2013) uses financial deepening as an indicator of FSD and observes a bi-directional causality between economic growth and FSD in Tanzania. This is also the case when broad money (M3) as a percentage of GDP and Bank deposits as a percentage of GDP were employed as indicators of FSD (Fille, 2013). Akinboade, (2000) suggest that FSD and economic growth do not cause one another i.e., causal independent in Tanzania. Studies on adjustment towards long run equilibrium in EAC countries are however still scanty and are dominated by Kenya. Bakang, (2015) observes that between 32 percent and 50 percent of the previous quarter`s deviation from equilibrium is corrected within the next quarter in Kenya. Waiyaki, (2016) notes that about 10 percent of previous period shock is restored to equilibrium in the next period. Based on the preceding discussion, the fastest growing economies seem to be within the SADC given the limited literature on EAC. Although observations in both the SADC and EAC regional-wise, suggest for a limited homogeneity in terms of finance-growth links, there is a clear divergence in terms of adjustments towards long run equilibrium path.

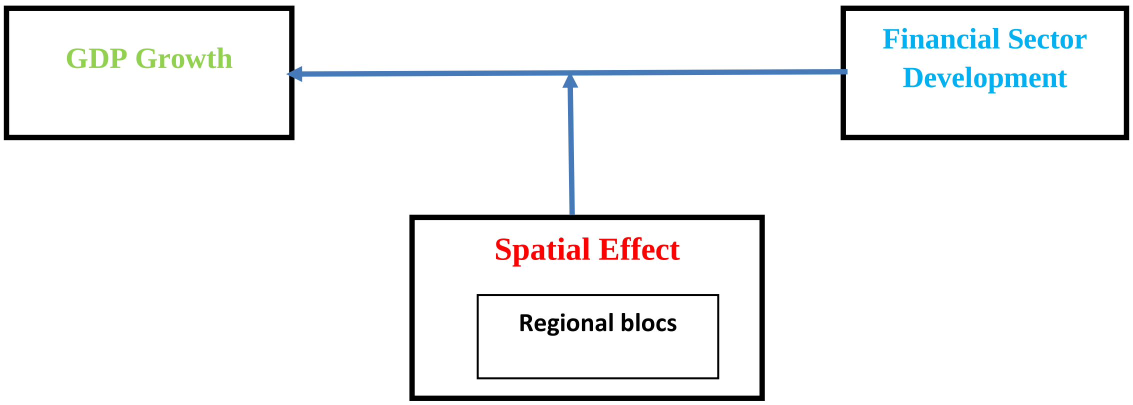


Figure 1: Moderating Effect of Regional Blocs in the Finance-growth exus

The moderating effect of economic integrations in the finance-growth nexus is summarized in Figure 1. It can be observed that FSD is associated with GDP growth through geographically defined regional bloc of countries in this case EAC and SADC. The regional bloc effect suggests that expanded FSD in some member countries can spur GDP growth in other countries given that such a bloc of countries have similar demand preferences that foster growth of the real economy (Linder, 1961). In response to expanded FSD in one of the member countries, all integrated countries gain not only from lower prices following improved productivity but also from improved resource allocation in response to intra-industry specialisation (Ezzahid & Elouaourti,, 2017; Gwahura, 2013; Sissoko, Sloboda, & Kone, 2018; Pelzman, 1978; Zdenek & Greenway, 1984).

Research Methodology

The baseline model is set such that economic growth depends on its one period lag to check for countries‟ conditional convergence effect (Andrianaivo & Yartey, 2009). The analysis is based on ARDL version of the ECM panel regression model represented as in equation 1.

$$\Delta grow_{it} = \emptyset_i\left[grow_{i,t-1} - \gamma_i X_{it}\right] + \sum_{j=1}^{P-1} \beta_{ij} \Delta grow_{it-j} + \sum_{j=1}^{P-1} \alpha_{ij} \Delta X_{it-j} + \mu_i + \varepsilon_{it}. \quad (1)$$

Where

$\Delta grow_{it}$ is the first difference of GDP growth of country i at time t,

$\emptyset_i$ is given by $-(1-\delta_i)$ group specific speed of adjustment coefficient expected that $\emptyset_i < 0$;

γ_i is a vector of long run relationships;

$ECT = [grow_{i,t-1} - \gamma_i X_{it}]$ is the error correction term;

X_{it} is a set of differenced covariates to achieve stationarity;

β_{ij}, α_{ij} are the short run dynamic coefficients

μ_{it} is the country specific unobserved random error term

ε_{it} is the overall unobserved random error term

Data and Variables

The relationship between FSD and Economic Growth in SSA countries is examined using data from the World Bank Indicator database. The core variable in the finance-growth relationship was a dummy variable for regional bloc (Bloc) which takes the value of one (1) if a country is a current member of the existing EAC/SADC and zero (0) otherwise. FSD is measured using two indicators:

i) Domestic Credit to the private Sector (dcps) equals the dcps (as a percentage of GDP); the indicator dcps includes non-bank credit to the private sector (Saci, Giorgioni, & Holden, 2009). and

ii) The liquid liabilities of the financial system are broad money (M3) (percentage of GDP) (Acaravci, Ozturk, & Acaravci, 2009).

A summary of the variables used in this study is provided in Table 1.

Table 1: Description of the Variables

Abbreviation	Variable name	Measurement	Data source
Dependent variable			
Grow	Constant (2010) annual GDP growth	Values	WDI
Intervening Variables			
eco_bloc	Regional integration	Dummy{1 if EAC, 0 otherwise}	SADC and EAC websites
Independent variables			
M3	Broad money as a share of GDP	Values	WDI
Dcps	Domestic credit to the private sector as a share of GDP	Values	WDI
Gfcf	Gross fixed capital formation as a share of GDP	Values	WDI
Open	Import plus export as a share of GDP	Values	WDI
wpop	Working population as a share of GDP	Values	WDI

Preliminary Tests

The results of the panel unit root based on Im, Pesaran, & Shin, 2003 (IPS) and Levin, Lin, & Chu (LLC), 2002) suggested that that all series become stationary after differencing once; the null hypothesis of unit root is therefore rejected suggesting that the panels become stationary after differencing once (autoregressive of order 1). Pedroni (1999; 2004) tests of co-integration led to the rejection of the null hypothesis of no co-integration across panels as they are significantly less than hypothetical critical values. The conclusion is that at least one panel series under consideration is co-integrated. The results of the Hausman test for the test between PMG and MG for EAC and SADC countries indicated that the PMG model was superior in either case as provided in Table 2. The Akaike Information Criterion (AIC) was used for optimal lag selection for the 14 countries based on ARDL model implemented on the observed series of each country. The most recurring lags across countries were then chosen as the best lags for the panel ARDL model implemented thereafter.

Table 2: The Hausman Test Results

	Coefficients				**Coefficients**			
	SADC				**EAC**			
	(b)	**(B)**	**(b-B)**	**sqrt(diag(V_b-V_B))**	**(b)**	**(B)**	**(b-B)**	**sqrt(diag(V_b-V_B))**
	mg	**pmg**	**Difference**	**S.E**	**mg**	**pmg**	**Difference**	**S.E**
m3_gdp	0.05	-0.26	0.30	1.00	0.05	-0.18	0.23	3.62
dcps_gdp	0.10	-0.31	0.41	0.99	0.10	-2.35	2.45	3.60
gfcf_gdp	1.11	0.24	0.87	0.99	1.11	1.30	-0.19	3.59
Open	-2.54	-0.07	-2.47	2.33	-2.54	1.72	-4.25	8.58
wpop_gdp	0.59	0.97	-0.38	1.54	0.59	-1.56	2.15	5.61
	chi2(5) = (b-B)'[(V_b-V_B)^(-1)](b-B) **=3.69**				chi2(5) = (b-B)'[(V_b-V_B)^(-1)](b-B) **=1.20**			
	Prob>chi2 = 0.5954				Prob>chi2 = 0.9446			

NB:

b = consistent under Ho and Ha; obtained from xtpmg

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

Test: Ho: difference in coefficients not systematic (PMG is not the best)

Model Specifications

Having established a co-integration relationship, the next step is to estimate the ECM model where the error correction term is incorporated within the short run dynamics (Hill, Griffiths, & Lim, 2011). The theoretical equation for this purpose is as provided in equation 2. Lagged variables of the dependent variable are used to address the reverse causality problem as a common practice in the growth literature (Mahawiya, 2015; Nwezeaku & Akujuobi, 2013; Singh, Kpodar, & Ghura, 2009). Lagged values of other control variables such as working population per GDP (wpop) are used to control for income and macroeconomic instability while those of gfcf are used because FSD allocate financial resources to investment projects (Andrianaivo & Yartey, 2009). The indicators of FSD are broad money as a share of GDP (M3) and domestic credit to the private sector as a share of GDP (dcps) both being lagged for the reasons explained.

$$\Delta grow_{it} = \propto_{0i} + \sum_{l=1}^{L} \beta_{1il} \Delta grow_{it-1} + \sum_{l=1}^{L} \propto_{11il} \Delta FSD_{it-1} + \sum_{l=1}^{L} \propto_{12il} \Delta wpop_{it-1} + \sum_{l=1}^{L} \propto_{13il} \Delta open_{it-1} + \sum_{l=1}^{L} \propto_{14il} \Delta gfcf_{it-1} + \emptyset_{1i} \Delta ECT_{it-1} + \varepsilon_{it}$$

……..……………….. (2)

Where,

$\propto_{0i}$ is the constant

β_{1il} are the coefficients for the lagged (l) growth series

$\propto_{1il}\ s$ are short run dynamic coefficients for lagged X_{it} to be estimated

$$\emptyset_i \Delta ECT_{it-1} = \emptyset_i [\![grow_{it-1} - \gamma_i^1 X_{it}]\!]$$

γ_i^1 is a vector of long-run relationship for each X_i and

$$ECT = grow_{it-1} - \gamma_i^1 X_{it}$$

Since in this study, two indicators of FSD were employed and the most recurring lag for M3, dcps and population were two (2) in each case, these variables were lagged once to capture the lag order effect. The final implemented ECM based ARDL model is presented in equation 3.

$$\Delta grow_{it} = \propto_{0i} + \beta_{1i} \Delta grow_{it-1} + \propto_{1i} \Delta M3_{it} + \propto_{2i} \Delta M3_{it-1} + \propto_{3i} \Delta dcps_{it} + \propto_{4i} \Delta dcps_{it-1} + \propto_{5i} \Delta gfcf_{it} + \propto_{6i} \Delta open_{it} + \propto_{7i} \Delta wpop_{it} + \propto_{8i} \Delta wpop_{it-1} + A_1 Sadc_{leg} + A_2 Eac_{leg} + \emptyset_i \Delta ECT_{it-1}$$

……..……………….. (3)

Where $A_1$and A_2 captures the regional bloc effect for SADC and EAC as moderating variables respectively. It is notable that the final model includes dummies for regions of interest i.e. SADC and EAC since their respective establishment i.e. 1992 and 1999 respectively. Apart from the overall ARDL model, three more similar models are also presented; the first is an overall model which neglects the regional bloc dummies and the last two estimated the relationship for each regional bloc separately. These separate models for EAC and SADC countries as well as the overall model were estimated as a robustness check mechanism. Dumitrescu & Hurlin (2012) pairwise tests of non-causality were further implemented to provide specific direction of effect in addition to inferring the causal direction from the panel ARDL models implemented.

Research Findings and Discussion

Descriptive Statistics

A description of all variables used in this study is provided in Table 2. Overall, there were 532 observations comprising of 342 from SADC countries and 190 from EAC. A total of 14 countries were involved out of which nine (9) came from SADC and five (5) from EAC. For SADC membership, a period before 1992 was considered "Unbloced" (as SADC as it is known today was not in existence)[1] while for EAC countries a period before 1999 was also considered "Unbloced" (Current EAC became operational in 1999)[2]. The time period of the dataset is 1980 – 2017 comprising 38 time periods (T). Average growth rate was higher and stable in the EAC than in the SADC and the period prior to the current EAC. EAC also have lower and stable broad money growth than the SADC and the period prior to unionisation. In terms of DCPS the EAC has lower expansion of credit to the private sector compared to both the SADC the period prior to unionisation. These observations points to a relatively stronger position that FSD occupies as a macroeconomic tool in the SADC than in the EAC.

Table 2: Descriptive Statistics for Regional Blocs

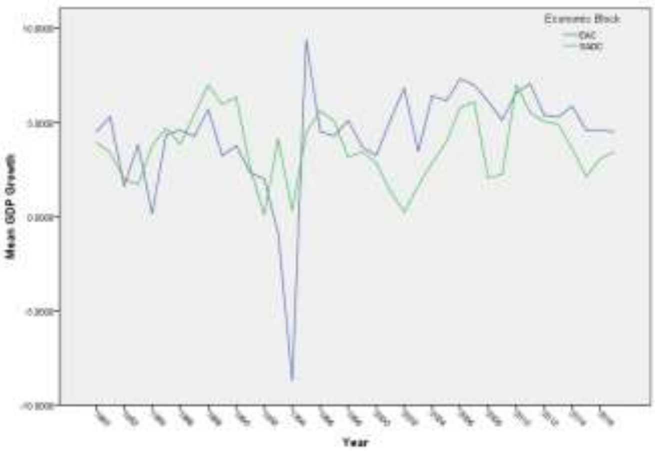
Variable	**Mean**	**Std. Dev**	**Min**	**Max**
Unbloc				
Grow	3.7	6.63	-50.25	35.22
m3	26.33	12.88	7.29	67.68
Dcps	16.65	15.17	1.58	78.47
Gfcf	18.43	6.65	6.1	36.54
Open	0.52	0.4	0.05	1.93
Wpop	8.23	5.99	0.76	25.99
N	203			
N	14			
T	15			
EAC				
Grow	5.48	2.88	-3.9	13.19
m3	24.5	7.72	15.12	43.25

[1] https://www.sadc.int/member-states/
[2] https://www.eac.int/overview-of-eac

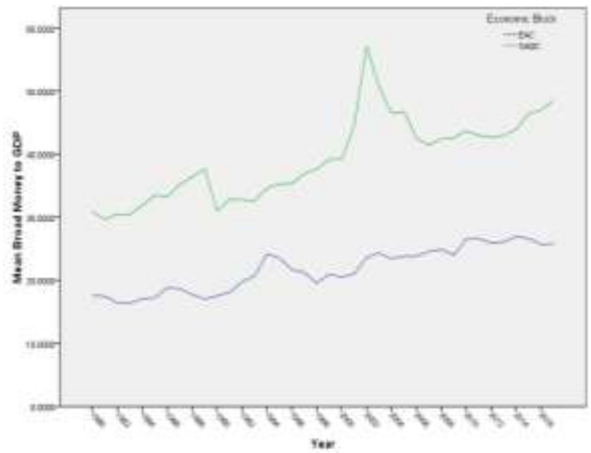
Table 2: Descriptive Statistics for Regional Blocs

Variable	Mean	Std. Dev	Min	Max
Dcps	16.36	7.13	4.09	34.25
Gfcf	20.14	6.7	2.78	34.25
Open	0.43	0.11	0.1	0.68
Wpop	11.4	6.14	4.86	24.57
N	95			
N	5			
T	19			
SADC				
Grow	3.46	4.67	-17.67	19.68
m3	42.17	28.78	4.68	151.55
Dcps	37.18	42.02	4.13	160.12
Gfcf	20.66	9.42	2	93.3
Open	0.91	0.46	0.05	2.43
Wpop	4.49	4.71	0.49	16.17
N	234			
N	9			
T	26			

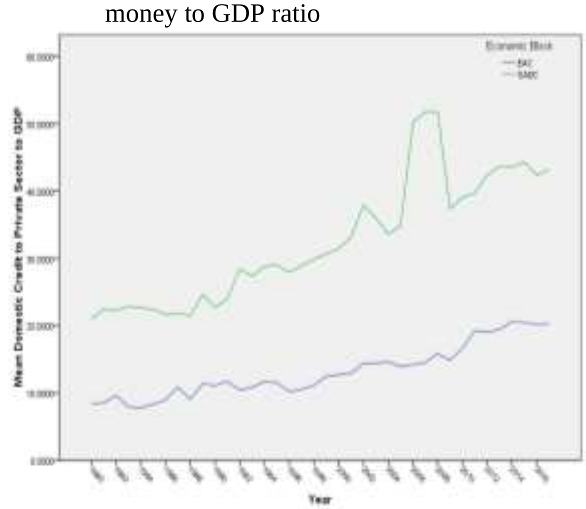
Figure 2 describes the economic bloc effect to three variables i.e., economic growth, broad money growth (m3_gdp) and domestic credit (dcps_gdp). Panel (a) suggest that the GDP growth trajectories for EAC and SADC countries were almost similar with the exception of few cases especially around 1994 and 1996 where abnormal behaviour were noted specifically for Rwanda. The Data suggest that before 1994 EAC countries were lagging behind their SADC counterparts in terms of GDP growth. However, since then growth in EAC has been similar or even higher than that of SADC although the differences are rather small. A similar pattern is not evident in the broad money growth data presented in panel (b). SADC countries display a remarkably higher m3_gdp ratio compared to EAC. This is also true for the variable dcps_gdp ratio. This clearly suggests that short run effect of finance on growth might be marginal or insignificant for the two blocs of countries thus calling for tests of long run co-integrating relationship



(a) Economic bloc effect on the trends of GDP growth



(b) Economic bloc effect on the trends of Broad money to GDP ratio



(c) Economic bloc effect on the trends of Domestic credit to the private sector

Figure 2: Trends in the effect of Economic bloc on the core variables considered in the finance-growth relationship

Without economic integration, both SADC and EAC member countries exhibited relatively higher correlations between broad money growth (M3) & DCPS and M3 & Working population as shown in Table 5. In the EAC however, such high correlation was only notable for M3 and DCPS while in the SADC such high correlation completely disappeared. These correlations suggested that region bloc can be used to explain the correlation between macroeconomic indicators especially FSD related variables. This, on one hand, reflect the level in the integration ladder: while EAC is approaching a common market (EAC, 2010), the SADC was still far away into Preferential Trade Area (Free Trade). M3 and DCPS were highly correlated in EAC while growth was neither correlated strong with M3 nor DCPS. As such economic growth could be limitedly associated with FSD in the EAC regional bloc. However, when a similar comparison was carried out in the SADC and the period prior to the two integration it was obvious that the correlations between both "m3 and dcps" and "grow" was the lowest in EAC (highest negative) suggesting that potentials for FSD to be detrimental to growth were relatively higher in EAC than both the SADC and the period prior to the two regional integration.

Table 3: Correlation Analysis

Variable	**Grow**	**m3**	**Dcps**	**gfcf**	**open**	**wpop**
Unbloc						
Grow	1.00					
m3	-0.01	1.00				
Dcps	-0.08	0.75	1.00			
Gfcf	0.22	0.41	0.23	1.00		
Open	0.26	0.39	0.14	0.57	1.00	
Wpop	-0.21	-0.73	-0.50	-0.55	-0.52	1.00
EAC						
Grow	1.00					
m3	-0.24	1.00				
Dcps	-0.25	0.85	1.00			
Gfcf	0.42	-0.01	-0.10	1.00		
Open	0.34	0.39	0.39	0.64	1.00	
Wpop	-0.39	-0.32	-0.23	-0.64	-0.58	1.00
SADC						
Grow	1.00					
m3	-0.07	1.00				
Dcps	-0.18	0.56	1.00			
Gfcf	0.16	0.28	-0.09	1.00		

Table 3: Correlation Analysis

Variable	Grow	m3	Dcps	gfcf	open	wpop
Open	0.08	0.40	-0.09	0.37	1.00	
Wpop	-0.07	-0.55	-0.40	-0.36	-0.40	1.00

Panel ARDL Model Results and Discussion

To establish a causal relationship between finance and growth for the different bloc of countries it was necessary to carry out a panel-based error correction model using Auto Regressive Distributed Lag ARDL. Table 4 summarises the results of the four models that were implemented; i) The model that included the economic integration blocs as dummies (Moderated) ii) The model that combined all the data and assumes no bloc effect (not moderated), iii) EAC model Separately (Independent) and iv) SADC Model Separately (Independent). The ECT section provides the long run relationship (γ_i^1) for the six independent variables of the ARDL model in equation 1. It is notable that both m3 and dcps have a significant and positive effect on growth in the overall model. However, the dcps was the only FSD variable whose effect was significant and negative in both EAC and SADC. It seems the integration has removed most of the positive dcps's effect on economic growth for the two blocs of countries and such removal was slightly higher in EAC than the SADC. M3 remains positive even with integration though its effect on growth was not statistically significant.

The observations in Table 3 suggest that M3 was only significant in EAC where it reduces growth at a rate of around 3% while DCPS contributes positively to growth at around 17%. In the short-run DCPS was trade diverting in all regional blocks while broad money supportted trade creation. In the long run the effect remained negative in the un-moderated model when regional integration was moderated the effect was positive but insignificant. It seems that regional integrations eliminated the trade diverting effect of dcps in the long run though the effect was not statistically significant. However, at the country specific effect suggests that FSD was a significant determinant of growth in a number of cases. In Rwanda and Tanzania there was a positive effect for the DCPS and a negative effect for M3. While expanding M3 significantly and positively induces growth in Rwanda, it had an insignificant effect in Tanzania and Uganda while in the other EAC countries the respective models were explosive. The findings from this study further compounded in favour of the sequencing hypothesis specifically in the SADC (Muyambiri & Chabaefe, 2017).

Table 4: Pooled Mean Group (PMG) Regression Results

	OVERALL1	Sig.	OVERALL2	Sig.	EAC	Sig.	SADC	Sig.
Number of Obs	504		504		95		234	
Number of groups	14		14		5		9	
Obs per group: min	36		36		19		26	
Avg	36		36		19		26	
Max	36		36		19		26	
Log Likelihood	-443.092		-496.743		32.155		-96.544	
ECT								
m3	-0.010		0.021	***	0.030		0.003	
	(0.008)		(0.007)		(0.022)		(0.007)	
Dcps	0.009		0.011	**	-0.080	**	-0.020	***
	(0.006)		(0.005)		(0.032)		(0.006)	
Gfcf	0.023	**	0.020	*	0.037	***	0.012	**
	(0.010)		(0.012)		(0.009)		(0.006)	
Open	-0.764	**	0.041		-1.604	***	-0.662	***
	(0.306)		(0.329)		(0.591)		(0.234)	
Wpop	-0.217	**	-0.275	***	-0.498	***	0.254	***
	(0.075)		(0.050)		(0.059)		(0.080)	
SR								
ECT	-0.580	***	-0.494	***	-0.723	***	-0.505	***
	(0.100)		(0.088)		(0.246)		(0.145)	
grow LD.	0.003		-0.007		0.001		-0.001	
	(0.012)		(0.008)		(0.046)		(0.007)	
m3 LD.	-0.088		-0.074		-0.044		-0.008	
	(0.095)		(0.070)		(0.039)		(0.012)	
m3 D1.	0.031		0.016		-0.055	***	-0.002	

	OVERALL1	Sig.	OVERALL2	Sig.	EAC	Sig.	SADC	Sig.
	(0.099)		(0.070)		(0.014)		(0.015)	
dcps LD.	-0.061	**	-0.042	**	0.093		-0.012	
	(0.021)		(0.021)		(0.116)		(0.024)	
dcps D1.	0.080		0.072		0.169	**	0.017	
	(0.069)		(0.074)		(0.086)		(0.016)	
gfcf D1	-0.016		0.007		0.021		0.002	
	(0.020)		(0.015)		(0.038)		(0.021)	
open D1	-0.519		-0.176		-3.032		1.127	
	(1.346)		(2.101)		(2.788)		(1.004)	
wpop LD.	11.936	*	15.362	**	2.185		23.643	**
	(6.881)		(6.712)		(2.177)		(11.850)	
wpop D1.	-36.210	***	-36.107	***	-9.853	***	-58.925	***
	(10.879)		(10.943)		(2.002)		(15.797)	
Sadc_leg	0.140							
	(0.195)							
Eac_leg	0.110							
	(0.145)							
_cons	2.525	***	1.799	***	5.984	***	1.148	***
	(0.504)		(0.448)		(1.822)		(0.378)	

NB: Standard errors for coefficient are given in parentheses

*** mean significant at 1%, ** mean significant at 5% and * mean significant at 10%

Regardless of the model, the short run ($\propto_{il}$)adjustment towards equilibrium is correctly signed (-) thus augmenting the existing body of literature that across countries, there was a short run adjustment towards long run equilibrium (Zerbo, 2015; Mathenge & Nikolaidou, 2018; Mahawiya, 2015). EAC adjusts at the rate of 72% while the SADC adjusts at a rate of around 50% both being relatively higher than the overall rate of adjustment. The overall significant and negative ECT provided evidence for long run convergence towards equilibrium. However, with the regional bloc effect eliminated in the Overal1 model, the adjustment across countries was around 58% a clear indicator that EAC adjustment towards steady state is relatively above average while SADC adjustment was slightly below average. The bloc effect here was that expansionary monetary policy would theoretically created trade to all EAC countries if they unanimously adopted it. Otherwise, individual monetary expansion might not have significant effect on GDP growth and to countries like Uganda it was detrimental to growth a finding that was in line with Zerbo, (2015). The regional bloc effect could be at work here since Uganda had the highest level of broad money growth and was negatively impacted in the short run but regional-wise long run effect was positive. The EAC regional bloc was trade creating in the long run despite having short-run diversion effect.

At country level, results are included in Appendix 1 where there were remarkable differences in terms of short run adjustment towards steady state between Tanzania and Rwanda. While Rwanda adjusted at a rate of 30% per annum, Tanzania adjusted only at the rate of 6% as shown in Table 4. Uganda led the race with almost 37% of previous deviation corrected in the current year. The other EAC countries adjusted the previous period deviations at a rate of between 26% and 27%. This provided a further deviation from the dominance of Kenya with adjustment speed of between 10% – 50% (Bakang, 2015; Waiyaki, 2016). The higher speed of adjustment in Rwanda potentially reflected economic stability and the benefits that broad money growth brought to economic growth in Rwanda. As such being the EAC regional bloc, it had the highest finance-growth positive effect to Rwanda as the regional-wise adjustment towards steady state was relatively faster than country specific effect.

For the SADC, the results suggested that the FSD – growth link in the short run was at best insignificant alongside Bara, Mugano, & Pierre, (2016) and Mahawiya, (2015). In country specific models however, the finance-growth relationship was significant in Botswana, Madagascar, Eswatini and Zimbabwe. A further scrutiny of observations in Appendix 2 suggested that out of the nine SADC countries, two were explosive i.e., Zambia and Zimbabwe. Of all the SADC countries broad money growth significantly increased GDP growth in Eswatini just like in Rwanda but unlike Rwanda the lag of broad money as a share of GDP was also positive in Eswatini an observation that somehow contradicts previous observations on the same (Bara, Mugano, & Pierre, 2016; Mahawiya, 2015). The lag of broad money as a share of GDP was also positive in Madagascar and Zimbabwe. Thus, out of the 14 countries included in this study only two (2) suggested that there was a significant positive short-run effect on broad money to GDP growth and observations from three (3) countries suggested that such positive effect occurs at one lag. In the lagged M3, Mauritius and South Africa also experienced short run negative effect of M3 on GDP growth. The negative effect could be linked to several factors including overinvestment in response to expansionary monetary policy or credit rationing (Zerbo, 2015; Saxegaard, 2006; Nketcha Nana & Samson, 2014). In terms of adjustment towards steady state, in the SADC region, among the 14 SADC countries, Zimbabwe led the race with around 8% adjustment rate surpassing previous observations of around 3 – 4.5% in single series models (Dzikiti, 2017). Apart from the adjustment speed, these observations indicated that been in the SADC provided an added advantage as growth was likely to be higher than without it. Mahawiya, (2015) noted an adjustment rate of around 15% and a long run convergent growth and a convergent growth rate of between 0.3 – 7% were observed by Chirwa & Odhiambo, (2016). In this region, South Africa had the highest adjustment rate of up to 73% (Nyasha & Odhiambo, 2015). This study however, suggested that short run adjustment towards steady state for SADC ranged between 10% - 43%, with an overall ECT of 51%.

Panel Finance-Growth Causal Effect

Table 5 summarises the Dumitrescu & Hurlin (2012) pairwise tests of non-causality. Although in the general model growth caused FSD through M3 such effect existed only for EAC. In the EAC growth caused DCPS and at the same time DCPS caused growth. As such, there was a strong conclusion of a bidirectional finance-growth nexus within the EAC based on DCPS. M3 however unidirectional with causal effect runned from growth to M3. Based on M3, in the EAC FSD-growth nexus did follow the DFH (Arayssi & Fakih, 2017) contrary to SLH alongside Waiyaki, (2016). The SADC economy also favoured a unidirectional hypothesis with DCPS causing growth without any feedback.

Table 5: Dumitrescu & Hurlin (2012) Granger Non-Causality Test Results

Xtgcause	**OVERALL**		**EAC**		**SADC**	
	Z-bar tilde	**Sig**	**Z-bar tilde**	**Sig**	**Z-bar tilde**	**Sig**
Forward causal effect						
grow dm3	9.25	***	6.49	***	1.13	
grow dcps	0.86		3.60	***	1.04	
grow dgfcf	2.28	**	14.99	***	6.28	***
grow dopen	1.54		16.72	***	1.48	
grow wpop	2.26	**	9.69	***	0.92	
Reverse causal effect						
dm3 grow	0.14		-0.95		-0.28	
dcps grow	-0.01		6.30	***	2.65	***
dgfcf grow	-0.05		0.07		-0.44	
dopen grow	1.98	**	4.18	***	-1.32	
wpop grow	0.71		8.75	***	0.61	

NB: Standard errors for coefficient are given in parentheses

Table 5: Dumitrescu & Hurlin (2012) Granger Non-Causality Test Results

Xtgcause	**OVERALL**		**EAC**		**SADC**	
	Z-bar tilde	**Sig**	**Z-bar tilde**	**Sig**	**Z-bar tilde**	**Sig**

*** mean significant at 1%, ** mean significant at 5% and * mean significant at 10%

Conclusion and Policy Implications

There are major disparities in term of the adoption of monetary policies across the countries that form the EAC and the SADC regional blocs. Generally, monetary expansionary policies within the SADC were more prevalent in Zimbabwe and Zambia compared to all other SADC countries while in EAC they were relatively more prevalent in Uganda. This reflect the financial repression policies which were more prevalent in the EAC than the SADC leading to negative effect on FSD development while financial openness might have favoured higher growth in the SADC (Andrianaivo & Yartey, 2010). The situation in Zimbabwe had been well documented and it was clear that monetary expansion in Zimbabwe had been detrimental to growth (Dzikiti, 2017). Broad money growth in Zimbabwe seemed to bring a positive short run effect specifically at one lag possibly reflecting some of the benefits accrued from both financial and trade openness regardless of the effected regional bloc (Mahawiya, 2015; Zerbo, 2015). Based on the evidence from this study, it was clear that GDP growth in the EAC increased with DCPS while the same declines within the SADC region. Considering DCPS as an indicator of FSD, FSD contribution to growth was country specific.

While for example it contributed positively to growth in Tanzania and Rwanda it also contributed negatively in Botswana and Eswatini. At the regional bloc level, DCPS reduced growth in both SADC and EAC in the long run and since the causal effect was bidirectional in EAC, it was an important policy instrument to avoid in EAC with the exception of Tanzania and Rwanda where it had a positive contribution to growth. In the SADC the causal direction was from DCPS to growth suggesting that it could be used as policy instrument in countries where long run FSD-growth nexuswas positive such as Botswana and Eswatini. With the exception of Uganda where short run effect on broad money was negative, all the other EAC countries provided evidence that expanding money growth had no short run significant effect and such effect could only be observable in the long run. Similarly, DCPS hadno specific significant effect on growth to any of the countries in the EAC regional bloc but had a significant bloc effect. Although broad money growth was generally negative on GDP growth in the short run among SADC countries, Eswatini was the only exception. With these observations only a partial conclusion on the positive finance-growth nexus in the EAC is favoured. In EAC countries finance-growth nexus were both bidirectional and unidirectional in the sense that growth granger caused broad money but not the other way around while DCPS granger caused GDP growth and at the same time GDP growth granger caused DCPS. Expanding DCPS in the EAC countries had a feedback mechanism. In as long as DCPS reduced growth, this feedback mechanism entailed a downward growth spiral as DCPS was expanded suggesting that DCPS was not a good policy instrument for the EAC as a regional bloc. This did not however detract countries such as Tanzania and Rwanda whose DCPS-growth relationship was positive from using DCPS as a policy instrument to bolster growth. It is obvious from the finding of this study that Market-based FSD, preceded both bank-based FSD in both the short run and the long run while Market-based FSD Granger-caused bank-based FSD in the short run and long run (Muyambiri & Chabaefe, 2017). The sequencing hypothesis suggested that FSD could only had a positive effect on GDP growth if properly sequenced and timed out. This indicated that policies such as the liquidation of defunct financial institutions and strengthening of regulatory and supervisory functions should have superseded chartering of new banks. In a similar manner stabilization policy targeting elimination of huge fiscal deficit, persistent depreciation of the exchange rate and tight credit policies were needed before any financial openness policy was adopted (Ikhide, 2015).

Finally, regional bloc monetary policies effects suggested that finance-growth nexuses were negative in both the EAC and the SADC in the long-run. Short run dynamics in the SADC suggested that Eswatini, Seychelles and Zambia achieved higher GDP growth in the short run-in response to broad money growth an indicator that such countries could use broad money growth to smoothen short run fluctuation though the long run impact would have been negative. These countries faced a trade-off between short run and long run goals; the choices might be shaped by the most beneficial and least costly option. What this observation implies is that choices had to be made between addressing short run GDP volatility and achieving higher GDP growth in the future. Politically, short term objectives were likely to override long term ambitions. Both objectives could have been made, however, if the negative long run consequences of FSD were mitigated through appropriate development of infrastructure that facilitate the absorption of expanded monetary instruments. As such short run monetary expansionary policies must be accompanied with long terms investment strategies that foster job creation, improved infrastructure in the real economy and technological improvement that increases the finance absorption capacity of the economy. With these were in place, SADC could have used FSD as an important tool to foster both short term volatility and ensure long run growth.

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Appendix 1: Panel ARDL Model Results for EAC

D.grow	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]		Percent
Burundi							
ECT	-0.989	0.041	-23.830	0.000	-1.070	-0.907	0.271
Grow							0.500
L1							0.500
m3_gdp							0.500
D1	0.449	1.536	0.290	0.770	-2.562	3.460	0.610
LD							
dcps_gdp							
D1	-0.857	1.025	-0.840	0.403	-2.866	1.151	0.298
LD							
gfcf_gdp							
D1	0.343	0.529	0.650	0.517	-0.695	1.380	0.585
Open							
D1	7.917	2.979	2.660	0.008	2.079	13.755	1.000
wpop_gdp							
D1	-100.946	4.058	-24.880	0.000	-108.899	-92.993	0.000
LD							0.500
_cons	-1.005	1.757	-0.570	0.567	-4.447	2.438	0.268
Kenya							
ECT	-1.021	0.014	-71.160	0.000	-1.049	-0.993	0.265
Grow							
L1							
m3_gdp							
D1	-0.487	0.574	-0.850	0.396	-1.612	0.638	0.381
LD							
dcps_gdp							
D1	0.039	0.405	0.100	0.923	-0.755	0.833	0.510
LD							
gfcf_gdp							
D1	-0.397	0.383	-1.040	0.300	-1.148	0.353	0.402
Open							
D1	3.679	1.124	3.270	0.001	1.476	5.881	0.975
wpop_gdp							
D1	-101.642	1.500	-67.760	0.000	-104.582	-98.702	0.000
LD							
_cons	-2.785	1.664	-1.670	0.094	-6.046	0.477	0.058
Rwanda							
ECT	-1.011	0.044	-23.040	0.000	-1.097	-0.925	0.267
Grow							
L1							
m3_gdp							
D1	6.092	7.244	0.840	0.400	-8.106	20.291	0.998
LD							
dcps_gdp							
D1	4.571	3.833	1.190	0.233	-2.942	12.084	0.990
LD							
gfcf_gdp							
D1	-10.493	6.260	-1.680	0.094	-22.762	1.776	0.000
Open							

D.grow	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]		Percent
D1	-19.132	12.200	-1.570	0.117	-43.044	4.779	0.000
wpop_gdp							
D1	-91.413	5.957	-15.350	0.000	-103.089	-79.738	0.000
LD							
_cons	-0.152	1.759	-0.090	0.931	-3.601	3.296	0.462
Tanzania							
ECT	-1.038	0.087	-11.870	0.000	-1.210	-0.867	0.262
Grow							
L1							
m3_gdp							
D1	-1.005	2.061	-0.490	0.626	-5.044	3.034	0.268
LD							
dcps_gdp							
D1	0.418	0.243	1.720	0.085	-0.058	0.894	0.603
LD							
gfcf_gdp							
D1	-0.312	1.477	-0.210	0.833	-3.207	2.583	0.423
Open							
D1	0.771	3.642	0.210	0.832	-6.367	7.909	0.684
wpop_gdp							
D1	-103.229	8.842	-11.670	0.000	-120.560	-85.898	0.000
LD							
_cons	-2.337	1.831	-1.280	0.202	-5.925	1.251	0.088
Uganda							
ECT	-0.551	0.137	-4.020	0.000	-0.819	-0.282	0.366
Grow							
L1							
m3_gdp							
D1	-6.857	2.471	-2.770	0.006	-11.700	-2.014	0.001
LD							
dcps_gdp							
D1	0.788	1.227	0.640	0.521	-1.618	3.194	0.687
LD							
gfcf_gdp							
D1	-0.340	4.444	-0.080	0.939	-9.051	8.371	0.416
Open							
D1	19.342	12.159	1.590	0.112	-4.489	43.174	1.000
wpop_gdp							
D1	-0.686	2.310	-0.300	0.767	-5.213	3.841	0.335
LD							
_cons	1.055	1.009	1.050	0.295	-0.922	3.033	0.742

Appendix 2: Panel ARDL Model Results for SADC

D.grow	Coef.	Std. Err.	Z	P>|z|	[95% Conf. Interval]		percent
Botswana							
ECT	-1.098	0.160	-6.850	0.000	-1.412	-0.784	0.250
Grow							0.500
L1	0.110	0.157	0.700	0.483	-0.197	0.417	0.527
m3_gdp							0.500
D1	-1.136	0.490	-2.320	0.021	-2.097	-0.175	0.243
LD	-0.738	0.454	-1.630	0.104	-1.627	0.151	0.323
dcps_gdp							
D1	0.304	0.590	0.510	0.607	-0.852	1.459	0.575
LD	0.720	0.490	1.470	0.142	-0.241	1.681	0.673
gfcf_gdp							0.500
D1	1.660	0.851	1.950	0.051	-0.008	3.328	0.840
Open							0.500
D1	-0.773	0.715	-1.080	0.279	-2.175	0.628	0.316
wpop_gdp							
D1	-105.410	1.817	-58.020	0.000	-108.971	-101.850	0.000
LD							
_cons	3.756	0.649	5.790	0.000	2.485	5.027	0.977
Madagascar							
ECT	-0.608	0.140	-4.330	0.000	-0.883	-0.333	0.353
Grow							0.500
L1	-0.397	0.140	-2.840	0.004	-0.671	-0.123	0.402
m3_gdp							0.500
D1	-0.337	0.180	-1.870	0.061	-0.690	0.015	0.417
LD	0.210	0.173	1.210	0.225	-0.130	0.550	0.552
dcps_gdp							0.500
D1	1.045	0.228	4.590	0.000	0.599	1.491	0.740
LD	-0.143	0.227	-0.630	0.529	-0.588	0.302	0.464
gfcf_gdp							0.500
D1	0.233	0.139	1.680	0.093	-0.039	0.506	0.558
Open							0.500
D1	0.556	0.391	1.420	0.155	-0.210	1.323	0.636
wpop_gdp							0.500
D1	-96.879	0.712	-136.130	0.000	-98.274	-95.485	0.000
LD							0.500
_cons	1.341	0.393	3.410	0.001	0.570	2.111	0.793
Mauritius							
ECT	-0.668	0.082	-8.160	0.000	-0.829	-0.508	0.339
Grow							0.500
L1	-0.290	0.084	-3.460	0.001	-0.455	-0.126	0.428
m3_gdp							0.500
D1	-2.195	0.830	-2.640	0.008	-3.822	-0.568	0.100
LD	-1.900	0.700	-2.720	0.007	-3.271	-0.529	0.130
dcps_gdp							0.500
D1	1.200	0.514	2.340	0.020	0.193	2.208	0.769
LD	0.788	0.507	1.550	0.120	-0.206	1.783	0.687
gfcf_gdp							0.500
D1	0.013	0.341	0.040	0.970	-0.656	0.681	0.503
Open							0.500

D.grow	Coef.	Std. Err.	Z	P>|z|	[95% Conf. Interval]		percent
D1	-0.611	0.553	-1.110	0.269	-1.694	0.472	0.352
wpop_gdp							0.500
D1	-104.236	1.691	-61.650	0.000	-107.550	-100.923	0.000
LD							0.500
_cons	1.794	0.476	3.770	0.000	0.861	2.727	0.857
Malawi							
ECT	0.169	0.776	0.220	0.827	-1.353	1.691	0.542
Grow							0.500
L1	-1.195	0.785	-1.520	0.128	-2.734	0.344	0.232
m3_gdp							0.500
D1	-0.233	1.891	-0.120	0.902	-3.939	3.473	0.442
LD	0.133	1.998	0.070	0.947	-3.784	4.050	0.533
dcps_gdp							0.500
D1	-0.082	1.647	-0.050	0.960	-3.310	3.146	0.480
LD	-0.136	1.525	-0.090	0.929	-3.125	2.852	0.466
gfcf_gdp							0.500
D1	0.150	1.550	0.100	0.923	-2.887	3.188	0.538
Open							0.500
D1	0.584	1.666	0.350	0.726	-2.681	3.849	0.642
wpop_gdp							0.500
D1	-91.772	5.941	-15.450	0.000	-103.416	-80.129	0.000
LD							0.500
_cons	4.022	2.770	1.450	0.147	-1.407	9.451	0.982
Eswatin							
ECT	-0.273	0.265	-1.030	0.304	-0.793	0.247	0.432
Grow							0.500
L1	-0.580	0.263	-2.210	0.027	-1.096	-0.065	0.359
m3_gdp							0.500
D1	2.358	0.868	2.720	0.007	0.656	4.059	0.914
LD	3.907	0.842	4.640	0.000	2.256	5.558	0.980
dcps_gdp							0.500
D1	-3.863	0.790	-4.890	0.000	-5.411	-2.316	0.021
LD	-2.855	0.693	-4.120	0.000	-4.213	-1.497	0.054
gfcf_gdp							0.500
D1	0.979	0.619	1.580	0.114	-0.234	2.192	0.727
Open							0.500
D1	0.061	0.874	0.070	0.944	-1.651	1.773	0.515
wpop_gdp							0.500
D1	-120.246	2.903	-41.420	0.000	-125.936	-114.556	0.000
LD							0.500
_cons	1.943	0.217	8.950	0.000	1.518	2.369	0.875
Seychelles							
ECT	-0.329	0.381	-0.860	0.387	-1.075	0.417	0.418
Grow							0.500
L1	-0.667	0.384	-1.740	0.082	-1.419	0.085	0.339
m3_gdp							0.500
D1	0.558	2.538	0.220	0.826	-4.416	5.533	0.636
LD	-0.422	2.646	-0.160	0.873	-5.607	4.764	0.396
dcps_gdp							0.500
D1	3.168	1.839	1.720	0.085	-0.436	6.771	0.960
LD	-2.063	1.944	-1.060	0.289	-5.874	1.748	0.113

D.grow	Coef.	Std. Err.	Z	P>|z|	[95% Conf. Interval]		percent
gfcf_gdp							0.500
D1	0.773	0.716	1.080	0.280	-0.630	2.175	0.684
Open							0.500
D1	-1.172	1.044	-1.120	0.262	-3.219	0.875	0.236
wpop_gdp							0.500
D1	-93.852	4.901	-19.150	0.000	-103.459	-84.246	0.000
LD							0.500
_cons	2.561	0.720	3.560	0.000	1.150	3.971	0.928
South Africa							
ECT	-2.201	0.024	-90.200	0.000	-2.249	-2.153	0.100
Grow							
L1	1.181	.	.	.	.	.	0.765
m3_gdp							0.500
D1	-0.816	0.920	-0.890	0.375	-2.619	0.987	0.307
LD	-1.592	0.792	-2.010	0.044	-3.144	-0.041	0.169
dcps_gdp							0.500
D1	0.870	0.415	2.090	0.036	0.055	1.684	0.705
LD	1.271	0.450	2.830	0.005	0.390	2.153	0.781
gfcf_gdp							0.500
D1	1.645	0.881	1.870	0.062	-0.082	3.373	0.838
Open							0.500
D1	3.231	1.670	1.930	0.053	-0.042	6.503	0.962
wpop_gdp							0.500
D1	-95.219	1.961	-48.550	0.000	-99.063	-91.375	0.000
LD							0.500
_cons	6.654	1.249	5.330	0.000	4.207	9.102	0.999
Zambia							
ECT	0.661	0.098	6.730	0.000	0.468	0.853	0.659
Grow							0.500
L1	-1.666	0.100	-16.580	0.000	-1.863	-1.469	0.159
m3_gdp							0.500
D1	0.642	0.262	2.450	0.014	0.129	1.155	0.655
LD	0.632	0.287	2.210	0.027	0.071	1.194	0.653
dcps_gdp							0.500
D1	-0.441	0.119	-3.700	0.000	-0.675	-0.208	0.391
LD	-0.282	0.134	-2.110	0.035	-0.544	-0.021	0.430
gfcf_gdp							0.500
D1	0.152	0.111	1.370	0.170	-0.065	0.370	0.538
Open							0.500
D1	0.625	1.082	0.580	0.564	-1.496	2.745	0.651
wpop_gdp							0.500
D1	-98.902	1.186	-83.370	0.000	-101.227	-96.577	0.000
LD							
_cons	4.317	0.469	9.210	0.000	3.399	5.236	0.987
Zimbabwe							
ECT	0.086	0.393	0.220	0.828	-0.685	0.856	0.521
Grow							
L1	-1.039	0.392	-2.650	0.008	-1.808	-0.271	0.261
m3_gdp							
D1	-0.140	0.305	-0.460	0.646	-0.738	0.458	0.465
LD	0.482	0.308	1.560	0.118	-0.122	1.087	0.618

D.grow	Coef.	Std. Err.	Z	P>|z|	[95% Conf. Interval]		percent
dcps_gdp							
D1	-0.293	0.264	-1.110	0.267	-0.811	0.225	0.427
LD	0.091	0.227	0.400	0.688	-0.353	0.535	0.523
gfcf_gdp							
D1	0.067	0.259	0.260	0.795	-0.440	0.574	0.517
Open							
D1	1.566	1.817	0.860	0.389	-1.996	5.129	0.827
wpop_gdp							0.500
D1	-100.051	2.195	-45.590	0.000	-104.352	-95.749	0.000
LD							0.500
_cons	2.967	0.467	6.350	0.000	2.051	3.883	0.951

Factors Influencing the Ethnocentric Tendencies to Tanzanians Consumers Toward Purchasing Domestic Anti-Malarial Remedies

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Abstract: *The aim of this study was to explore the factors influencing the ethnocentric tendencies to Tanzanian consumers towards purchasing domestic anti-malarial remedies. A case research design was adopted which helped to discover ideas and insights underlying consumers' evaluation of anti-malarial remedies as far as consumer ethnocentrism was concerned. Purposive sampling was used to select 9 participants in this study. In this study, it was found out that the ethnocentric tendencies of Tanzanian consumers toward purchasing the domestic anti-malarial remedies were influenced by availability, affordability, quality and days of dosage of the anti-malarial remedies. The findings of this study were expected to provide health professional bodies with knowledge about ethnocentric tendencies of Tanzanian consumers towards purchasing domestic anti-malarial remedies. This would help them to boost the standard of the different domestic medical products and hence encourage Tanzanians to value their domestically produced anti-malarial remedies and other home produced products.*

Keywords: Consumer Ethnocentrism; Anti-malarial remedies; Consumer behavior; buying local, products choice

INTRODUCTION

The growth of manufacturing industries in Africa is very stagnant and its contribution to the gross national economy is very insignificant. In average, manufacturing industries contribute less than five percent to the national economy of the Sub-Saharan African countries. Further, the continent's global trade is very small with decreasing trend while other developing countries scored dramatic steady growth. Many examinations have been conducted to identify the root cause for the problem of African manufacturing industry problems. Majority of the investigations conclude that the attitude of consumers towards manufactured products from African countries contribute for the weak growth of manufacturing industry of the continent (Kibret, 2016). Globalization has intensified the movement of grocery products across national boundaries such as, international trade has gained momentum thereby exposing consumer worldwide to various products (Muchandiona et al., 2021; Makanyeza and du Toit.2017). Increased globalization has resulted in intense competitive pressure in the retail sector the world over (Das Nair, 2018). Nickanor et al. (2020) asserted that, African markets are increasingly opening up for foreign grocery products in a bid to meet the increasing demands of their growing population. Consumers in developed and developing countries have negative attitude towards manufactured products from African countries. Consumers in African countries prefer products from developed and emerging economies to domestic products. Consumers in developed countries prefer domestic products to imported products or in the absence of domestic products they prefer products from other developed countries to products from developing countries particularly from Africa. Hence, the survival and growth of manufacturing industries have been threatened by lack of demand in both local and international markets (Kibret,2016). The need to survive in this intense competitive atmosphere has motivated firms to increase their attention towards understanding consumer behaviour, paying special attention to consumer ethnocentrism (Muchandiona *et al*., 2021; Cosado-Aranda *et al*., 2020; Voung and Giao,2020; Zeren et al.,2020; Kibret,2016). A complete understanding of consumer behaviour is of paramount importance because it helps marketers in designing effective marketing strategies (Muchandiona et al., 2021; Makanyeza & du Toit, 2017). Consumer ethnocentrism refers to the beliefs held by consumers on whether it is appropriate or not to buy foreign-made products (Akbarov, 2021; Das & Mukherjee, 2019; Karoui and Khemakhem, 2019; Shimp and Sharma, 1987). Balabanis and Siamagka (2017) posit that consumer ethnocentrism resembles a biased preference for local products at the expense of foreign alternatives. Several studies have been conducted on consumer ethnocentrism in both developed and developing countries (Balabanis & Siamagka, 2017; Casado-Aranda *et al*., 2020; Karoui & Khemakhem, 2019; Maison & Maliszewski, 2016; Makanyeza & du Toit, 2017; Pentz et al., 2017; Shimp & Sharma, 1987; Vuong and Khanh Giao 2020).

However, the study of consumer ethnocentrism in Tanzania is still in its infancy. There are relatively few studies that have focused on consumer ethnocentrism and its influence on consumer behaviour. More so, these few studies that have been conducted in the SADC region have recommended that further studies on consumer ethnocentrism be conducted in this region to have a better understanding of this concept (Pentz et al., 2014; Makanyeza & du Toit, 2017). The main reasons for calls for further consumer ethnocentrism studies included the fact that consumer ethnocentrism varies from country to country and over time. It also varies with the product category. Consumer ethnocentrism cannot be generalised across product categories and from country to country. Consumer tastes and preferences need constant monitoring since they tend to change over time and consumers are dynamic (Akbarov, 2021). The motive behind this study was to understand the factors influencing consumer ethnocentrism towards purchasing domestic anti-malarial remedies in Tanzania in order to enhance the understanding of consumer ethnocentrism. Therefore, this study strengthens the existing body of consumer ethnocentrism knowledge. The study focuses on medical products specifically anti-malarial remedies. The findings of this will study provided insights to marketers on designing effective marketing strategies. The objectives of this study were; to explore the influence of the availability of domestic anti-malarial on ethnocentric tendencies to Tanzanian consumers; to explore the influence of the affordability of domestic anti-malarial remedies on ethnocentric tendencies to Tanzanian consumers; to explore the influence of the quality of domestic anti-malarial remedies on ethnocentric tendencies to Tanzanian consumers and to explore the influence of days of dosage of domestic anti-malarial on ethnocentric tendencies to Tanzanian consumers.

Literature Review

Consumer Ethnocentrism

Sharma and Shimp (1987:280) defined Consumer Ethnocentrism (CE) as “the beliefs held by consumers about the appropriateness, indeed morality, of purchasing foreign- made products”. The concept of consumer ethnocentrism is intended to capture individual consumer cognitions and emotions as they relate to product offerings from other countries (that is "out -groups") (Sharma and Shimp, 1987). In addition to Sharma and Shimp (1987), Balabanis and Siamagka (2017) defined consumer ethnocentrism as the beliefs held by consumers about the suitability and morality of purchasing domestic products at the same time rejecting foreign-made products. That is consumer ethnocentrism is the tendency of consumers to prefer locally produced products to foreign products. In the same vein, Agarwal (2020) describe consumer ethnocentrism as a tendency for people to favour locally made products. Ningsih et al. (2019) viewed consumer ethnocentrism as the inclination of consumers to view and assume one's cultural group as the best. De Nisco et al. (2016) assert that consumers who have strong ethnocentric beliefs tend to evaluate foreign products negatively than those who are less ethnocentric. Consumers who have strong ethnocentric tendencies avoid purchasing foreign-made products although they are of superior quality to local products (De Nisco et al., 2016). Karunaratne and Wanninayake (2019) asserts that consumer ethnocentric appeals can predict consumers' inclinations to purchase locally made products instead of imports. In the broad sense of ethnocentrism, product symbols from other countries may represent objects of disapproval to the ethnocentric consumer, whereas the products of one's own national group are objects of pride and attachment (Shimp *et al*., 1993). The literature proved that consumers who are ethnocentric believe that purchasing imported products is unpatriotic, causes loss of jobs, and hurts the domestic economy (Sharma and Shimp, 1987). The general applicability of ethnocentrism to the study of consumer behaviour has been acknowledged by different authors (Berkman and Gilson 1978; Markin, 1974). This concept of CE in this manner is used here to represent consumers' beliefs in the superiority of their own country's products (Altinaú and Tokol, 2007).

This perception is postulated to go beyond mere economic and functional considerations, and, instead, to have a more noble foundation rooted in morality (Altinaú and Tokol, 2007). That is to say, the concept of CE is rooted in nationalism, which means in order for the country's GDP to grow; consumers must concentrate on consuming the domestic products and ignore imported products. By doing so the domestic industries will be sustained and hence increase the national income. The CE concept is postulated to be one component of a complex, multifaceted construct involving consumers' *cognitive, affective, and normative* orientations toward foreign-made products (Shimp *et al*., 1993). The domain of this general construct spans object-based beliefs and attitudes such as perceptions of product quality, value and others, normative based beliefs and attitudes such as perceptions of whether one should or should not purchase foreign-made products, and personalistic-based considerations of what mode of behaviour i.e. product choice is in the consumer's best personal interest (Shimp *et al*., 1993). Sharma *et al.* (1995) argued that consumer ethnocentricity has the following characteristics; first, consumer ethnocentricity results from the love and concern for one's country and the fear of losing control of one's own economic interests as a result of the harmful effects that imports may bring to oneself or one's countrymen. Second, it contains the intention or willingness not to purchase foreign products. For highly ethnocentric consumers, buying foreign products is not only an economic issue but also a moral problem. This involvement of morality causes consumers to purchase domestic products even though, in extreme cases, the quality is below that of imports. In the eyes of ethnocentric consumers, not buying foreign products is good, appropriate, desirable, and patriotic; buying them is bad, inappropriate, undesirable, and irresponsible. Thirdly, it refers to a personal level of prejudice against imports, although it may be assumed that the overall level of consumer ethnocentricity in a society system is the aggregation of individual tendencies (Sharma *et al.,* 1995). In particular, this ethnocentric attitude towards foreign-made products is rooted as a psychological symptom by certain types of consumers (Balabanis *et al*., 2001). This psychological symptom explains why consumers prefer home country made products over foreign-made products even when the quality of foreign made products is better or the price is lower (Balabanis *et al*.,2001). Shimp and Sharma (1987) argued that a key reason for consumers to buy or not to buy imported products, regardless of the general conditions of product itself, such as quality, price and brand, is the consumer's patriotism. Out of loyalty, consumers faithfully refuse to buy imported products and punish fellow consumers for doing so, claiming that buying foreign goods puts one's country out of work, hurts the economy, or is disloyal. To measure consumer ethnocentric tendencies, Shimp and Sharma (1987) developed a well-known 17 item scale, the Consumer Ethnocentric Tendencies Scale (CETSCALE) to capture consumers' ethnocentric consistent tendencies toward foreign and domestic products and confirmed its validity in predicting consumers' buying behaviour. Such tendencies may precede attitudes, but they are not the equivalent of attitudes, which tend to be object specific. Herche (1992) showed that the CET scale can predict consumers' preferences to buy or own domestic as opposed to foreign products even better than demographic and marketing mix variables. This is to say, the ethnocentric level of consumers are determined at the point of purchasing the domestic product over foreign products.

Consumer Ethnocentrism and Product Choice

To relate CE with consumers' product choice, the concept of CE brings awareness to individuals for them to understand what purchases are acceptable to the in-group, as well as feelings of individuality and belonging (Chang and Cheng, 2001). For consumers who are less ethnocentric, products are evaluated on their virtues apart from national origin, or possibly even viewed more positively because they are foreign (Chang and Cheng, 2011). Consumer ethnocentrism (CE) begins its effect on the consumer's product choice when foreign-made products are allowed to be imported by governments into one's home country market (Sharma *et al.,* 1995). Under the trend of globalization and internationalism toward the world market, intense competition between different "made-in" products imported from foreign countries and one's home country made products, therefore, occurs (Sharma *et al.,* 1995). Such competition normally exists in various marketing aspects such as; price, product quality, after-sale service, brand equity, placing channels, or even the country of origin of products (the "made-in" label) (Sharma *et al.,* 1995). From the perspective of home country consumers, CE has been previously confirmed to be a key factor that affects their buying preference for domestic rather than foreign made products (Shimp and Sharma, 1987).

Consumer Ethnocentrism and Necessity of the Product

While some studies indicate that consumer ethnocentrism determines consumers' attitudes towards purchasing imported goods (Shimp and Sharma, 1987; Herche, 1992), Sharma *et al.* (1995) found out that, for Korean consumers, the perceived necessity of a product moderated the effect of ethnocentrism on attitudes towards imports. The authors examined ten products in their study and found out that Korean consumers rated medicine, kitchenware and beef as the most necessary products in the study and golf clubs, insurance and bananas as the least necessary. Specifically, Sharma *et al.* (1995) found that the less necessary a product is perceived to daily life, the greater the impact CE has on attitudes toward importing that product. In addition, the more those consumers perceive imports to threaten their economic welfare, the greater the role ethnocentrism plays in determining consumer attitudes towards importing products. In a country such as; Poland, which is experiencing a pro-domestic movement, familiarity with the moderating effect of product necessity may be useful to marketers who are considering the Polish market as a distribution outlet (Huddleston *et al*., 2001). In this study the effect of ethnocentric tendencies on choice of anti-malarial remedies was examined. The findings of this study will be a useful contribution to knowledge on the relationship between the choice of anti-malarial remedies and ethnocentric tendencies among Tanzanians.

Methodology

This study was carried out in Mbeya Region which is in the Southern part of Tanzania. Mbeya comprises of consumers from different parts of Tanzania and it has the advantage of being close to two national borders, Malawi and Zambia, which offer routes for importing medicines. The study employed case study design to obtain in-depth understanding of the phenomena. The selection of this design was based on the nature of the study which was able to examine the "what" "how" and "why" questions pertaining to the researcher's topic of interests (Yin, 2013). The main aim of the case study is to study a select sample intensively so as to obtain a thick description about the topic of the study (Eurepos, Mills & Wiebe, 2010). Using this research design, the researcher obtained useful responses from the participants as the researcher adopted the flexibility of the study to explore ideas and insights on the factors influencing the ethnocentric tendencies of Tanzanian consumers towards purchasing domestic anti-malarial remedies. Also, this study adopted qualitative research to explore the factors influencing the ethnocentric tendencies of Tanzanians while purchasing anti-malarial remedies. According to Hancock (1998:2), qualitative research is concerned with developing explanations of social phenomena. It aims to help us understand the world in which we live and why things are the way they are.

The selection of this approach was motivated by the following reasons: first, the researcher was interested to understand in natural settings the ethnocentric tendencies of Tanzania consumers towards purchasing domestic anti-malarial remedies. Second, qualitative research is important in the behavioural sciences where the aim is to discover the underlying motives of human behaviour. This was very useful to the researcher as it helped her to discover the hidden factors that influenced consumers while seeking for malaria medication. Through qualitative research, the researcher was able to analyse the various factors that motivated Tanzanian consumers to behave in a particular manner. Also, the Interpretivist theoretical lens was adopted in this study. As the interpretivist paradigm seeks to understand the subjective reality of participants in a way that is meaningful for the participants themselves (Brand, 2009), the researcher acknowledged the different demographic characteristics studied and participants' subjective ways of deciding the malaria medication which suited their chosen criteria. By adopting an Interpretivist paradigm, the researcher assumed that the ethnocentric tendencies of Tanzanian consumers towards purchasing domestic anti-malarial remedies were not an objective phenomenon with known properties or dimensions; hence, a subjective way of reasoning was needed. The adoption of the Interpretivist paradigm helped the researcher to recognize the wide interpretations of reality from the participants' perspective. In this study, respondents were viewed as peers or friends and an attempt was made to discover hidden meanings, as opposed to measurement in the research (Proctor, 2003). In this study, the targeted population were key informant from Tanzania Medicines and Medical Devices Authority (TMDA,) Tanzanian consumers and pharmacists. Purposive sampling strategy was used to obtain participants in this study. Purposive sampling permits the researcher to decide which cases to choose that will best answer the research research questions and meet the research objectives

(Saunders *et al*., 2009). This strategy enabled the researcher to gain access to a variety of knowledge and experience relevant to different aspects of the research phenomenon in order to address the research questions and meet its objectives. Profiles of individual participants are shown in Table one.

Table 1: Participants' Profile

Participant	Gender	Level of Education	Occupation
Bupe	Female	Diploma	Pharmacist
Alex	Male	Primary Education	Taxi Driver
Ben	Male	Diploma	Retired Pastor
Amba	Male	Diploma	Pharmacist
Amy	Female	Bachelor Degree	Public Relations Officer
Bariki	Male	Masters	Assistant Lecturer
Jane	Female	Primary Education	Housewife
Bity	Female	Masters	Managing Director at TMDA
Emmanuel	Male	Bachelor Degree	Pharmacist

NB: Participants' names listed in Table 1 are not the real names.

According to the nature of the study, the sample size was 9 respondents which was comprised of 1 key informant from TMDA, 2 pharmacists, and 6 consumers. In this study it should be noted that, pharmacists helped the researcher to understand the criteria used by consumers while purchasing/seeking advice on anti-malarial remedies. Also, key informants from TMDA helped researcher to understand the availability of domestic anti-malarial remedies together with the capacity of pharmaceutical domestic industry in producing anti-malarial remedies. Qualitative data was obtained through in-depth interview. Collis and Hussey (2003) suggested that in-depth interviews are appropriate when it is necessary to understand the construct that the interviewee sees as a basis for his or her opinions and beliefs about a particular matter. In-depth interview is also appropriate if the aim of the interview is to develop an understanding of the respondent's world so that the researcher might influence it either independently or collaboratively. Use of in-depth interview in this study helped the researcher to get an in-depth understanding on the ethnocentric tendencies of Tanzanian consumers towards purchasing domestic anti-malarial remedies. This method of data collection was appropriate in this study as the researcher believed that interviewing individual participants on the studied phenomena would help in collecting rich information which would be full of the individual's subjective perception and experiences on evaluation of anti- malarial remedies. An interview guide was prepared based on themes identified from the literature which the researcher believed would enable useful information to be obtained from the participants. Interviewees were informed about the aim of the interview session. The researcher obtained consent from the interviewees to participate in the study. The interview sessions were audio taped and notes were taken simultaneously. This method of data collection was useful in this study as the rich information obtained helped to answer the research questions and meet the objectives. The trustworthiness of the study was determined through credibility (in preference to internal validity), transferability (in preference to external validity/ generalisability), dependability (in preference to reliability) and confirmability (in preference to objectivity) as proposed by Lincoln and Guba (1985) as cited by Shenton (2004) and Kisawike (2015). The thematic data analysis technique was used to analyse the collected data. Braun and Clarke (2006) defined thematic analysis as a qualitative analytic method for identifying, analysing and reporting patterns (themes) within data. It minimally organizes and describes the data set in rich detail. However, frequently it goes further than this, and interprets various aspects of the research topic. According to Namey *et al* (2012), thematic analyses, as in grounded theory and development of cultural models, requires more involvement and interpretation from the researcher. Thematic analyses move beyond counting explicit words or phrases and focus on identifying and describing both implicit and explicit ideas within the data, that is, themes. Although, the procedures of analysing data by using the thematic analysis has been said to miss the reliability component in the study, nevertheless thematic analysis is useful in capturing the complexities of meaning within a textual data set. It is also the commonly used method of analysis in qualitative research (Namey *et al*., 2012). In analysing the obtained information, the researcher adopted the Braun and Clarke's guide to thematic analysis. The components or steps of the process are; becoming familiar with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes and producing the report (Braun and Clarke, 2006).

A theme captures something important about the data in relation to the research question and represents some level of patterned response or meaning within the data set. Firstly, the researcher gained familiarity with the collected data by re-reading the field notes and listening the audio in an active way. The recorded interviews were transcribed into the written form. Secondly, the researcher generated initial codes by grouping the data in meaningful groups. Thirdly, the researcher searched for themes sorted different codes into potential themes by considering how different codes could be combined to form overarching themes. Fourthly, the researcher reviewed the themes by identifying if there were enough data to support each identified theme. Also, some themes were broken into sub-themes where it was necessary to do so. Fifth, the researcher defined and named the themes that were used to present and analysed the collected data. This was done by identifying the essence of what each theme was about and determining what aspect of the data each theme captured. In each theme, the analysis was made in detail to provide the meaning. Also, the relationship between the research questions and the identified themes was taken into consideration to see if the research questions were answered through the responses in each theme. Lastly, the report was drafted that detailed the findings by synthesizing and summarizing.

Research Findings

The ethnocentric tendencies of Tanzanian consumers when purchasing the domestic anti-malarial remedies were examined in this study. Pharmaceutical industry in Tanzania is not able to produce enough medical products to satisfy the needs of all Tanzanians; for this reason the importation of the medical products cannot be avoided. In this situation, knowing the ethnocentric tendencies towards the available domestic anti-malarial remedies was vital. In this study it was found out that the ethnocentric tendencies of Tanzanian consumers toward purchasing the domestic anti-malarial remedies were influenced by availability, affordability, quality and days of dosage of the anti-malarial remedies.

Availability of Domestic Anti-malarial Remedies

In this study, the availability of the domestic anti-malarial remedies was identified in light of the capacity of the domestic pharmaceutical industry to produce enough anti-malarial remedies to cater for the needs of all Tanzanians. It was found out that the technological level of the pharmaceutical industry in Tanzania hinders the production of required anti-malarial remedies to meet the demand.

> *"The production of anti-malarial remedies needs complicated procedures in order to meet the required standards. The technology we have does not accommodate the production of enough anti-malarial remedies that can satisfy all Tanzanian"* (Bity).

Production of the anti-malarial remedies needs advanced technology in order to produce medicines that meet the required standards. Technological hindrances have opened the door for the importation of anti-malarial remedies from different countries, which raised the competition among anti-malarial remedies in the Tanzanian market.

> *"Most of anti-malarial remedies are imported from countries such as; Germany, India, United Kingdom, Kenya, Uganda, Belgium, China, Switzerland, Netherlands and Italy;very few anti-malarial remedies are produced within the country"* (Bity).

The importation of anti-malarial remedies from the economically developed countries has attracted some Tanzanian consumers to undervalue their home produced anti-malarial remedies, believing that the imported anti-malarial remedies are of higher quality than domestically produced anti-malarial remedies. Tanzanian Government through the Ministry of Health Community Development, Gender and Children has tried to promote the usefulness of Artemether + Lumefantrine (ALU), which is among the anti-malarial remedies produced within the country. Radio and television were used to raise awareness of the availability, affordability and usefulness of the particular medicines. However, the government did not encourage citizens to utilize the available anti-malarial remedies rather than imported anti-malarial remedies; possibly the limited capacity of domestic pharmaceutical industry in producing large quantities of anti-malarial remedies was the main reason. As a result, most Tanzanians, especially those with high income, were attracted to use foreign anti-malarial remedies over domestically produced anti-malarial remedies. Availability of the domestic ant-malarial remedies in this study was identified in the light of the capacity of the home industry to supply the required anti-malarial remedies to all Tanzanians. It was found out that producing anti-malarial remedies needs a well-equipped infrastructure in terms of technology in order to produce anti-malarial remedies that will meet the required standards. The level of technology of the pharmaceutical industry in Tanzania was found to be low; as a result the home industry was not capable of producing the required anti-malarial remedies to meet the demand of all Tanzanians. To meet the demand for anti-malarial remedies, the Government allows the importation of foreign anti-malarial remedies from other countries such as; Germany, India, the United Kingdom, Kenya, Uganda, Belgium, China, Switzerland, Netherlands and Italy. The importation of foreign anti-malarial remedies in Tanzania has resulted in widening the choice of anti-malarial remedies to use. The Tanzanian Government, through the Ministry of Health Community Development, Gender and Children, is trying to promote the usefulness and affordability of the domestically produced anti-malarial remedies, especially ALU. However, consumers are not advised on the importance of valuing their home produced anti-malarial remedies over foreign anti-malarial remedies. This has attracted most Tanzanian consumers to take the domestic anti-malarial remedies for granted. The Tanzanian Government needs to educate consumers to value their home produced anti-malarial remedies and other medication. Despite the limited volume of anti-malarial remedies produced by the domestic pharmaceutical industries, the Government could urge patients to consume the available domestic anti-malarial remedies first, and then opt for foreign anti-malarial remedies when the domestic anti-malarial remedies are out of stock. By so doing, the notion of nationalism in minds of Tanzanians will be built; not only regarding domestic medical consumption, but also consumers will value other domestically produced products, which will strengthen the economy of the country.

Affordability of Domestic Anti-malarial Remedies

The ability to purchase anti-malarial remedies was shown to shape the purchasing decisions of a number of consumers. It was found out that most low income consumers were able to purchase the domestically produced anti-malarial remedies because they were cheaper than foreign anti-malarial remedies.

> *"I use ALU for malaria treatment because it is cheap, I always buy it for Tshs 2,000 ($0.864) per dose"* (Jane*).*

The affordability of domestic anti-malarial remedies had influenced most participants especially those with low income, to purchase those medications. Foreign anti-malarial remedies such as Artequin, Co-Artesiane, Duo-Cotecxin, Fansidar, Artequik and Metakelfin which were imported from countries such as Switzerland, Belgium, China, Kenya and other anti-malarial remedies from other countries were relatively expensive, being sold at prices ranging from Tshs.7, 000 ($3.019) to Tshs.14, 000 ($6.039) which is not affordable for most Tanzanians, especially those with low income. These consumers purchased domestic anti-malarial remedies, which are sold for Tshs 2,000 ($0.864). The responses from the pharmacists confirmed that some consumers could not afford to purchase foreign anti-malarial remedies, since they are highly priced compared to the domestically produced anti-malarial remedies.

> *"Most consumers in this village are managing to purchase the ALU anti-malarial remedy which is domestically produced. Previously I was bringing a few foreign anti-malarial remedies such as Metakelfin and Fansidar to my shop but I found that most of the time those medications expired since most of customers could not afford to purchase them"* (Bupe*).*

Only relatively wealthy consumers were able to purchase imported medications:

> *"Foreign anti-malarial remedies are demanded by consumers with high income, low income earners prefer the domestic anti-malarial remedies specifically ALU"* (Amba).

Thus, consumption of domestic anti-malarial remedies was shown to be influenced by the affordability factor. Consumers did not necessarily purchase domestic anti-malarial remedies, because of valuing their home produced anti-malarial remedies but they were forced to do so by their limited income. Most Tanzanians are living below the poverty line; hence, their consumption behaviour in relation to goods and services is shaped by their level of income. Domestic anti-malarial remedies are priced lower compared to foreign anti-malarial remedies. This has attracted a number of Tanzanians, especially those with low level of income, to use them. Since most of the foreign anti-malarial remedies are expensive this has hindered low income earners from using them; only higher income earners managed could purchase them. It could be shown that domestic anti-malarial remedies were demanded solely because they were affordable to most consumers, but if the price of the domestic anti-malarial remedies had been the same as the price of foreign anti-malarial remedies, more consumers might have opted for the foreign anti-malarial remedies. The reason was that Tanzanian consumers were not well informed about the importance of utilizing domestic products over foreign products. The ethnocentric use of foreign products would result in the loss of jobs and hurt the economy of the country, but this was not in the Tanzanian attitude. This requires the Government of Tanzania, through the Ministry of Health Community Development, Gender and Children, to think of having promotional strategies which would encourage Tanzanians to use home produced anti-malarial remedies irrespective of their level of income. This would help Tanzanians in building the confidence on their home produced anti-malarial remedies and other medication and hence increase the level of ethnocentrism, which would boost the domestic industries and thereby strengthen the economy.

Quality of Domestic Anti-malarial Remedies

The quality of the domestic anti-malarial remedies was questioned by some consumers. It was found out that some of the medicines produced in Tanzania were of low quality as evaluated based on the performance of the particular medicine.

> *"I don't have courage to purchase the domestically produced medications as even the pain killers sometimes are not functioning"* (Bariki).
>
> *"I am using Metakelfin from Kenya for malaria treatment. Previously I was using ALU but I found my body temperature rising every time I used the medicine"* (Alex).

Consumers who purchased some domestically produced medications and found performance different from their expectations lost trust in the domestically produced anti-malarial remedies and hence valued the foreign anti-malarial remedies. The pharmacists recognized this problem:

> *"Some consumers are complaining about the performance of ALU, I think the government needs to take some measures to see how they can improve the quality of the domestic produced medicines*" (Emmanuel).

Pharmacists received complaints from their customers about the poor performance of the domestic anti-malarial remedies, especially ALU, supporting the view that the ethnocentric tendencies of a number of Tanzanian consumers in purchasing domestic products were affected by the quality of the medication produced within the country.

Conversely, a few consumers were found to be satisfied with the domestic anti-malarial remedies

> *"I am using ALU for malaria treatment previously I was using Chloroquine but after it's resistance I started to use ALU. I am comfortable with this medication since I have never been disappointed"* (Ben).

As this example shows consumers who had not experienced any problems on the use of the domestic anti-malarial remedies might be happy with their purchase decision, that is to say, satisfied with the performance of the domestically produced anti-malarial remedies. However, some consumers were shown to undervalue the domestic anti-malarial remedies despite not having experienced any problems, negative word of mouth caused them to form a negative attitude towards domestic anti-malarial remedies.

> *"Some consumers are coming to my shop asking for foreign anti-malarial remedies such as Metakelfin and Orodar, both from Kenya. I ask them why they don't use ALU because it is cheaper than those chosen medication. They said that their friends were affected by the consumption of ALU; so they are hesitating to face similar problems*" (Amba).

Negative word of mouth from a few consumers who were affected by the domestic anti-malarial remedies spread negativity in the minds of other Tanzanians on the poor performance of the domestic produced anti-malarial remedies. As a result, consumers who were able to buy foreign anti-malarial remedies valued foreign anti-malarial remedies over the domestic anti-malarial remedies. However, a few consumers who were satisfied with the domestic anti-malarial remedies advised their fellow Tanzanians to value their home produced anti-malarial remedies.

> *"Tanzanians should not underrate themselves by thinking that their home produced medicine cannot cure malaria, instead they should be proud of on their home produced medicines since they function in the same way as the foreign medicines*" (Ben).

Tanzanians need to see the potential of medication produced within their country, trust and use it. By so doing it would strengthen the domestic industries and hence strengthen the economy. The quality of the domestic produced anti-malarial remedies was found to be questioned by a number of consumers. The quality of domestic anti-malarial remedies in this study was defined in terms of the performance of the medication consumed. Consumers who experienced negative performance of anti-malarial remedies and other medicines which were domestically produced were shown to be disappointed by the domestic anti-malarial remedies; as a result some of them who were capable of purchasing foreign anti-malarial remedies did so. Negative word of mouth on any product has great impact on the progress of any industry; changing negative attitudes in consumers' minds requires a lot of effort. The Government, through the Ministry of Health Community Development, Gender and Children, is required to monitor the quality of the domestic anti-malarial remedies in order to make sure that the produced anti-malarial remedies meet the required standards and satisfy consumers' needs. These findings support the argument of Newton*et al*. (2006) that the health of people living in the developing countries is critically dependent upon the availability of good quality medicines. Safety, quality, and efficacy of medicines are the three most important criteria used by governments to regulate pharmaceuticals (WHO, 2000). Quality of drugs is especially important and is one of the earliest to come under government scrutiny (Amin and Kokwaro, 2007).

Days of Dosage and amount of Tablets per Course

A dose is the amount taken on one occasion-so for example if it is 2 tablets, twice a day, for 6 days, the dose is 2 tablets, the course is 24. Duration of the course and amount of tablets per dose were among the criteria used by participants when purchasing anti-malarial remedies. Among the anti-malarial brands in the Tanzanian market, ALU (an anti-malarial remedy produced in Tanzania) was shown to be a long course of treatment as a patient has to take 24 tablets per course. This discouraged a number of consumers from using it.

> *I use Orodar anti-malarial drugs from Kenya; the reasons for choosing this anti-malarial remedy is that the course is a short one (I take it once) and does not make me feel tired or headache after taking it so I go on with my daily activities after taking it.* (Amy).
>
> *I use Metakelfin anti-malarial drugs from Kenya. Its course is short; I take it once then after a few minutes I go on with my daily activity"* (Alex).

Most consumers were interested to get the malaria treatment and go on with their daily activities without disturbing their timetable. The single dose attracted them to use the particular medication.

> *"ALU anti-malarial remedy is attractive to number of consumers because the price is lower compared to other anti-malarial remedies; but the number of tablets per dose (a patient has to take 8 tablet per day; 4 tablets in the morning and another 4 tablets in the evening for three days amounting to 24 tablets) discourages most Tanzanians from using it"* (Amba).

It can be revealed that the number of tablets per dose of different anti-malarial remedies differs from one brand to another. For instance with the ALU anti-malarial remedy made in Tanzania a patient has to take 8 tablets per day for three days, amounting to 24 tablets per course, with Duo-Cotecxin anti-malaria from China a patient has to take 2 tablets per day for three days and with Metakelfin a patient has to take 2-3 tablets once (depending on the body weight of a patient). Comparing brands of the anti-malarial remedies, ALU from Tanzania was found to require many tablets per course. Taking 24 tablets per course made a patient become tired throughout the treatment period and hindered patients from going on with other daily activities, because their bodies were weakened. As a result, most consumers in this category preferred foreign anti-malarial remedies. The findings above revealed that the ethnocentric tendencies among participants were low as most purchased domestic anti-malarial remedies not to protect their home industries or because they valued the home produced anti-malarial remedies but because domestic anti-malarial remedies were cheaper than foreign anti-malarial remedies. Also, the performance of the domestic anti-malarial remedies raised the question of a quality of the domestic anti-malarial remedies produced. This resulted in discouraging a number of Tanzanian consumers from using the domestic anti-malarial remedies and instead they valued the foreign anti-malarial remedies. Among the criteria used by Tanzanians when purchasing anti-malarial remedies were the days of dosage and amount of tablets per course. It was found out that the course of domestic anti-malarial remedies, especially ALU, required a large quantity of tablets compared with other anti-malarial brands from other countries. In addition to the quantity of the tablets, the medication had a tendency of raising the body temperature of a patient after using it and also it took a further week for a patient to recover after finishing the course; thiswas due to reaction to the medication. This has discouraged a number of Tanzanians from using it, especially consumers who preferred taking the malaria medication while working. As a result many consumers prefer to purchase the Metakelfin anti-malarial remedies from Kenya and other anti-malaria brands that required fewer tablets per course. The Government, through the Ministry of Health Community Development, Gender and Children, could find a means of modifying the dose intake without disturbing the contents by reducing the number of tablets per course from 24 tablets to 9-12 tablets per course.

If they did so, more consumers would be attracted to use home produced anti-malarial remedies and hence strengthen domestic industry. Generally, the findings revealed that the ethnocentric tendencies among participants on purchasing the domestic anti-malarial remedies were quite low. The Tanzanian Government has encouraged Tanzanians to use the ALU anti-malarial remedy due to its usefulness and affordability, but no emphasis was given in educating Tanzanians to use home produced anti-malarial remedies. Despite the limited capacity of local anti-malarial production, the Tanzanian Government could encourage the Tanzanians to value their home produced anti-malarial remedies first. Without such encouragement, consumers found domestic anti-malarial remedies unattractive and instead opted for foreign anti-malarial remedies if they could afford them. Consumers purchased domestic anti-malarial remedies solely because of their low price, but not because they cared about the growth of the domestic industry.

In addition, the performance of the domestic anti-malarial remedies and the number of the tablets per course raised a question on the quality of the domestic anti-malarial remedies produced. This resulted in discouraging a number of Tanzanian consumers from using the domestic anti-malarial remedies, and led them to prefer the foreign anti-malarial remedies. There was no nationalism in the minds of Tanzanians when purchasing domestic anti-malarial remedies. The findings above were contrary to the characteristics of ethnocentric consumers as identified by Sharma *et al. (*1995). They argued that consumer ethnocentricity has the following characteristics; first, consumer ethnocentricity results from the love and concern for one’s country and the fear of losing control of one’s own economic interests as the result of the harmful effects that imports may bring into oneself. Second, it contains the intention or willingness not to purchase foreign products. For highly ethnocentric consumers, buying foreign products is not only an economic issue but also a moral problem. This involvement of morality causes consumers to purchase domestic products even though, in extreme cases, the quality is below that of imports. In the eyes of ethnocentric consumers, not buying foreign products is good, appropriate, desirable, and patriotic; buying them is bad, inappropriate, undesirable, and irresponsible. Thirdly, it refers to a personal level of prejudice against imports, although it may be assumed that the overall level of consumer ethnocentricity in a society system is the aggregation of individual tendencies (Sharma *et al.,* 1995).

Conclusion and Recommendations

In this study it was found out that the pharmaceutical industry in Tanzania is not equipped enough to produce sufficient anti-malarial remedies to cater for the needs of all Tanzanians. In order to meet the demand, the country allowed the importation of anti-malarial remedies from different countries. The variety of different anti-malarial brands in the market has contributed in widening the choices of anti-malarial remedies for Tanzanian consumers. The Government through the Ministry of Health and Social Welfare has promoted the usefulness and affordability of ALU, one of the domestic anti-malarial remedies. However, consumers were not advised to use the ALU anti-malarial remedy over foreign anti-malarial remedies. This made most consumers purchase any anti-malarial brand from any country because they had a free choice and they did not see a problem in purchasing foreign anti-malarial remedies rather than domestic anti-malarial remedies. The findings from the field indicated that only consumers with low income were shown to purchase the ALU anti-malarial remedy, whereas most consumers with a high level of income switched from one brand to another, based on their interest in a particular medication.

Also, uncertainties in the consumption of domestic anti-malarial remedies influenced some consumers to use a number of criteria for evaluation of anti-malarial remedies. The uncertainties of malaria medication prompted most consumers to be highly involved in their decision making towards seeking for malaria medication. Consumers used both extrinsic such as Country of origin, price and brand name and intrinsic, such as content and quality cues in evaluating anti-malarial remedies. Through the identified criteria, the quality of the domestic anti-malaria remedies was questioned by a number of consumers. They complained that pharmaceutical companies produced products of low quality, as they found the performance of the medicines to be poor. Some consumers experienced some problems after using the ALU anti-malarial remedy which was domestically produced. This made some consumers form negative perceptions of locally produced anti-malarial remedies. In addition, the ALU anti-malarial remedy was found to require a large number of tablets, which discouraged consumers from using it.

Due to these factors, most consumers were found to prefer foreign anti-malarial remedies over the locally-produced anti-malarial remedies. Therefore, from the findings above it can be concluded that the ethnocentric tendencies of Tanzanian consumers when purchasing the domestic anti-malarial remedies were extremely low. This is because they purchased domestic anti-malarial remedies because of their affordability and not because they valued their home produced anti-malarial remedies. Also, there was no guilt in their minds that purchasing foreign anti-malarial remedies would result in the loss of jobs and hurt the economy of the country. The findings of this study are expected to provide health professional bodies with knowledge about the decision making process Tanzania consumers' use while purchasing anti-malarial remedies. This will help them to boost the standard of the different domestic medical products and hence increase ethnocentric tendencies among Tanzanian consumers.

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Assessing Africa Readiness to Host Travelers with Disabilities: A Review of Accessible Accommodation Studies in African Countries

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Abstract: *Even though Africa has been involved in the movement towards protecting the rights of disabled people, the emerging market is still under-served. Despite having multiple tourist attractions, the continent has not fully implemented its tourism and disability policies to make sure that barrier-free accommodation services are offered to disabled guests. The purpose of this study was to review and analyze studies done on the accommodation sector in African countries and to establish the extent to which the existing accommodation establishments were user-friendly to disabled people. Google Scholar, EBSCOhost, and science direct were used to generate academic journals. Two main themes mainly demand and supply was developed from the content analysis. On the demand side, quality of services and user-friendly services were the main challenges limiting the accommodation sector from offering barrier-free services to disabled guests while on the supply side, accessible room facilities were seen as a critical issue. Hotel service providers needed to make sure that there were accessible facility in bar and restaurant including ramps, elevators, hearing aids, leveled access routes as well as spacious rooms to host disabled guests. Provision of barrier-free services as recommended in the social disability model would be possible if service providers were willing to change their attitude regarding disability. Once the attitude is changed then it would be easy to resolve the structural and communication barriers.*

Keywords: Travelers with Disabilities**,** Accessible Accommodation, People with Disabilities, African countries

INTRODUCTION

Africa is the largest and the second most populated continent after Asia. The continent covers about 30.3 million km^2 which is equivalent to 11.7 million square miles. The continent accounts for 6% of Earth's total surface area and around 20% of its land area. Tourism is one of the crucial industries globally, and it is the second world's largest sector after the banking industry (Edusei *et al.*, 2015). Africa is rapidly becoming a global tourism economy (Rogerson, 2007). This is possible because the continent is blessed with abundant tourist attractions that attract a larger portion of visitors from other continents as well as from Africa itself. Mount Kilimanjaro (Tanzania), the famous Pyramids of Giza (Egypt), Kruger National Park (South Africa), Marrakesh Medina (Morocco), Sossusvlei Dunes (Namibia), mountain gorillas (Rwanda), Victoria Falls (Zambia & Zimbabwe), Nyika Plateau National Park (Malawi), Makgadikgadi Pans (Botswana), Liwonde National Park (Malawi), wildlife safaris (Tanzania and Kenya), Lower Zambezi (Zambia), Gorongosa National Park (Mozambique), Etosha National Park(Namibia), Nyiragongo Volcano

(DRC), Lake Malawi (Malawi), African Renaissance Monument (Senegal), Olumo rock (Nigeria), Kakum National Park (Ghana) and Goree Island (Senegal) are some of the famous tourist attractions in Africa. Tourism is an important sector for the economic development of most African economies (UNCTAD, 2017). The industry has helped most African countries move away from the dependency economy to the service sector (Mariki *et al.,* 2011). It is the fastest-growing sector contributing significantly towards employment creation, foreign exchange, investment, strengthening regional integration, as well as reducing poverty for most of the countries (Africa Tourism Monitor, 2016). This sector also serves as a tool in creating closer bonds between cultures, countries and people (Acha-Anyi, 2018). The importance of this sector in African countries is reflected in the number of international tourist arrivals on the continent. As of December 2020, a total of 1.2 million people arrived in Africa (Doris, 2021). Apart from arrivals, the tourism sector contributed 86 billion USD to the GDP of the continent and offered 17.5 million jobs in 2020 (WTTC, 2021). Furthermore, it is estimated that the sector will contribute $269 billion to the GDP of the African continent and offer 29 million new jobs by 2026(African Development Bank Group News, 2018). The tourism sector is reported to create a positive effect on people that are directly involved in the sector (Ozturk, Yayli, & Yesilitas, 2008; Eichhorn, Miller, & Tribe, 2013). This sector is known for its role in bringing people closer (Edusei *et al.,* 2015).

Unfortunately, the involvement and the participation of people with disability in the tourism industry has been limited (Maskele, Woreta, & Weldesenbet, 2018). Even though that tourism is as much of a social right of everyone, to disabled people, it seems impossible (Chikuta, 2015). Little emphasis has been placed by the service providers to accommodate them even though they constitute a significant market (Chikuta, 2015). Policymakers are ignoring them and the society they live in keeps on discriminating them. They are seen as beggars, economically unproductive and lazy (Chikuta, 2015). Service providers in Africa are unaware of the disabled travel market and this is caused by ignorance regarding the economic value of the disabled travel market (Bisschoff & Breedt, 2012). Issues of disability in Africa are seen as charity matters and not as rights of a country’s commitment to democracy by treating all citizens as equal members of the society (Maja-Pearce, 1998). Disabled people in African countries face a lot of challenges. These include; attitude barrier e.g., negative attitude from the community and service providers (Oladokun, Ololajulo & Oladele, 2014; Mensah, Badu & Opoku, 2015; Bombom & Abdullahi, 2016; Adam, Boakye & Kumi-Kyereme, 2017; Adam, 2019) and ignorance of service providers (Spencer & Mnqayi, 2017; Abd-Elraof, Dawood & Mohamma, 2018; Chikuta, DuPlessis & Saayman, 2018), communication barriers e.g., limited trained personnel to communicate with disabled people (Oladokun, Ololajulo & Oladele, 2014; Lwoga & Mapunda, 2017; Refaat & Ibrahim, 2017; Chikuta, Kabote&Chikaya, 2017; Chikuta, DuPlessis & Saayman, 2018), lack of clear and up- to- date information (Adam, Boakye & Kumi-Kyereme, 2017; Chikuta, DuPlessis & Saayman, 2018) and lack of user-friendly hotel websites (Khalil & Fathy, 2017); physical challenges e.g., limited facilities (Lwoga & Mapunda, 2017; Refaat & Ibrahim, 2017; Chikuta, Kabote & Chikaya, 2017), inaccessible transport systems (Bombom&Abdullahi, 2016; Chikuta, DuPlessis & Saayman, 2018), lack of appropriate tourism activities for disabled people (Chikuta, Kabote&Chikaya, 2017), and lack of accessible accommodation (Bisschoff & Breedt, 2012; Chikuta, 2015; Khumalo & Ndlovu, 2017; Mangwiro *et al.*, 2018; Meskele, Woreta &Weldesenb, 2018). These are among the serious problems limiting disabled travelers from enjoying their trips. As a result, few people with disabilities in Africa are engaging in leisure and tourism activities (Mensah, Badu, & Opoku, 2015). Generally, the disabled travel market has been ignored (Florence, 2018), and this is why it is an untapped market (Avis, Card, & Cole, 2005). Few countries and companies have shown interest in serving this market (Snyman, 2004), because they see it as a niche (Vila, González, & Darcy, 2019) or weak travel market (Chikuta, 2015). Globally, it is estimated that about 15% of the world's population, which is about 1 billion people, live with some form of disability of which 2% to 4% experience significant difficulties in functioning (World Health Organization , 2019). This figure is expected to rise to 1.2 billion people by 2050 (Vila, Darcy, & González, 2015), due to demographic changes, natural disasters, accidents, as well as an increase in chronic diseases such as; diabetes, cardiovascular disease, cancer and other mental health issues (World Tourism Organization UNWTO , 2011). Global statistics indicate that between 110-190 million people which is $1/5^{th}$ of the world population in the tourism market would require accessibility (Burnett & Bender-Baker, 2001).

Developing countries are estimated to have a higher growth rate (NIA & NIH, 2011), with about 80% of the world's disabled population living in Africa, Latin America and South-East Asia. In Sub-Saharan Africa, 3.2 % of the total population is reported to have at least one form of disability while 1.1% is reported to be covered by those with more than one form of disability. The data specifically reported that visual impairment is the most common form of disability in Africa affecting 1.8% of the total population, followed by mobility disability (1.6%) of the total population), memory impairments (1.2%) and hearing challenges between 0.4% to 0.7% (Montes & Swindle, 2021). Disability in Africa is caused by war, violence, superstition, poor nutrition and poverty (Maja-Pearce, 1998). In Africa, disability is high in rural areas and is believed to affect those with less education (Montes & Swindle, 2021). Due to the increase in the number of people with disabilities globally, several initiatives were developed by various African countries to make sure that the rights of people with accessibility requirements are protected. For example, South Africa has passed legislation supporting people with disabilities. The country has national building regulations to support a barrier-free environment to accommodate disabled people. But the Bureau of Standards code 04400 of 1995 failed to make sure that all the existing buildings are user-friendly to disabled people. On top of that, the tourism body in the country has failed to make sure that universal designs for disabled people are well established (Ashton, 2012). On the other hand, Zimbabwe has a tourism authority responsible for ensuring that accessible facilities are fixed to accommodate disabled people (Chikuta, 2015). Furthermore, Tanzania adopted the National Policy on Disability in 2004 to provide a conducive environment for disabled people to engage in productive activities (URT, 2004). Ghana, on the other hand, passed the Persons with Disability Act in 2006 to improve the attitude of able-bodied persons towards disabled people and to make sure that disabled people are free to access public areas. Egypt also passed the Rights of Persons with Disabilities Act in 2018 making sure that disabled people get equal opportunities in work, health and other issues just like able-bodied persons (Egypt Official Gazette, 2018). In the accommodation sector, disabled people have been neglected. As a result, tourism bodies responsible for grading accommodation establishments offering accessible facilities are failing to do their work as required (Ashton, 2012). Hence, hotel owners and managers don't take an active role in promoting hotel rooms appropriately to people with disabilities (Darcy, 2000). As a result, most of the accommodation establishments in Africa are not accessible to disabled people. Despite all the challenges, people with access needs tend to choose expensive hotels because of accessibility desires (Buj, 2010). They need to ensure that the accommodation meets their needs and desires before they make travel decisions (Darcy & Pegg, 2011). In case of the absence of accessible accommodation, disabled people are usually forced to find alternative destinations that have accessible features or cancel their trips (Stumbo & Pegg, 2010). Once they find the destination that offers accessible facilities, they are willing to pay anything to get the desired service (Magwiro *et al.*, 2018) and may return to the same destination once satisfied with the accessibility facilities and positive staff treatment (Tantawy, Kim, & Pyo, 2005).

Although the existing literature has pointed out challenges limiting people with disabilities from enjoying accommodation in African countries, their focus was on specific African countries such as South Africa (e.g., Bisschoff & Breedt, 2012; Spencer & Mnqayi, 2017; Khumalo & Ndlovu, 2017), Zimbabwe (e.g., Mangwiro *et al.*, 2018), Egypt (e.g., Tantawy, Kim & Pyo, 2005; Atef, 2011; Hussein & Jones, 2016; Khalil & Fathy, 2017; Abd-Elraof, Dawood & Mohamma, 2018), Ethiopia (e.g., Meskele, Woreta & Weldesenb, 2018) and Ghana (e.g., Adam, 2015). Also, the focus of their studies was either from the suppliers perspective (e.g., Tantawy, Kim & Pyo, 2005; Atef, 2011; Bisschoff & Breedt, 2012; Chikuta, 2015; Adam, 2015; Spencer & Mnqayi, 2017; Khalil & Fathy, 2017; Meskele, Woreta &Weldesenb, 2018; Abd-Elraof, Dawood & Mohamma, 2018) or the demand side (e.g., Hussein & Jones, 2016; Khumalo & Ndlovu, 2017; Magwiro *et al.*, 2018). A study that reviewed and analyzed the ability of the accommodation sector in Africa, both demand and supply side to host travelers with different forms of disabilities in its totality is missing. Therefore, this study intended to review whether the existing accommodation sector in African countries offers user-friendly facilities to travelers with disabilities. Furthermore, this study intended to shed some light on the strategies taken by the African countries to provide accessible accommodation to disabled people. This study was important because the disability market can be an important travel market if accommodation establishments put more emphasis (Tantawy, Kim, & Pyo, 2005). Hotel marketers need to be aware that the disabled travel market could be a profitable business if marketed well. It is known beyond reasonable doubt that the number of disabled people in Africa is increasing daily because of accidents, diseases, poor diets, poor working conditions, violence, wars, natural disasters and higher poverty rates (WHO, 2021). Furthermore, disabled people prefer to undertake leisure trips to natural areas and take part in outdoor activities (Chikuta, 2015) hence this travel market can be used as an alternative source of tourism receipts once the mainstream travel market fails to perform due to seasonality. Furthermore, literature has also pointed out that people with disabilities do travel with caregivers, family members or friends hence any ticket purchased by a disabled customer means a double income is generated and therefore, this is an economic travel market that should not be ignored (Ater, 2011). Disability is something that should not be overlooked because some people acquire a disability in the course of their lives (Batavia & Schriner, 2001). Additionally, little has been published regarding disability and tourism in the context of Africa (Chikuta, 2015; Montes & Swindle, 2021). This study intended to bridge that knowledge gap.

Literature Review

Social Model of Disability

The foundation of this study is based on a social model of disability. The social model of disability has been extensively used by academia to understand the origin of a disabled person. This model was developed by disability activists in the 1970s and 1980s. The social model assumes that it is the society that imposes a disability on people with various impairments (Bingham *et al.*, 2013). This model assumes that the origin of disability is the mental attitudes and physical structures of the society, rather than a medical condition that one has. This model assumes that individual limitations are not the cause of disability. Rather, it is society's failure to offer appropriate services to accommodate people with various disabilities. In this model, the concept disability and impairments are differentiated. Impairment is seen as an abnormality of the body, such as a limitation or malfunction of a limb (Goodley, 2001; Forhan, 2009). On the other hand, disability is seen as the disadvantage or restriction of activity as a result of a social organization that fails to take into account people who have impairments and segregate them from society (Goodley, 2001). The distinction is crucial because the social model assumes that it is not individual bodily function that constrains his/her abilities, it is the society (Roush & Sharby, 2011; Barney, 2012).

Therefore, theorists of the social model see disability as something that is imposed in addition to impairments in the way that persons with impairments are segregated and excluded from full participation in their society (Bingham *et al.,* 2013). Isolation and exclusion can be a result of the way society are unable to willingly remove environmental barriers that limit people with disabilities in participating as active members in society (Forham, 2009). The social model assumes that exclusion and segregation of disabled people can be solved if the society changes rather than individuals' perceptions. Therefore, any change in the way people see disability has to require political action and social change rather than a change in ones' physical body (Bingham *et al.,* 2013). In the social model, impairment is seen as a form of diversity that offers reasons for people to celebrate and value. The model assumes that negative attitudes regarding disability may disappear once people's attitudes towards disabled people change. Although the social model sees disability as impairment caused by the way society negatively perceives it, the social model is not free from critique. It is reported that the social model fails to address impairment as an observable attribute of a person which is a crucial aspect of their lived experience (Palmer & Harley, 2012). This issue has been seen when the model separated impairment from disability (Bingham *et al.*, 2013). Palmer and Harley (2012) concluded that separating the two constructs, it means the model has not fully accounted for the lived experiences of people with disabilities. Additionally, this model is also criticized because it has failed to recognize differences between individuals with disabilities.

Challenges of Serving Disabled Guests in Accommodation Establishments

Several studies have been done to assess barriers of various types of accommodation establishments in serving disabled people. Communication happened to be one of the core barriers that limit people with disabilities from getting their desired services. Based on the demand side, about 33% of the existing literature has reported that lack of reliable and up-to-date information is the key barrier limiting people with disabilities from enjoying accommodation in African countries. Research done by Khumalo and Ndlovu (2017) has reported that lack of reliable information has limited wheelchair users from choosing the right accomodation. Wheelchair users prefer to have the correct travel information before they make their decision. Issues such as spacious rooms, parking space, accessible room services are very important. Although South Africa has legislation and a tourism unit that is responsible for ensuring that accessibility features in the accomodation sector are adhered to, hotel owners have failed to offer reliable and up-to-date information to disabled guests. On the supply side, 11% of the existing research has declared that lack of accessible information is indeed the primary barrier limiting disabled guests from enjoying their accomodation. Khalil and Fathy (2017) have revealed that hotel websites in Egypt offer information that is not user-friendly to disabled people.

But researchers believe that if assistive technology is used it will help hotel websites to offer accessible information to disabled people. It was suggested that hotel websites should be improved to provide user-friendly information to assist disabled people. The structure of the website should provide titles and headings to assist those with low vision. The text should be used in videos for hearing impaired people get a clear message. Voice recordings/screen readers and Braille should be used to assist blind persons. Structural barriers are another problem limiting disabled guests from enjoying accommodation in African countries. From the demand perspective, lack of ramps (67%), accessibility features in bars and restaurants (67%), lack of elevators (33%), limited assistive technologies, lack of ground floor access routes as well as lack of spacious rooms (22%) are the main structural barriers. While on the supply side, lack of accessible room facilities (44%), lack of elevators (22%), lack of accessible features in bars and restaurants are among the key structural barriers limiting disabled guests from enjoying accommodation in African countries.

These challenges have been reported in South Africa (Bischoff and Breedt, 2012), in Zimbabwe (Mangwiro, Zengeni, Mirimi, & Chamunorw, 2018) and Egypt (Atef, 2011). Since the focus of the studies were on wheelchair users (Khumalo & Ndlovu, 2017), senior citizens (Bischoff and Breedt, 2012) as well as those with visual, hearing, intellectual and physical impairments (Hussien & Jones, 2016) It is important to take note of their needs and make sure that the accommodation sector produces what is needed. The attitudinal barrier is arguably one of the significant barriers affecting disabled guests from selecting hotels (Adam, 2019). Negative attitudes from the service providers at the front desk and hotel employees can be traced to stigma, where disability is seen as something abnormal, resulting in the disabled guest needs being overlooked. The ignorance comes from the belief that disabled people are seen as insignificant, poor and unproductive (Chikuta, 2015).

This perception shows that the hoteliers are not aware of the economic value of the disabled travel market hence they don't see why they should put more emphasis on serving them. Lack of knowledge regarding disabled peoples' needs has affected the provision of quality and barrier-free services in the hotels (Tantawy, Kim, & Pyo, 2005; Atef, 2011; Bischoff & Breedt, 2012; Hussein & Jones, 2016; Khumalo & Ndlovu, 2017; Mangwiro *et al.*,2018) and this is why there are few disabled guests in hotels (Abd-Elraof, Dawood, & Mohammad, 2018). Based on these findings, lack of quality services (100/%) and lack of user-friendy services (67%) are the main barriers reported on the demand side while on the supply perspective, lack of user-friendly services (44%) and lack of qualified staff (33%) were the main attitudinal barriers. Therefore, to close the attitudinal barrier gap in the hotel industry, service providers need to be trained on the economic wealth of this new niche market so that they will change their attitude towards disabled guests. The training needs to be geared towards the provision of quality and user-friendly services. A summary of the barriers limiting disabled guests when boarding hotels in African countries is presented in Table 1.

Table 1 Barriers affecting disabled guests from enjoying accommodation in African countries

Sub- concepts	Specific barrier	Demand side	Suppliers side
Communication	Lack of reliable and appropriate communication	Khumalo & Ndlovu (2017) - 33%	Khalil & Fathy (2017) – 11%
Structural	Lack of balcony/veranda Shortage of handrail in the bathroom Accessibility features in the bar & restaurant	Hussien & Jones (2016)- 11% Hussien & Jones (2016)- 22%	Bisschoff & Breedt (2012) - 11% Atef (2011) Maskele, Woreta & Weldesenbet (2018)- 67%
	Accessible room services	Mangwiro *et al.,* (2018) – 33%	Atef (2011), Spencer & Mnqayi (2017) Chikuta (2015), Maskele, Woreta & Weldesenbet (2018) - 44%
	Lack of ramps	Hussien & Jones (2016), Mangwiro *et al.,* (2018) – 67%	
	Flat access routes & ground level rooms	Hussien & Jones (2016) – 33%	
	Quality services	Hussien & Jones (2016), Khumalo & Ndlovu (2017), Mangwiro *et al.,* (2018) – 100%	Tantawy, Kim, & Pyo (2005), Atef (2011), Bisschoff & Breedt (2012) - 33%
	Spacious rooms		Atef (2011), Maskele, Woreta & Weldesenbet (2018)- 22%
	Parking space		Tantawy, Kim, & Pyo (2005)- 11%
Attitudinal	Negative attitude & lack of knowledge regarding disabled travel market	Khumalo & Ndlovu (2017) – 11%	Tantawy, Kim, & Pyo (2005), Atef (2011), Spencer & Mnqayi (2017) - 33%

Methodology

The main focus of the study was to review and analyze studies that have been done on the accommodation and disability travel market in different African countries and shed light on the strategies taken by the African countries in the provision of accessible accommodation to disabled people. In the current study, the concept-driven systematic review approach proposed by Webster and Watson (2002) and used by other researchers such as Alalwan, Rana, Dwivedi, & Algharabat (2017) was used. The technique allows the literature to be examined from the concept point of view rather than an author-driven approach that focused on how multiple authors have examined the multiple concepts in different studies. This method was appropriate in the current study because issues regarding disability and tourism seem to be evolving in the area of tourism and the hospitality industry. This study involved an extensive desk literature review. In the process of searching for articles, the researcher used several keywords such as “accessible accommodation”, “tourism”, “people with disabilities”, “African countries”, “hospitality”, “inclusive accommodation", "motel", "guest houses", "tented camps", and "hotels". These were used separately and at times a combination of words was employed to generate the relevant articles for the study. The references cited in the peer-reviewed published articles were also traced to assess their relevance in the study before including them in the analysis. The decision to include an article was primarily based on the full-length published in a peer-reviewed journal especially in the accommodation sector in African countries and the field of tourism and hospitality. To ensure the reliability of the data, each article was critically reviewed twice by the researcher to justify its inclusion and to ensure its accuracy and objectivity. Since the concepts used in the study were developed from peer-reviewed journals, content validity was ensured. The initial search retrieved a total of 21 articles in the form of abstracts; conference proceedings, book reviews, editor prefaces and internet columns. 9 articles of such nature were excluded from the analysis because of their limited if any, contribution to the existing knowledge. However, information from WHO country reports and country statistical data related to disability were used to justify the current problem. Some of the information such as definitions of key terms such as "disabled people" and "accommodation" was taken from books. Information regarding content analysis came from books too. The final searching process yielded 12 full-text articles that were considered relevant to the analysis in the current study (Refer Table 2). The researcher reviewed all 12 and assigned them to two themes as analyzed from the supplier and demand sides.

Finally, it was concluded that "tourism" "people with disabilities" "African countries" "accommodation" "inclusive accommodation" were among the main key search words used to get the final articles. Therefore, the population for this study was 12 fully peer-reviewed published articles relevant for the current research. Due to the relatively small population (12 articles) then census was used instead of selecting a sample. Three main tourism database search engines such as EBSCOhost, science direct, and Google scholar were used to download the reviewed articles. These databases are the largest and most popular online search engine databases used in tourism and hospitality studies (Buhalis & Law, 2008). Content analysis was employed to analyze content and concepts in the studies. This technique is a popular data analysis method in the social sciences (Berg, 2009). This method involved a careful, detailed, systematic assessment and interpretation of a particular body of material to identify patterns, themes, biases, and meanings. The technique identified the meaning of the text and, therefore, maintains a qualitative textual approach. The technique is flexible and employed to analyze different types of qualitative data (Kyngäs, 2020). Since the population was small (N= 12) then data were manually analyzed. The analysis involved reading the selected articles twice to ensure their relevance in answering the research question. Then, a unit of analysis i.e. accommodation and people with disabilities articles were used to generate open codes i.e.,barrier- free accommodation, accommodation for disabled guests, user-free accommodation, accessible accommodation, then sub-concepts such as; communication barriers, structural barrier and attitudinal barriers were developed. In the end, main themes namely;

demand perspectives and supply perspectives were emerged (the summary is indicated in Table 2).

Table 2: Accessible Accommodation Studies in African Countries

S/N	Author(s)	Aim of the study	Focus of the study	Data collection	Data analysis & sampling design	Major Findings	Themes
1	Bisschoff, &Breedt, (2012)	Determine the accessibility of hotels in South Africa for the physically disabled tourist and elderly travellers.	Physically disabled and elderly travellers	Questionnaire	Qualitative research Convenience sampling	The accommodation industry in South Africa can only accommodated 15% of travelers with disabilities.	Suppliers side
2	Chikuta (2015)	Assess the ability whether Zimbabwe has enough accommodation facilities to enable people with disabilities	Registered tourism operators in Zimbabwe's hotels/lodges, travel agencies, tour operators and cruise operators	Interviews, questionnaires and observations	Exploratory design Simple random & judgmental sampling Descriptive statistics Content Analysis	Zimbabwean hotels have no facilities to accommodate disabled customers	Supplier side
3	Spencer, &Mnqayi, (2017)	To establish whether owners of accommodation, transport service providers and tourism officials understand the concept of universal accessibility in tourism.	Accommodation (Bed-n-Breakfast, camping sites, accommodation in nature parks & hotels) in South Africa	Questionnaire Interviews	Descriptive statistics Content analysis	Some of the hotel offers accessible facilities to accommodate disabled customers	Suppliers side
4	Mangwiro et al (2018)	Perceptions of people with disabilities on the compliance of Zimbabwean hotels in the provision of innovative	People with mobility, visual, hearing and a category for other disabilities	Semi-structured interview	Exploratory study Thematic analysis Convenience sampling	Hotels in Zimbabwe still lag behind in terms of offering services to disabled customers	Demand side

S/N	Author(s)	Aim of the study	Focus of the study	Data collection	Data analysis & sampling design	Major Findings	Themes
		facilities for guests with disabilities.					
5	Atef (2011)	Investigate the ability of the Egyptian hospitality industry to accommodate special needs customers in Egypt	six major 5star hotel chains	Questionnaire	Opportunistic sampling Normality of distribution by the Kolmogorov-Smirnov test. Means and standard deviations	Egyptian hotels have failed to fully accommodate disabled customers	Suppliers
6	Meskele, Woreta, &Weldesenb (2018)	Evaluate accessible tourism challenges and development issues in hotels and attraction sites in Ethiopia	Hotel managers/ employees, culture and tourism office employees, destination managers, and tourist guides.	Open ended interview Questionnaire	purposive sampling Descriptive research Cross-tabulation	Some of the hotels in Ethiopia offers some facilities that are user-friendly to disabled customers	Suppliers side
7	Abd-Elraof, Dawood, & Mohamma (2018)	Evaluate disabled services and facilities provided for persons with disabilities in resorts in Egypt	(three, four and five-star) from major tourist cities in Egypt, including Cairo; Ain- Sukhna; Aswan; Luxor; Hurghada; Sharm El-Sheikh.	Questionnaire	Quantitative approach exploratory Descriptive statistics and One-way ANOVA	Some of the 5 star resort hotels have offers disabled services than four and three star resorts.	Supplier side
8	Khumalo, &Ndlovu, (2017).	Investigate the accessibility of B&B facilities by wheelchair bound persons in Durban.	Physically mobility people specifically mobility impaired people	Interviews self-administered questionnaires	Qualitative quantitative research designs Convenient sampling. Cross tabulation	The majority of B&B facilities were found not user-friendly services and their physical states do not allow ease of access and free movement.	Demand side

S/N	Author(s)	Aim of the study	Focus of the study	Data collection	Data analysis & sampling design	Major Findings	Themes
9	Adam (2019)	Examines the attitudinal functions of hotel frontline employees towards serving the guests with disabilities in Ghana.	Hotel frontline employees in budget hotels .	Questionnaire	Two-step cluster, Kruskal-Wallis test Chi-square test of independence	Empathetic accommodating attitude helps to understand the needs Of guests with disabilities	Supplier side
10	Khalil & Fathy (2017)	Assessing the accessibility of disabled guests on hotel websites in Alexandrians (Egypt)	Hotel operators in 4 and 5 star hotels	Interview	Content analysis	Hotel websites information are not user-friendly to disabled guests	Supplier side
11	Tantawy, Kim, and Pyo (2005)	Deficiencies of hotels in Cairo to accommodate disabled customers	Room division managers Food and beverage directors Marketing directors	Questionnaire	Descriptive statistics	Most of disabled customers lack confidence to use hotels even if the hotels are promoted to have accessible facilities	Supplier side
12	Hussein & Jones (2016)	Identify disability related facilities to accommodate disabled customers in Egypt	Hearing impaired Sight impaired Intellectual impaired	Questionnaire	Analysis of variance Mann-Whitney U test Kruskal Wallis Convenience sampling	Disabled people put emphasis on different accessibility facilities	Demand side

Discussion of Findings and Implications of the Study

This study came up with two main themes based on supply and demand perspectives. Out of 12 refereed published academic articles, 9 focused on suppliers' side and 3 of them were on demand. The overall findings from the studies have indicated that most of the existing accommodation establishments in African countries were not capable of hosting disabled customers. On the demand side, provision of quality services happened to be the most critical problem limiting disabled guests from enjoying accommodation in African countries (Tantawy, Kim & Pyo, 2005;

Khumalo & Ndlovu, 2017, Hussein & Jones, 2016; Mangwiro *et al.*, 2018), followed by lack of user-friendly services (Hussein & Jones, 2016; Khumalo & Ndlovu, 2017). This implies that the provision of quality service should be a priority to hoteliers if they are thinking of expanding their clientele to this new niche. This information is very important because disabled guests are willing to pay anything to get the desired services (Lyu, 2017) and they do care about accessibility features when choosing hotels (Hussein & Jones, 2016). On top of that, if guests with disability perceive that they are not going to get equal treatment as able-bodied guests, then their future behavioural intention may be affected. Therefore, hoteliers need to make sure that the best and user-friendly service is offered in their hotels. On the supply side, accessible room facilities were seen as the main critical areas that need improvement. Hoteliers need to make sure that things such as ramps are present as this will assist those with mobility challenges as well as those with low vision. Wheelchair users as well as blind guests prefer flat routes, ground access rooms, spacious rooms, presence of handrail in the bathroom; hence priority should be on those areas when investment in accommodation is made because disabled guests pay emphasis on hotel barrier-free facilities (Zhang & Yang, 2021). Although most African countries have disability policies, they are not implemented fully to ensure that disabled people are accommodated just like the mainstream market. The focus of the existing policies is on health welfare not on the framework to make sure that a barrier-free environment is implemented to assist disabled people to enjoy leisure and tourism (Khumalo & Ndlovu, 2017).

The existing guidelines demanding universal buildings are not implemented. Therefore, African governments need to make sure those tourism authorities responsible for grading the accommodation sector offer accessible facilities (ramps, elevators, accessible rooms, spacious rooms, ground floor access routes, assistive hearing aids). The beneficiaries of accessibility features in the hotel sector are not only disabled people but children of a young age, senior citizens, pregnant women as well as those with temporary impairments. Additionally, offering accessibility services in the sector will bring equality and quality which are pillars of sustainable tourism development (Lwoga & Mapunda, 2017). Another area of importance to be looked at is the attitudinal barrier. Negative attitude, ignorance and lack of qualified staff to assist disabled hotel guests were reported to be critical barriers on suppliers' side. Negative attitudes have been extensively reported to be one of the critical issues affecting disabled people in most studies (McKertcher, Packer, Yau, & Lam, 2003). Ignorance or misconceptions about disability leads people to equate any disability to total disability (Ray & Ryder, 2003; Yau *et al.*, 2004). This misconception regarding the level of support needed often turns to inappropriate attention or service failures. This implies that service providers in the hotel and accommodation industry need to be trained to change their mindset regarding disabled guests. Knowledge of disabilities and their needs may help them to change their mindset and start treating them just like other human beings. Failure to understand disabled guests' needs may lead to the failure of providing the desired services. It should be remembered that the root cause for this problem can be traced back to African culture. The culture has made disabled people see themselves as “other” and not as any other ordinary member of the community (Khumalo & Ndlovu, 2017). This belief has made disabled people to be discriminated against and segregated in almost all spheres of their lives including leisure and tourism. Therefore, if African countries are to move to barrier-free accommodation, then service providers need to change their attitude regarding disability issues. On the other hand, policymakers can use the information to educate the public on the diversity of disability and learn to accept the disabled as part and parcel of the community because they have equal rights to be treated with respect just like any human being. Lack of accurate information and proper means of communication has been identified to be one of the critical areas of interest in most of the disability studies. Lack of accurate information is affecting more disabled guests than able-bodied persons (Ray & Ryder, 2003). Disabled guests need to have all the information regarding hotel accessibility features before making any travel decision. At times service providers claim that the services offered are accessible but is not always the case. Lack of accurate information has mostly been reported in the hotel sector (Ray & Ryder, 2003). Most of the hotel websites have inaccurate and out-of-date information regarding accessibility features in the hotels. Information such as accessible rooms, elevators, ramps, flat routes, spacious rooms is very important to people with both mobility challenges and vision challenges.

Wheelchair users would be thrilled to know whether the room is spacious and room facilities are placed on the lower level. Therefore, hotel service providers need to make sure that they advertise the right information on their hotel websites as this will offer meaningful details to disabled guests. On the other hand, policymakers need to make sure that they include the clause that will request the hotel service providers to offer relevant and up-to-date information when developing their marketing and promotional materials to attract customers. The information provided has to be in a form that is user-friendly to everybody. For example, visitors with low vision would prefer tactile markers or voice recorders when communicating while those with hearing impairments prefer sign language. The use of the right means of communication may make customers to be satisfied with the service and this may have an impact on future travel behaviour. Therefore, this implies that hotel staff needs to be trained to communicate properly with disabled guests because disabled guests want to be treated with respect and dignity the same way as the mainstream group. Based on the social disability model, people are becoming “disabled” when faced with barriers that are imposed on them by other people on top of their impairments. To implement the social model in the accommodation sector, service providers’ attitudes regarding disabled guests needs to be changed. This can be achieved by providing training regarding disability issues. Understanding the concept of disability, their needs and how to communicate with them clearly may help hotel staff to offer quality and user-friendly services. Furthermore, since disabled people are not homogeneous, then service providers need to make a note of their differences as this information may help them to deliver what is desired. For example, not all disabled people require architectural modifications like those with mobility challenges; some just need assistive hearing aids to enjoy their accommodation.

Conclusion and Limitations

This study examined the ability of the accommodation sector in Africa to host disabled guests and provide strategies that can be used by different countries to make sure that barrier-free hotel services are provided. Overall, the finding indicates that the accommodation sector in Africa is not able to fully host disabled guests. Disabled guests are still constrained by communication, structural as well as attitudinal barriers that limit them from enjoying accommodation in African countries. Although most African countries have disability policies and a tourism unit responsible for ensuring that barrier-free services are given to disabled guests, these guests are still segregated and they don't receive equal treatment as able-bodied persons. For African countries to attain sustainable tourism, serious efforts need to be taken to make sure that disability policies are implemented to the point where barrier-free services are offered to disabled guests. This will only be possible if the hotel service providers change their attitude regarding disabled guests. Training on disability issues will help them to be aware of disability needs hence it will be easy for them to learn how to communicate and deliver barrier-free services to disabled customers. Once the negative attitude is changed, the quality and user-friendly services will be offered to disabled guests. Although the finding of this study confirms the social disability model, the model can only be implemented in the accommodation sector if the service providers decide to train their staff to perceive disability positively.

The introduction of inclusive hotel services is important because disabled people are willing to return to a destination that offers accessibility facilities and have staffs who can serve them well (Tantawy, Kim, & Pyo, 2005). Although accessible tourism theme has been extensively done by researchers in developed countries, little is known in the context of African countries. This study contributed to the literature by providing an overview of findings and discussions in the tourism and hospitality literature on accessible accommodation in African countries. Hence, the current study contributes to academia and industry by proposing strategies for African countries to start offering barrier-free accommodation to satisfy the needs of disabled customers. A major limitation of this is the exclusion of books and articles from conference proceedings in the analysis therefore, future studies should include them in the analysis for more insights into the subject matter. Another direction for further studies is to analyze the specific accessibility needs among disabled people so as to determine the most unique accessibility requirement for specific disabled customers. This information will help hotel service providers to deliver what is desired by each category. Additionally, this study found out that quality of services is the main barrier for disabled people from enjoying the accommodation sector in African countries. Therefore, future studies can focus on addressing different service quality dimension barriers in the accommodation sector. The information can assist service providers to attract a significant number of disabled guests.

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Effect of Marketing Mix on the Marketing Performance of Grapefruits in Tanzania

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Abstract: *Using the model of the marketing mix, this study assessed the effect of the marketing mix elements on the marketing performance of grapefruits in Tanzania. It was conducted at Hombolo Ward in Dodoma as one of the major grape-producing areas. Using a structured questionnaire, a simple random sample of 142 respondents was taken from a sampling frame of 220 grapefruit growers in the ward. Descriptive statistics and multiple linear regression analysis were used. Results indicated that price, product attributes, and place significantly affect the marketing performance of grapefruits. Promotion aspects on the other hand were found to have no significant effected. This indicated that the promotion was either inadequate or irrelevant, as evidenced by the lack of improved grapefruit marketing performance. This study recommended that an appropriate pricing strategy be implemented because it plays a significant role in grapefruit marketing performance. Since product attributes were found to strongly affect the marketing performance of grapefruits, it was recommended that producers should focus on improving product attributes such as quality and packaging. Finally, improvement of distribution infrastructure should be considered, since producers would be able to efficiently store, preserve, and deliver their products to the intended markets.*

Keywords: Product, Price, Promotion, Place and Grapfruits

INTRODUCTION

Marketing performance is one of the dimensions of company performance which reflects the managers' ability to effectively manipulate the marketing mix variables. From a marketing perspective, marketers of physical products are guided by the 4P model, comprising of product, price, promotion and place that summarizes key decision responsibilities of marketing managers. Originating from the microeconomic theory as proposed by MCarthy (1964), the marketing mix is used to describe different kinds of choices organizations have to make in the whole process of bringing a product or service to the market. Accordingly, Sudari, Tarofde, Khatibi and Tham (2019) and Othman *et al.* (2019) explain the marketing mix as having positive effects on customer satisfaction which in turn leads to customer loyalty and consequently marketing performance. Harsono (2017) suggests that marketing performance lies in the ability to influence consumers to learn and purchase a company's products and thus increasing the chance of creating a loyal customer. To achieve this goal, companies need to have a good product (Product), offer reasonable prices (Price) at accessible locations (Place) and effective promotion strategy (Promotion); that is 4Ps. The study was based in Dodoma Tanzania, which is the major grape-producing Region. Previous studies suggest that grapefruit is one of the main cash crops in Tanzania (Kaliman`asi *et al*,2014). It was reported that in 2015, farmers were able to cultivate more than 1500 acres of grapefruits (The citizen, 2015). However, one of the greatest challenges facing all grapefruits producers in Dodoma is the marketing of their products once they have been produced (*ibid*.). Currently, the grapefruit farmers in Dodoma rely on two major buyers; Central Tanganyika Wine Company (CETAWICO) and ALKO VINTAGES LTD. Moreover, it was revealed that one of the buying companies failed to purchase more grapes due to challenges related to taxes and the absence of preserving facilities (The Guardian, 2018). As a result, the massive production of grapefruits in Dodoma lacks markets which compelled some farmers to sell their products at relatively lower prices as compared to their counterparts in South Africa (Habari Leo, 2015).

Furthermore, Ministry of Industry, Trade and Marketing (MITM) (2008) noted that Tanzanian farmers were facing several constraints based on product quality, few processing plants, price, low incentives, low output, shortage of purchasing posts, late payment, low productivity of labour, poor harvest and some actors infringed set standard units of weights and product grades. In 2016, it was reported that about 430 tons of grapes remained in vineyards due to a lack of buyers (Mtanzania, 2016). Kaliman`asi *et al*, (2014) revealed further that Hombolo Ward grape producers sold their products on a credit basis and payment took more than six months. It was also indicated that producers experienced a challenge of quality decline due to pests, unreliable demand and an insufficient number of processing firms *(ibid*). The mentioned cases are an indication that something is cooking on in the marketing performance of grapefruits in Dodoma. Although previous studies such as those by Laswai, Kulwijila & Makindala (2018), MITM (2008), Kaliman`asi *et al* (2014) and Nguni (2013) attempted to address the problem, their focus was not directly related to the effect of the marketing mix on the marketing performance of grapefruits in Tanzania. For example, Laswai *et al.* (2018) focused on the value chain analysis of grapefruit in Dodoma, Kaliman`asi *et al.* (2014) studied small farmers' grape production and marketing. Nguni (2013) concentrated on the supply chain. None of the previous studies looked into the effect of the marketing mix in its totality. Thus, this study focused on establishing how the marketing mix variables could be effectively manipulated to produce meaningful marketing performance of grapefruits in Tanzania by using the 4Ps model.

Literature Review

The Marketing Mix

Chong (2003) pointed out that marketing mix is the product of a single P(Price) of microeconomic theory. This research employed the model of 4Ps of marketing advanced by McCarthy in 1964. The key variables underlying the model of the 4Ps of marketing are based on product, price, promotion and place (distribution).

Product Element

Product specifies goods and services which are offered by the business firm (Eavani & Nazari, 2012). However, the product is characterized by aspects such as size, test, colour and quality which are to be taken into account by the producer for they have a great impact before the eyes of customers. Accordingly, the sellers need to have the right products for the target market. In this research, the product was grapefruits which can be sold when ripe or processed into wine or juice.

Price Element

Price is the amount paid in respect of the product offered by the business firm. It is one of the most significant components of the marketing mix (Eavani & Nazari, 2012). However, the price of the product or service can be determined by the buyer's ability to pay, cost incurred in production, competitors' price as well as government regulations (*ibid.)*. In this study, the price aspect was concerned with what has been charged for the grapefruits.

Promotion Element

Promotion is a term used to describe a company's range of techniques that can be employed to effectively communicate the importance of products or services to its consumers. Advertising, sales promotion, public relations, direct marketing as well as personal sales are the aspects of the promotion mix (CIM, 2004). It encompasses elements such as advertising, publicity, public relations and sales promotion (Kotler and Armstrong, 1999). However, in this research promotion aspect was used to address all techniques employed by grapefruits producers to provide the market with information on the products offered.

Place (Distribution) Element

Distribution is the strategy by which the producer is connected to the consumer. The essential objective of any distribution system is to clear the gap between a product's manufacturer and the user thereof (Raphel, 1999). In this research, the aspect of the place was concerned with a channel on how grapefruits were being distributed to the targeted customers. Example through direct distribution channel; from the farmers to the customers/consumers or through indirect distribution system from the producers to the middlemen and from the middlemen to the customers/consumers. However, the 4Ps of the marketing model has been criticized for being much focused on the production definition of marketing rather than customer-centered (Popovic, 2006). Despite such critique, Goi (2009) stressed that the 4Ps model of marketing was still useful in the present World. Kent & Brown (2006) highlighted that regardless of its shortcomings, the 4Ps of the marketing model remains a staple of the marketing mix. The 4Ps of the marketing model have been utilized by Kurtz & Boone (1987), Kellerman, Gordon & Hekmat (1995), Sigh (2012), Rad & Akbari (2014) and Isoraite (2016). Accordingly, the mentioned researchers did not employ the 4Ps of the marketing model to study the marketing performance of grapefruits in Tanzania. Thus, there was a need for this study to be guided by the 4Ps of the marketing model to assess its effects on the marketing performance of grapefruits in Tanzania.

Effectiveness of Place and Marketing Performance of Grapefruits

Distribution is the strategy through which the manufacturer is connected to the consumer. The essential objective of any place is to clear the gap between a producer and the user thereof (Raphel, 1999). Aazadi *et al.* (2016) heightened that road accessibility was one of the factors affecting fruit growers in Pakistan. Accordingly, Nzioki (2013) noted that lack of transport was a challenge facing the marketing of mango fruits in Kenya. Owomoyela, Oyeniy & Ola (2013) noted that effective distribution outlets increase the marketing performance of the product. Based on that knowledge, the study's first hypothesis is:

H1: Place is positively affect marketing performance of grapefruits

Price and Marketing Performance of Grapefruits

Price is the amount paid in respect of the product offered by the business firm. It is one of the most significant components of the marketing mix (Eavani & Nazari, 2012). Nzioki (2013) researched challenges affecting the marketing of mango fruit in Kenya. It was reported that mango fruits marketing at Masongaleni ward in Kenya was affected by several aspects, price fluctuation being one among them. MITM (2008) identified that price of the product was one of the factors affecting stallholder farming in Tanzania. Gituma (2017) identified that pricing has a positive influence on sales volume. Therefore, the second hypothesis of this study was:

H2: Pricing positively affects marketing performance of grapefruits

Product Attributes and Marketing Performance of Grapefruits

Product specifies goods and services which are offered by the business firm (Eavani & Nazari, 2012). However, the product is characterized by aspects such as size, taste, colour and quality which are to be taken into account by the producer for they have a great impact in the eyes of customers. MITM (2008) identified that product quality and standard units were the factors affecting stallholder farming in Tanzania. Nguni (2013) noted that a poor quality control system was the challenge encountered by horticultural enterprises in Tanzania. Anand and Negi (2015) revealed that quality and standards affected the supply chain of fruits in India. Gituma (2017) revealed that product quality has a positive effect on sales efficiency. Thus, this study hypothesized that:

H3: Product attributes positively affect marketing performance of grapefruits

Promotion and Marketing Performance of Grapefruits

Promotion is a term used to describe a company's range of techniques that can be employed to effectively communicate the importance of products or services to its consumers. Advertising, sales promotion, public relations, direct marketing as well as personal sales are the aspects of the promotion mix (CIM, 2004). It encompasses items such as advertising, publicity, public relations and sales promotion (Kotler and Armstrong, 1999). Aazadi *et al* (2016) discovered that packaging was an aspect affecting fruit growers in Pakistan. MITM (2008) suggested that the shortage of buying posts was a challenge facing stallholder farming in Tanzania. On the other hand, Laswai *et al* (2018) revealed that limited access to marketing information was one of the major obstacles along the value chain which contributes to the loss of grapes. So, the study's fourth hypothesis is:

H4: Promotion positively affect marketing performance of grapefruits

Conceptual Framework

The 4Ps have been presented in this model as independent variables whereas the marketing performance of grapefruits has been presented as the dependent variable.

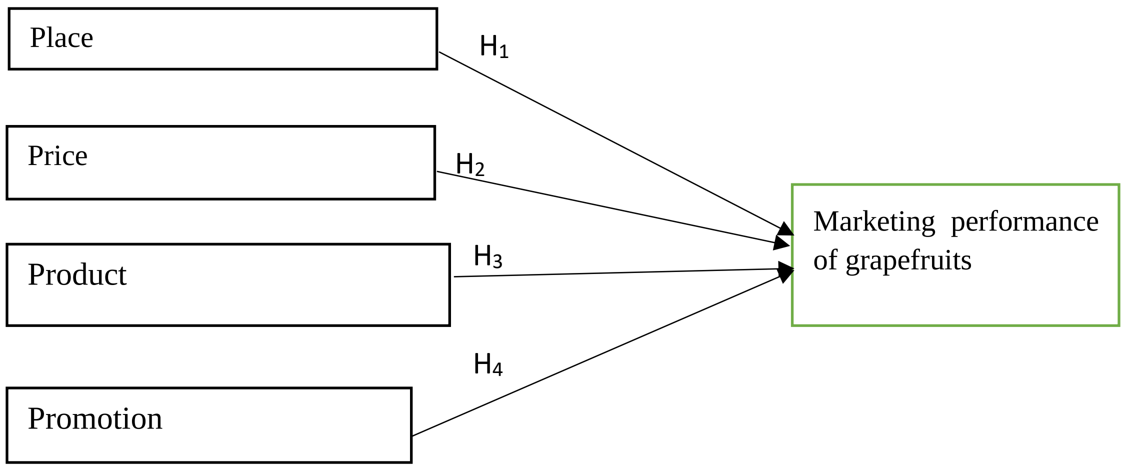

Figure 1: Conceptual Framework

Methodology

This study was done at Hombolo Ward in Dodoma City whereby a sample of 142 respondents was selected through simple random sampling. The sampling frame was comprised of 220 grapefruit producers in Hombolo Ward accessed from Management Associates Limited, 2020. Yamane's (1967) formula was used to calculate the sample size. Data were gathered through a structured questionnaire. Descriptive statistics and Multiple Linear Regression were employed to analyze the gathered data. For the analysis of respondents' information, descriptive statistics were used. Multiple linear regression was used to assess the effect of independent variables (price, product attribute, place and promotion) on the dependent variable (marketing performance of grapefruits) based on the following regression equation:

$$\mathbf{Y = \beta_o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \acute{\varepsilon}}$$

Where; Y = The marketing performance of grapefruits

X_1 = Place,

X_2 = Price,

X_3 = Product,

X_4 = Promotion

β_1, β_2, β_3, and β_4 are the regression coefficients

β_o = Constant

$\acute{\varepsilon}$ = Error term

The following assumptions of multiple regression analysis were tested; linearity, in which bivariate scatter plots for all the variables were used to test it. In addition, this study utilized skewness and kurtosis to check for the normality of the data. Finally, homoscedasticity and multicollinearity were checked by using a scatterplot of residuals versus predicted values and Variance Inflation Factor (VIF) respectively.

Variables and Measurement Scale

In this study, the marketing performance of grapefruits was the dependent variable that was measured by using the financial output scale adopted from Clark (2000). This scale comprises three dimensions namely profit, sales revenue and cash flow. Accordingly, Clark (2007) insisted on the use of the financial output scale when measuring marketing performance. Therefore, three (3) items with a five-point Likert-type scale were used to obtain a composite measure of the grapefruit marketing performance. Independent variables of this research included place, price, product attributes and promotion aspects. The STRATADAPT scale adopted from Lages, Abrantes & Lages (2008) was used. This scale comprises of four dimensions; promotion, product, price and distribution. Accordingly, the STRATADAPT scale was utilized by Brei, Avila, Camargo & Engels (2011) as well as by Abdoly & Alinejad (2013). Moreover, 21 items of independent variables were summarized by using a five-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5).

Study Results

Respondents' Demographic Characteristics

This study revealed that the majority 128 (90.1%) of the total respondents were males whilst 14(9.9%) were females. This implies that the cultivation and marketing of grapefruits at Hombolo ward is carried out mainly by males. It was further indicated that nearly half 66(46.5%) of the respondents had a certificate of primary education, 39(27.5%) of the total respondents had secondary education (O level) while 6(4.2%) of the total respondents possessed certificate education. Accordingly, it was reported that 8(5.6%) of the total respondents possessed diploma education, 19(13.4) of the total respondents were graduates of bachelor degree while a small number of the total respondents were graduates of master degree. These findings imply that to a great extent production and marketing of grapefruits at Hombolo ward was done by a majority of people with primary education. Additionally, the results of this study indicated that 19(13.4%) of the total respondents had between 0 and 4 years of experience in grapefruit cultivation and marketing, while 109(76.8%) of the total respondents had between 5 and 9 years of experience in grapefruit cultivation and marketing. Accordingly, it was reported that 13(9.2%) of the total respondents had 10 to 14 years of experience in grapefruits cultivation and marketing while 1 (0.7%) of the total respondents indicated that they had more than 15 years of experience in grapefruits cultivation and marketing. These results indicated that a lot of respondents had sufficient experience in the production and marketing of grapefruits.

Results from Reliability Analysis

Cronbach Alpha was used to measure reliability statistics. The research results indicated that the values of the Cronbach Alpha coefficient ranged between 0.736 and 0.792. This indicates that the measurement instrument had a greater internal consistency. Accordingly, these findings are supported by the argument of Santos (1999) that a construct with Cronbach's Alpha coefficient of 0.7 or higher tends to have good internal consistency. The results of reliability statistics are summarized in Table 1.

Table 1: Reliability Analysis

	Cronbach's Alpha	N of Items
Place	0.774	5
Price	0.759	6
Product attributes	0.736	5
Promotion aspects	0.762	5
Marketing Performance	0.792	3

Testing for Multiple Linear Regression Assumptions

Multicollinearity Test

According to Pallant (2013) multicollinearity occurs when independent variables are highly correlated. In this study, multicollinearity was checked by using Variance Inflation Factor (VIF) and Tolerance values. Tsagris and Pandis (2021) pointed out that the values for VIF should be less than 5 and tolerance values should be above 0.1 otherwise multicollinearity could be a problem. Results of the multicollinearity test for this study showed that tolerance values range from 0.873 to 0.941 while VIF values are ranged between 1.063 and 1.145. These findings indicated that the data for this study fulfilled the multicollinearity assumption. Table 2 showed the results from the multicollinearity test.

Table 2: Results of Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Price	.925	1.081
	Product attributes	.941	1.063
	Promotion	.873	1.145
	Place	.936	1.069

a. Dependent Variable: Marketing performance

b. Predictors: Price, Product attributes, Promotion, Place

Normality Test

In this study skewness and kurtosis were used to test for normality. Won *et al.,* (2017) stressed that for normality assumption to be attained, skewness and kurtosis values for the variables were required to be within the range of +2 and -2. Findings from this study indicate that skewness values were within the range of -0.003 and 0.733. Accordingly, the values of kurtosis ranged between -0.146 and 1.066. These findings implied that the study attained the normality assumption. Table 3 illustrates the results of the normality test.

Table 3: Results of Skewness and Kurtosis of Variables

	Skewness Statistic	Std. Error	Kurtosis Statistic	Std. Error
Price	.299	.203	-.146	.404
Product attributes	-.003	.203	-.164	.404
Promotion	.733	.203	-.409	.404
Place	.720	.203	1.066	.404

Linearity Test

A linearity test was performed to check whether the relationships between variables were linear. In this study, the linearity assumption was checked by using bivariate scatterplots. According to Pallant (2013), the scatterplot of scores should be in a straight line for the linearity assumption to be met. Findings from this study indicate that title circles follow the straight line. This implies that the relationships among variables for this study were linear. Figure 2 displays the results of the linearity test.

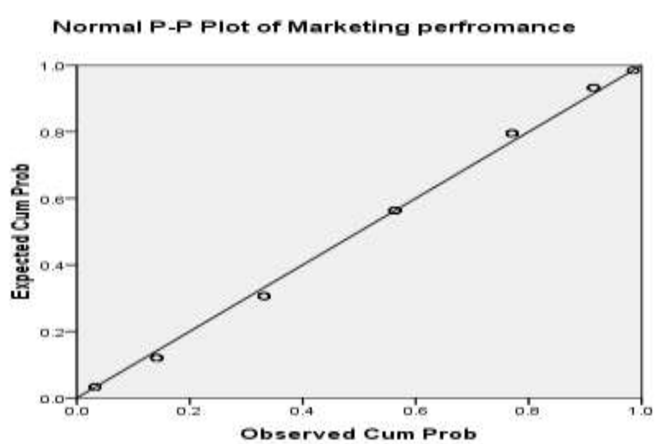

Figure 2: Linearity Test

Homoscedasticity Test

A scatterplot of residuals versus predicted values was used to test for homoscedasticity in the data. This assumption ascertains that variability in scores for variable X should be similar at all values of variable Y. Heteroscedasticity was demonstrated when residuals were not uniformly distributed along the line (Osborne and Waters, 2002). In addition, visual analysis of the plot of standardized regression residuals was used to check homoscedasticity assumptions. The study findings show that residual values are distributed equally below and above zero on the X-axis and to the left and right of zero on the scatterplot of the Y-axis. This means that the study met the homoscedasticity assumption. Figure 3 illustrates the results of the homoscedasticity test.

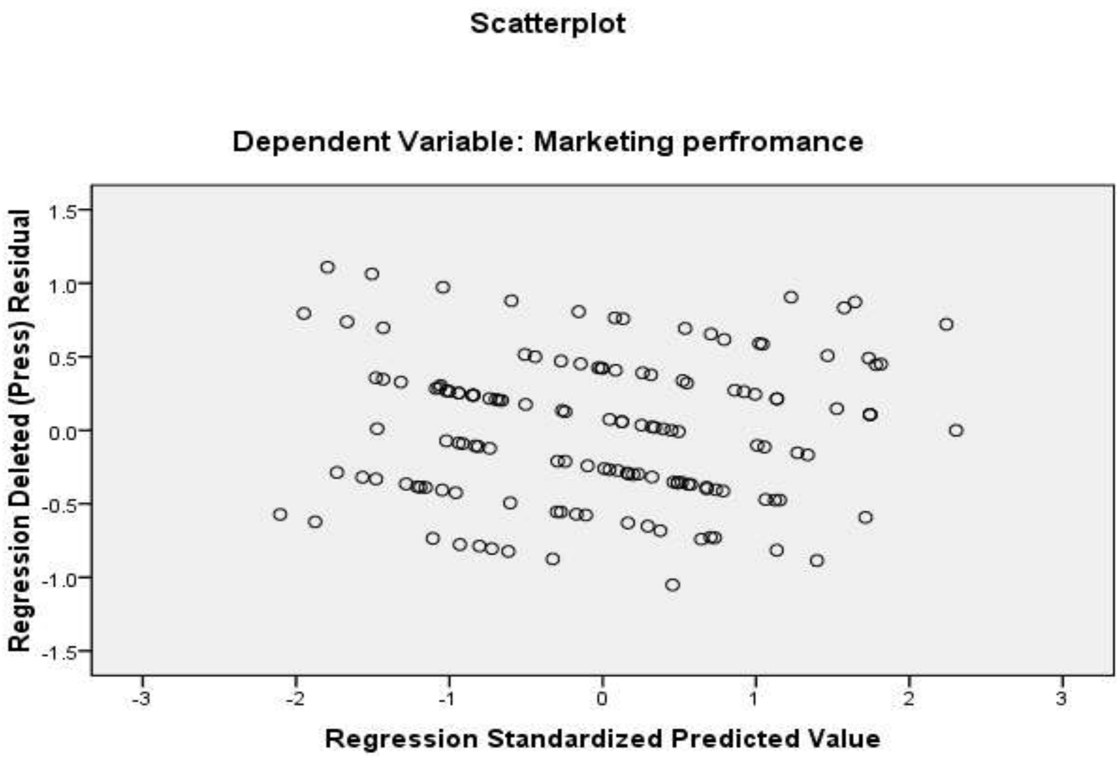

Figure 3: Results of Homoscedasticity Test

Findings from Multiple Linear Regression Analysis

It was found out that price had a positive and significant effect on the marketing performance of grapefruits (β= 0.370, p = 0.032). This implied that price was an important variable influencing the marketing performance of grapefruits. Further findings from the study indicated that product attributes positively and significantly affected the marketing performance of grapefruits (β= 0.291, p= 0.003). These findings suggest that product attributes were an important variable influencing the marketing performance of grapefruits. Furthermore, it was established that place had a positive coefficient and was statistically significant in affecting the marketing performance of grapefruits (β= 0.429, p = 0.007). Thus, distribution was an important item in the marketing performance of grapefruits. Concerning promotion, it was found out to have a negative coefficient and not statistically significant in affecting the marketing performance of grapefruits (β = -0.097, p = 0.410). This means that a unit increases in promotion strategies would not lead to any meaningful increase in the marketing performance of grapefruits. These results are captured in Table 4

Table 4: Findings of Multiple Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.135	.481		-.281	.001
	Distribution system	.429	.156	.226	2.745	.007
	Price	.370	.170	.180	2.170	.032
	Product attributes	.291	.095	.251	3.049	.003
	Promotion aspects	-.097	.117	-.071	-.827	.410

Source: Field Data (2020)
a. Dependent Variable: Marketing performance

Results from Hypotheses Testing

This research suggested that a positive effect exists between effectiveness of the place and the marketing performance of grapefruits. Thus, it was hypothesized that: T*he place positively affects the marketing performance of grapefruits. The f*indings of the study revealed that the effectiveness of the place had regression coefficient values of 0.429 and a p-value of 0 .007. This means that the effectiveness of the place was statistically significant and more likely to affect the marketing performance of grapefruits, hence accepting the first hypothesis (H_1) of the study. Furthermore, this study pointed out that there was a positive relationship between price and marketing performance of grapefruits. However, the study founded out the price had a regression coefficient of 0.370 and a p-value of 0.032. This implied that the effect of price was statistically significant and positively influences the marketing performance of grapefruits; hence supporting the second hypothesis (H_2) of the study that, *price positively affects the marketing performance of grapefruits*.

Further, this study suggested that there was a positive relationship between product attributes and the marketing performance of grapefruits. Regression results indicated the coefficient value of 0.291 and the p-value of 0.003. This implied that product attributes significantly and positively affected the marketing performance of grapefruits, thereby accepting the third hypothesis (H_3) of the study, that *product attributes positively affect the marketing performance of grapefruits.* Additionally, it was argued in this research that there was a positive relationship between promotion aspects and marketing performance of grapefruits. However, the results of regression indicated the coefficient value of -0.097 and p-value of 0.410. This means that promotion aspects were insignificant in affecting the marketing performance of grapefruits, thereby rejecting the fourth hypothesis (H_4) of this research that, *promotion aspects positively affect the marketing performance of grapefruits*.

Discussion of Findings

It was intended by this study to test whether place positively affects the marketing performance of grapefruits. However, it was discovered that the place was positively and statistically significant in affecting marketing performance. The findings of this research are compatible with those of Aazadi *et al* (2016) that road accessibility affected the performance of fruits growers in Pakistan.

Additionally, Nzioki (2013) stressed that lack of transport was a challenge facing the marketing of mango fruits in Kenya. Furthermore, this study was aimed at testing the effect of price on the marketing performance of grapefruit. The price was found to have a positive and significant effect on the marketing performance of grapefruits. These findings suggest that a better price of grapefruits is important for marketing performance. These findings are consistent with those of MITM (2008) that price was an important aspect in the performance of farmers in Tanzania. On the contrary, price was not indicated as an important factor affecting the business of fruits in India (Anand and Ngeri, 2015). In addition, this tested whether product attributes could have a positive effect on the marketing performance of grapefruits. Findings showed that product attributes had a strong positive and significant effect on the marketing performance of grapefruits. These findings are in line with those of Nguni (2013) and MITM (2008) that product quality, standards and poor harvest were the factors affecting farmers in Tanzania. Consistently, Dias *et al* (2008) noted that grading and standardization hindered the marketing of agricultural products in Timor Leste.

It was further hypothesized in this study that promotion aspects positively affect the marketing performance of grapefruits. However, the results of the hypothesis test revealed promotion had a negative and not statistically significant in affecting the marketing performance of grapefruits. These results were incompatible with the results of Aazadi *et al* (2016) and Laswai *et al* (2018) who suggested that promotion aspects such as packaging, purchasing centers and marketing information significantly affected the marketing of fruits. Promotion was found to be an unimportant aspect of marketing performance of grapefruits in Tanzania due to the ground that, at the time of the study grapefruits producers at Hombolo Ward are limited to two potential buyers; Central Tanganyika Wine Company (CETAWICO) and ALKO VINTAGES LTD concentrated at Dodoma city. These buyers used to purchase grapefruits from farmers directly. This ground does not need much utilization of promotion aspects due to the oligopsony nature of the market.

Conclusion and Recommendations

This study concludes that; distribution, price and product attributes are important elements of the marketing mix that have significant influences on the marketing performance of grapefruits in Tanzania. The promotion element was not found to have a bearing on the performance of grapefruits marketing. The reason behind this lack of influence could be because the grapefruit market in Tanzania operates under oligopsony, hence promotion would not bear sufficient impact on the marketing performance. The findings from this study suggested that grapefruit growers should concentrate their efforts on ensuring the quality of their products as product attributes were found to have a significant effect on marketing performance. This could be made possible through government intervention by providing educational programs through agricultural extension officers. Concerning the price which was found to be an important determinant of marketing performance, this study recommends putting in place programs to attract more buyers which could disrupt the oligopsony nature of the market hence increasing competition among the buyers. The increased competition shall raise the price of grapefruits hence better marketing performance. Finally, we recommend the improvement of transportation infrastructure since distribution was found to be among the significant determinants of the marketing performance of grapefruits.

Limitations of the Study and Areas for Further Studies

This study concentrated on grapefruits products. However, there was an existence of other fruits which were not covered by this study. Therefore, future studies should focus on other kinds of fruits in an attempt to assess the effect of marketing mix on the marketing performance of those fruits. Also, this study focused on the effect of marketing on the marketing performance of fruit products. Thus, there is a chance for future studies to be done on other types of agricultural products such as maize and beans. Additionally, the promotion aspect was found to be insignificant in influencing the marketing performance of grapefruits. Hence, further studies may test its significance in assessing the marketing performance of other products or services.

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The Nexus between Capital Structure and Financial Performance of Banks: The Influence of COVID 19 in Tanzania

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Abstract: *The purpose of this study was to examine the nexus between capital structure and financial performance of commercial banks in Tanzania. Panel data were used to conduct the empirical study which was extracted from the annual reports of 25 selected commercial banks for the period from 2016 to 2020. Descriptive statistics, correlations, fixed effect, and random effect models were used for the data analysis. Then, with the results of the Hausman Specification Test, the fixed effect model was considered as the most suitable model to examine the relationship between capital structure and ROA. Random effect model was considered as the most suitable model to examine the relationship between capital structure and ROE. This study was one of the very few studies which have investigated the nexus between capital structure and financial performance of commercial banks in Tanzania under COVID 19 impacts which gives the contribution to the existing finance literature.*

Keywords: Growth in banks deposit, Capital structure, Bank size, Return on Assets, and Return on equity.

INTRODUCTION

The bank plays a critical role in transmitting monetary policy impulses to the entire economic system. Capital structure plays a significant role in the success of an enterprise. A good capital structure enables a banking company to go ahead successfully on its path and attain gradual growth(Allahham, 2015). The COVID-19 pandemic caused the worst crisis in the global economy since the2007–2009 global financial crisis. It slowed down, and temporarily froze, the functioning of both the real and financial sectors, including banks(Kozak, 2021). The bank's performance is the capacity to generate sustainable profitability(Ferrouhi, 2018). The most common measure of bank performance is profitability. Profitability is measured using the following criteria: Return on Assets (ROA), the ratio is important as it shows the ability of management to acquire deposits at a reasonable cost and invest them in profitable investments (Ahmed, 2009). ROE is the most important indicator of a bank's profitability and growth potential. It is the rate of return to shareholders or the percentage return on each of equity invested in the bank (Kumbirai and Webb, 2010). The European Central Bank BCE defined three traditional measures of performance: Return on Assets ROA, Return on Equity ROE, and Net Interest Margin NIM. ROE and ROA are important components in banking for measuring corporate performance. Return on equity (ROE) helps investors gauge how their investments are generating income, while return on assets (ROA) helps investors measure how management is using its assets or resources to generate more income.

These ratios are defined as follows: ROA = (Net income / Total assets) x 100, this ratio measures the profitability relative to the bank's assets and therefore the overall bank performance. This ratio is the most important for comparing profits efficiency and banks performance; ROE = (Net Income / Equity) x 100. The higher the value, the greater the effectiveness of the bank. The capital structure consists of debt and equity used to finance the firm. Combinations of equity and debt in firms' capital structures have been identified by scholars(San and Heng, 2011), and (Chakraborty, 2010) to affect the current and future financial operations of the firm. The decision on the ratio of total debt to equity is considered as a strategic one for managers i.e., future-oriented, and has a long-term effect(Watson and Head, 2010). Capital structure decision directly affects an entity's profit. This makes it an important decision in corporate finance, so it must not be taken lightly. Bank consolidation increased banks' equity capital against debt in the short run with an increasing level of debt after the Central Bank of Nigeria's bailouts soon after the consolidated exercise. Therefore, this study aims to determine the relationship between capital structure variables and corporate performances of quoted banks in Nigeria. Data for this study, equity, debt, will be from the published financial statements of the sampled banks and the least square regression analysis will be used for data analysis. The study concludes that bank management in Nigeria should consistently use debt in the capital structure to enhance bank financial performance.

This study adds to existing knowledge in these ways; firstly, when considering the capital structure affects the performance of the banking sector, it has some impacts on the performance. Therefore, the capital structure of the banking sector influences the performance of the banking sector. From the studies on the relationship between capital structure and financial performance which have been carried out in the past, some studies concluded that there is a positive relationship between capital structure and firm performance (San and Heng, 2011) some of the studies concluded that there is a negative relationship between capital structure and firm performance (e.g:(Khan, 2012)) and some of the studies concluded that there is no significant relationship between capital structure and firm performance (e.g: (Ebaid, 2009)). Secondly, (Ajibola et al., 2018), (Singh, 2013)and (Sheikh and Wang, 2013) all previous studies have focused on the impact of capital structure on the manufacturing industry, and the findings of this study are of importance since it provides recommendations to a very sensitive sector of the economy. Therefore, there is no clear evidence on the relationship capital structure and firm's financial performance. Thus, this study attempts to fill this gap by investigating the influence of COVID 19 on the nexus between capital structure and financial performance of banks in Tanzania using banks' post-consolidation published financial statements covering 2016 to 2020. The rest of the paper is divided into Section 2 review of the literature; section 3 data and methodology; section 4 data analysis and 5 discussions of findings; and section 6 conclusions and recommendation.

Literature Review

Taub (1975); Nerlove (1968); Bakar (1973); Dickson eta al (2013) Petersen and Rajan (1994) and Nikoo (2015) also found a positive relationship between capital structure and profitability/financial performance of the firms. In addition, Roden and Lewellen (1995) found a positive relationship between profitability and total debt. Champion (1999) described that the use of leverage is one way to improve the performance of the firm. Hadlock and James, (2002) argued that companies prefer debt financing because they anticipate higher returns. Abor, (2005) examined the effect of capital structure on the corporate profitability of the listed firms in Ghana using a panel regression model. His measures of the capital structure included short-term debt ratio, long-term debt ratio, and total debt ratio. Abor (2005) findings showed a significantly positive relationship between the short-term debt ratio and profitability. Nguyen and Nguyen, (2020) investigated the relationship between capital structure and the firm's profitability of the banking industry in Kenya, using panel data that were extracted from the financial statements of the companies listed on the Nairobi Stock Exchange for the nine years from 2004. Findings were reported that short-term debt had a significant positive relationship with profitability. Fama and French, (1998) argued that the use of excessive debt creates agency problems among shareholders and creditors, in turn, leads to a negative relationship between leverage and profitability. Majumdar and Chhibber, (1999) found a negative effect of leverage on corporate profitability. Jensen (1986) reported that profitable firms might signal quality by leveraging up, resulting in a positive relationship between leverage and profitability. Abor (2005) reported a significant positive relationship between short-term debt and profitability and a negative association between long-term debt and profitability. This implies that an increase in the long-term debt position is associated with a decrease in profitability. Saeed and Amjad, (2013) assessed the impact of capital structure on the performance of banks in Pakistan for the 5 years from 2007. They have found out a positive relationship between determinants of capital structure and the performance of the banking industry.

Renoh and Ntoiti, (2015) studied the effect of capital structure on the financial performance of listed commercial banks in Kenya and found out that there was a negative effect of capital structure on the financial performance of commercial banks. Ramadan and Ramadan, (2015) examined the effect of capital structure and financial performance on Jordanian companies and their findings suggested that negative effects of capital structure on return on assets were observed in their study. This finding was contradicted with the findings of Al-Taani's study. Al-Taani, (2013) conducted a study to investigate the relationship between capital structure and profitability. However, results illustrated that there was no relationship between debt ratio and return on assets. Anyhow, this finding was consistent with the Ebaid (2009) study which evaluated the relationship between capital structure and performance based on the 64 firms in Egyptian companies during the period from 1997 - 2005. Siddik et al., (2017) conducted a study to examine the impact of capital structure and financial performance of banks in Bangladesh. They focused on 22 banks for 10 years period from 2005. Return on assets, return on equity, and earnings per share were considered as the performance measures. Results of their study illustrated that capital structure inversely affectedthe bank's performance. Therefore, mixed results on the relationship between capital structure and financial performance have been reported in the literature. Brabete and Nimalathasan, (2010) conducted a study to examine the impact of capital structure on the profitability of 13 listed manufacturing companies in Sri Lanka for the period from 2003 to 2007. The findings of their study revealed that the debt-equity ratio was significantly and positively related to gross profit ratio, operating profit ratio, and net profit ratio. Therefore, they have suggested that there was a significant positive relationship between capital structure and profitability. However, the findings of Prahalathan and Ranjani, (2011) indicated that neither short-term debt to total asset ratio, long-term debt to total debt ratio nor total debt to total asset ratio had a significant impact on firm's performance measured by return on equity and return on assets respectively. These results were contradicted with findings of a previous study carried out in 2010. Pratheepkanth, (2011) found out that there was no significant relationship between capital structure and gross profit but there was a negative significant relationship between capital structure and net profit, return on equity, return on investment and return on assets. Lingesiya and Premkanth, (2011) conducted a study to examine the impact of capital structure on the financial performance of listed manufacturing companies in Sri Lanka. The outcome of their study revealed that there was a significant negative impact of capital structure on the financial performance of listed manufacturing companies in Sri Lanka. The findings of Velnampy and Niresh, (2012) revealed that there was a significant negative relationship between the capital structure and profitability of banks in Sri Lanka from 2002 to 2009. Nirajini and Priya, (2013) conducted a study to examine the impact of capital structure on the financial performance of the listed manufacturing companies for the period from 2006 to 2010. The findings of their study suggested that there was a positive significant relationship between capital structure and financial performance of listed trading companies in Sri Lanka. Further, (Nadeesha and Pieris, 2014) conducted a study to investigate the impact of capital structure choice on firm performance in Sri Lanka with 82 listed non-financial firms during 2011/2012. They found out that there was a positive relationship between debt to total assets and return on capital employed. Sivalingam and Kengatharan, (2018) completed a study on debt capital and financial performance which was a comparative analysis of South African and Sri Lankan listed companies. Their findings of the study were, in the case of Sri Lanka, debt financing in terms of short-term debt hurt firm performance while long-term debt had a positive impact.

The COVID-19 pandemic caused a significant global economic shock, triggering the deepest global economic recession in nearly a century (Weiss et al., 2020). Although the global economy is on the journey to recovery, the rebound is expected to be uneven across countries, with strong growth in major economies even as many developing economies lag (Aktar et al., 2021). Sub-Saharan African countries are among the most severely affected by the pandemic and are expected to have suffered serious setbacks in development and per capita income gains by at least a decade (Anyanwu and Salami, 2021). Ongoing implementation of large-scale containment measures by governments and uncertainty regarding the duration of the COVID 19 pandemic continue to adversely affect economic and financial conditions in developing countries, making the recovery more varied, difficult, and uncertain. The African financial sector has not been spared from the pandemic, which exposed financial institutions to extraordinary operational and financial challenges. The COVID-19 pandemic contributed to a sharp rise in defaults of corporate and household debt, adversely affecting the financial performance of banks and their ability to intermediate credit and support an economic recovery (Sokol and Pataccini, 2020)

COVID-19 has had major impacts on banking, COVID-19 came as a shock to the financial markets all over the world, and as a consequence, the markets became extremely volatile and more corporate bankruptcies were observed within a short period. The demand for external funds increases in the presence of a cash-flow shortage arising from COVID-19 as almost all business activities are forced to cease to stop the spread of the virus. As a result, firms have been negatively impacted by the pandemic shock and seeking more funds to manage their liquidity shortage. Halling et al., (2020) find that the bond market has become more active since the outbreak of COVID-19, and Li et al., (2020)and Acharya and Steffen, (2020) further document that the pandemic has increased bank lending and credit line drawdowns, respectively. Neukirchen et al., (2021) find that firms with high financial flexibility lose less market value than those with low financial flexibility as a result of COVID-19. The estimates of the International Monetary Fund (IMF) analysts indicate that the pandemic reduced the value of global GDP in 2020 by 3.2%. GDP fell the most in advanced economies (AE)-by 4.6%, while in emerging market (EM) countries, it fell by 2.1%, including the Emerging and Developing Europe (EDE) countries by 2% as well

(IMF,2021). Therefore, there was a need for the study to examine the nexus between capital structure and financial performance of banks in Tanzania because there were contradictions among the findings of the studies which were carried out previously. Specifically, very few studies have been reported for commercial banks in Tanzania. Thus, the current study was a attempt to examine the influence of COVID 19 impact on the nexus between capital structures on the financial performance of Tanzania commercial banks.

Conceptualization

With the evidence of empirical review carried out in the current study, the following conceptual framework was framed to answer the research question.

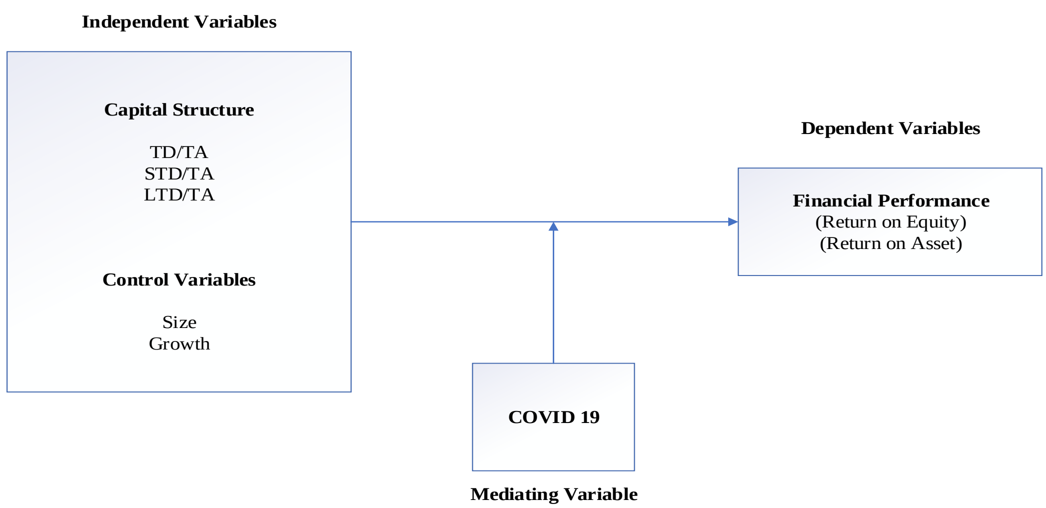

Figure 4: Conceptual Framework

Hypotheses

Based on the research problem and objective of this study, the following hypotheses have been formulated to carry out the empirical study:

H1: There is a significant connection between total debt to total assets and the financial performance of commercial banks.

H2: There is a significant connection between long-term debt to total assets and the financial performance of commercial banks.

H3: There is a significant connection between short-term debt to total assets and the financial performance of commercial banks.

H4: There is a significant connection between COVID-19 impact and capital structure on the financial performance of commercial banks.

Methodology

Research Design

The research design which used in this study is Structural Equation Modeling (SEM). According to DeVault (2018), Structural Equation Modeling is a quantitative research technique that can also incorporate qualitative methods. SEM is used to show the causal relationships between variables. That is to say that a researcher of this study is interested in the strength of the relationships between variables in a hypothesis, and SEM is a way to examine those variables.

Data Collection

The researcher used annual audited financial statements data from the commercial banks published on their website as per the Bank of Tanzania regulations forming a fixed balanced fixed panel data. Data was considered from twenty-five (25) commercial banks from 2016 to 2020. The data forms 100 observations. Bank Size was measured by the natural log of total assets ratio (Yinusa, Adelopo, Rodianova, and Luqmon, 2019). Data collected were subject to various correlation tests.

Data Analysis

From the acquired secondary data, different comparable ratios which are normally used as a basis for performance measurement were calculated. Also, the capital structure as measured by the debt-equity ratio was determined for respective financial years, thereby being correlated with the financial performance to find the relationship between capital structure and commercial bank financial performance. Data were analyzed using a computerized data analysis package known as Statistical Package for the Social Sciences (SPSS).

Test on Variable Inflation Factor

A Variable Inflation Factor test was conducted to examine whether multicollinearity exists amongst independent variables. Results of the VIF test are presented in Table 1. Nachane (2006) suggested that VIF < 10.0 was acceptable. According to table 1, the highest variance inflation factor (VIF) was 4.140 therefore, there was a low level of multicollinearity, and as such multicollinearity did not seem to be an issue in this study.

Table 1: Values of Variance Inflation Factors

Variables	VIF	1/VIF
SDTA	1.274	0.785
LDTA	1.469	0.681
TDTA	1.364	0.733
SIZE	4.140	0.242
GRO	3.850	0.259

Models

The current study was performed on the balanced panel data analysis from 25 selected commercial banks that have measurements on selected variables in all 5 years study periods (2016-2020). Therefore, panel data might have individual/ group effects, time effects, or both, which could be analyzed by fixed-effect or random-effect model. Therefore, the present study considered the fixed and random effect models to carry out the analysis. In analyzing the nexus between capital structure and financial performance of banks, the researcher made use of a multiple-indicators-multiple-causes (MIMIC) structural equation modeling (SEM). Figure 2 presents the path diagram that depicts a simplified MIMIC model in which variables in a rectangular box denote observable variables, while variables in the oval box are latent variables.

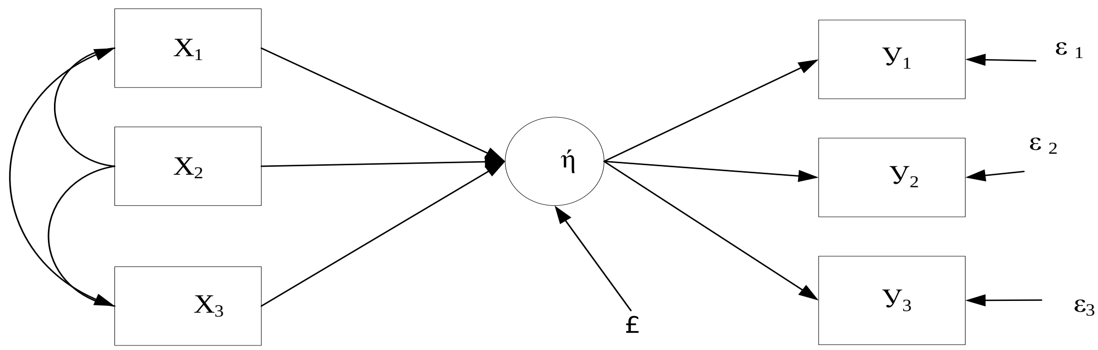

Figure 5: Path Diagram of a Simplified MIMIC Model

Source: Chang et al., (2009).

In the figure above X_1, X_2, and X_3 are factors that cause the latent variable ή; and, $У_1$, $У_2$, and $У_3$ are indicators of ή. In the context of this study, Xis are determinants of capital structure (ή), which are further measured by Yis.

ή = AX + £

Y = B_y ή + ε

Where,

Y is a vector of indicators of the latent variable ή, and X is a vector of causes of ή. The latent variable ή is linearly determined by a set of observable exogenous causes, X = (X_1, X_2....X_j), and disturbance term £. The latent variable ή, in turn, linearly determines a set of observable endogenous indicators, Y = (Y_1, Y_2..Y_k), and a corresponding set of disturbance, ε = (ε_1, ε_2...ε_l).

The MIMIC model was used to determine values of latent variables whereby data input applies a linear regression model to find a significance among tested variables. The linear model was applied to test five determinants of a capital structure against the financial performance of commercial banks for 5 periods of study. The Variable in the model are short term debt divided by total assets of bank i at time t, long term debt divided by total assets of bank i at time t, total debt divided by total assets of bank i at time t, Size for bank i in time t, and Growth changes in banks deposit.

The estimated Fixed Effect Model reads as follows:

$$\mathbf{ROAit = \alpha 0 + \alpha_1 SDTAit + \alpha_2 LDTAit + \alpha_3 TDTAit + \alpha_4 SIZEit + \alpha_5 GROit + \varepsilon it} \text{ ....(1)}$$

$$\mathbf{ROEit = \alpha 0 + \alpha_1 SDTAit + \alpha_2 LDTAit + \alpha_3 TDTAit + \alpha_4 SIZEit + \alpha_5 GROit + \varepsilon it} \text{............(2)}$$

And the Random Effect Model reads as follows:

$$\mathbf{ROAit = \alpha 0 + \alpha_1 SDTAit + \alpha_2 LDTAit + \alpha_3 TDTAit + \alpha_4 SIZEit + \alpha_5 GROit + uit + \varepsilon it} \text{...... (3)}$$

$$\mathbf{ROEit = \alpha 0 + \alpha_1 SDTAit + \alpha_2 LDTAit + \alpha_3 TDTAit + \alpha_4 SIZEit + \alpha_5 GROit + uit + \varepsilon it} \text{........ (4)}$$

In the equation,

ROAit is calculated as net profits divided by total assets of bank i at time t.

ROEit is calculated as net profits divided by shareholder equity of bank i at time t.
SDTAit is short-term debt divided by total assets of bank i at time t.
LDTAit is long-term debt divided by total assets of bank i at time t.
TDTAit is total debt divided by total assets of bank i at time t.
SIZEit is the log of total assets for firm i in time t;
GROit is changes in banks deposit
εit: Stochastic error term of firm i at time t
uit: error term of firm i at time

Results

Correlation Analysis

Table 1 provides the results of correlations analysis between capital structure and financial performance of the selected commercial bank in Tanzania from 2016 to 2020.

Table 1: Correlations Analysis Between Capital Structure and Financial Performance

	SDTA	LDTA	TDTA	GROW	SIZE	ROE	ROA
SDTA	1.000						
LDTA	.365	1.000					
TDTA	-.034	.250	1.000				
GROW	-.382	-.376	-.208	1.000			
SIZE	-.452	-.009	.571	.750	1.000		
ROE	-.037	.765	-.367	-.054	-.009	1.000	
ROA	.534	.924	-.071	-.380	-.075	.917	1.000

As per the results presented in Table 2, there was a significant positive association between short term debt to total assets ratio and ROA ($\alpha = 0.534$, $p = 0.620$) but short-term debt to total assets ratio shows negative significant association with ROE ($\alpha = -0.037$, $p = 0.782$). Anyhow, long term debt to total assets ratio had a positive significantly associated with financial performance measure in terms of ROE ($\alpha = 0.765$, $p = 0.127$) and ROA ($\alpha = 0.924$, $p = 0.138$). Total debt to total assets ratio significantly negatively associated with ROA ($\alpha = -0.071$, $p = 0.920$) but there was negative significant association between total debt to total assets ratio and ROE ($\alpha = -0.367$, $p = 0.570$).

There was negative significant association between growth and financial performance measures (ROA: α =-.380, p = 0.862, ROE: α = -.054, p = 0.621). Size was significantly positively associated with ROE (α = -.009, p = 0.438). However, there was significantly positively association between size and ROA (α = -.075, p = 0.325).

Nexus between Capital Structure and ROA

In the first equation, the relationship of short-term debt, long-term debt, and total debt with the financial performance (ROA) was studied keeping size and growth as a controlling variable.

$$ROAit = \alpha 0 + \alpha_1 SDTAit + \alpha_2 LDTAit + \alpha_3 TDTAit + \alpha_4 SIZEit + \alpha_5 GROit + \varepsilon it \text{ ....(1)}$$

$$ROAit = \alpha 0 + \alpha_1 SDTAit + \alpha_2 LDTAit + \alpha_3 TDTAit + \alpha_4 SIZEit + \alpha_5 GROit + uit + \varepsilon it \text{...... (3)}$$

Table 2: Nexus between Capital Structure and ROA

Variable	Fixed Effect Model	Random Effect Model
C	0.345	0.5134
SDTA	-0.336	-0.1764
LDTA	-0.6643	-0.2376
TDTA	-0.4231*	-0.5549**
SIZE	-0.3824	0.3634
GRO	0.1008	0.0987*
No. of observations	100	100
R-Square	0.5220	0.5308
F-statistic(p-value)	6.432(0.033)	10.765(0.031)
Hausman Specification Test	0.78(0.8231)	

Table 2, presented the results of panel data multiple regression analysis to examine the nexus between capital structure and financial performance of banks in Tanzania. The F-statistics value for the fixed effect model (6.432 ($p<0.05$)) and random effect model (10.765 ($p<0.05$)) indicated that the independent variables were jointly statistically significant in the fixed and random estimates in explaining variations in ROA. The R-square statistics value of 0.5220 and 0.5308 revealed that the independent variables jointly account for about 52.20%, and 53.08% variation in ROA in the fixed and random effects models respectively. Going by the Hausman test statistics of (0.78, $P < 0.10$) it was rejected the null hypothesis that differences in coefficient of the fixed and random estimates were systematic, thus fixed effect model was accepted ad interpreted. Therefore, the fixed-effect model was considered as most suitable to explain the nexus between capital structure and ROA in this study.

Nexus between Capital Structure and ROE

In the second equation, the relationship of short-term debt, long-term debt, and total debt with the financial performance (ROE) was studied keeping size and growth controlling variables.

$$\textbf{ROEit} = \alpha 0 + \alpha_1 \textbf{SDTAit} + \alpha_2 \textbf{LDTAit} + \alpha_3 \textbf{TDTAit} + \alpha_4 \textbf{SIZEit} + \alpha_5 \textbf{GROit} + \varepsilon it \text{............}(2)$$

$$\textbf{ROEit} = \alpha 0 + \alpha 1\textbf{SDTAit} + \alpha 2\textbf{LDTAit} + \alpha 3\textbf{TDTAit} + \alpha 4\textbf{SIZEit} + \alpha 5\textbf{GROit} + \textbf{uit} + \varepsilon\textbf{it} \text{........ } (4)$$

Table 3, present the results of panel data multiple regression analysis to examine the relationship between capital structure and ROE of banks in Sri Lanka. The F-statistics value for the fixed effect model was 4.723 ($p<0.05$) and the random effect model was 7.434 ($p<0.05$) which illustrated that the independent variables were jointly statistically significant in the fixed and random estimates in explaining variations in ROE. The R-square statistics value of 0.563 and 0.623 showed that the independent variables jointly accounted for about 56.30%, and 62.30% variation in ROE in the fixed and random effects models respectively. Going by the Hausman test statistics of (0.57, $P > 0.05$) we accepted the null hypothesis that differences in coefficient of the fixed and random estimates were not systematic, thus it accepted and interpreted the random effect model. In this case, the random effect model was the best model to explain the relationship between capital structure and ROE.

Table 3. Nexus between Capital Structure and ROE

Variable	**Fixed Effect Model**	**Random Effect Model**
C	0.520	0.3304
SDTA	0.423	0.4876
LDTA	-0.543	-0.5645**
TDTA	-0.354*	-0.5549**
SIZE	0.425	0.348
GRO	0.206*	0.378**
No. of observations	100	100
R-Square	0.563	0.623
F-statistic(p-value)	4.723 (0.002)	7.434(0.005)
Hausman Specification Test	0.57 (0.0892)	

From the results of the Fixed effect model presented in table 4, there was a significant positive association between short-term debt to total assets ratio. This showed positive significant association with ROE ($\alpha = 0.423$, $p = 0.538$), long term debt to total assets ratio had a negative sign associated with financial performance measure in terms of ROE ($\alpha = -0.543$, $p= 0.253$). There was a negative significant association between total debt to total assets ratio and ROE ($\alpha = -0.354$, $p = 0.430$). Size was significantly positively associated with ROE ($\alpha =0.425$, $p = 0.358$).

Discussion of Findings

From the results presented below in the fixed-effect model, there was a significant negative relationship of total debt to total assets ratio ($\alpha = -0.4231$, $P < 0.10$) with ROA. Short-term debt to total assets ratio, long-term debt to total assets ratio, and size was not significantly related to ROA. However, Growth of banks ($\alpha = 0.1008$, $P < 0.05$) had significant positive relationship with ROA. Therefore, as per the fixed-effect model presented in Table 2, H1 had been supported with the results of the study that there was a significant relationship between total debt to total assets ratio and ROA. H2 was not supported with the results of the study that long-term debt to total assets ratio had not significantly related to ROA. Further, the results of the study were not supported with the H3 as well that there was no significant relationship between short-term debt to total assets ratio and ROA. From the results of the random effect model presented in Table 3, H1 was not supported by the results of the study that there was a significant negative connection between total debt to total assets ratio and ROE. H2 was supported with the results of the study that there was a positive significant connection between long-term debt to total assets ratio and ROE. Further, H3 was also not supported by the results of the study that there was no significant connection between short-term debt to total assets ratio and ROE. The findings of the study were consistent with the studies of Ramadan and Ramadan (2015) and Abewardhana and Magoro (2017). There was a significant connection between COVID-19 impact and capital structure on the financial performance of commercial banks. From the noticeable results from data analyzed of this study, the COVID-19 pandemic had significant effects on return on equity and returns on assets, and the growth rate which affects the financial performance of commercial banks in Tanzania. This was because when the economy of the country slows down, banks face the challenge of keeping up with demand and raising additional resources to balance the situation.

Conclusions

By considering the panel data from selected commercial banks in Tanzania for the period from 2016 to 2020, this study empirically examined the nexus between capital structure choice (TDTA, LDTA, and SDTA) and financial performance of banks (ROA and ROE). Based on findings, it was documented that short-term debt had no significant relationship with financial performance in terms of ROA and ROE. Further, ong-term debt had also no significant relationship with the financial performance in terms of ROA and ROE in this study. Most importantly, the total debt to total assets ratio had a significant negative relationship with ROA and ROE. These findings envisage that debts were relatively more expensive due to certain direct and indirect costs. Therefore, employing high proportions of debt in financial structure results in low financial performance. Growth had a significant positive relationship with ROA and ROE. However, the size of banks did not show any significant relationship with ROA and ROE. Empirical results indicated a negative significant relationship between total debt to total assets and financial performance. This study suggests that financial managers should try to finance from retained earnings rather than relying heavily on debt capital in their capital structure.

However, they can employ debt capital as the last resort. To maximize the performance of banks, the managers should try to attain an optimal level of capital structure and endeavor to uphold it as much as possible. These negative impacts also suggested that the legislative rules and policies have to be designed in such a way to assist banks in sharply reducing the reliance on too much use of debt. Although it observed significant negative impacts of capital structure choice on the financial performance of the sampled banks, this investigation still suffers from a comprehensive and systematic database for all banks in Tanzania. As more systematic datasets become available, we suggest that further research can be conducted on the same issue by employing data from a larger sample and more control variables for a longer period to confirm this finding. Under the COVID 19 impacts on the financial performance of commercial banks were apparent. COVID-19 has dramatically changed the economic conditions in Tanzania. Add-on that was an increase in the risk of bank failures due to the impacts on the financial services industry both from direct COVID-19 effects on borrowers, banks, and the global markets but also from government regulatory and policy changes envisioned to combat the impact on the Tanzania citizens and businesses.

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Effect of Merger and Acquisition of Deposit Money Banks on Nigeria's Economic Growth: A Pre and Post Analysis

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Abstract: *The study examined the effect of Mergers and Acquisitions (M&As) of Deposit Money Banks (DMBs) on Nigeria's economic growth. Pre-M&As period lasted from 1990–2004, while the Post-M&As spanned from 2005–2019. Data was collected from the Central Bank of Nigeria (CBN) Statistical Bulletin and tested with Ordinary Least Square Regression Analysis. The results indicated that in the Pre-M&As era, bank's capital base, credit granted to the private sector and bank spread positively, enhanced economic growth howbeit and bank's gross credit adversely affected economic growth. Findings also revealed that Post-M&As era contradicted the Pre-M&As effect on DMBs, with all the bank indicators showing negative connection with economic growth, except credit granted to the private sector. These findings led to the conclusion that M&As had little impact on the country's economic growth during the period under consideration. As a result, the study recommendedthat the CBN issue a special directive to the DMBs to extend more credit to the private sector as a means of accelerating economic growth.*

Key words: Gross Credit**,** Mergers and Acquisitions, Deposit Money Banks, Economic Growth
JEL Classification: D21, D4, L1, L2

INTRODUCTION

Banks contribute significantly to the economic growth of any nation. Through banks, mobilization of savings serves as a catalyst for investment (Abdullahi, 2002; Mordi, 2004), thus, creating wealth through capital formation, stimulating economic growth and providing risk management services (Dogarawa, 2011). Nevertheless, for banks to achieve these goals optimally, they must be reordered through reform processes targeted towards revamping and incorporating the banking sector into an all-inclusive financial system. These reforms may be introduced in both advanced and emerging economies so as to rectify the observed inadequacies impairing the financial sector (Dogarawa, 2011; Ebimobowei and Sophia, 2011). In terms of institutional numerical strength, board composition, as well as the entire operations, these reforms involve remarkable changes. The process of bank consolidation is an indication of an effective reform strategy. Consolidation is the process of integrating many elements into a single unit. In the financial sector, consolidation is similar to merging. According to Adegbaju & Olokoyo (2008), when company A purchases company B in a merger, the existing company is buyer A, and when A and B merge, company C is formed. In Nigeria, the banking consolidation operation in 2012 resulted in the formation of 21 commercial banks from 89 banks in existence before 2004. Since 1980, approximately 7,000 bank mergers have occurred in the United States, with a similar pattern emerging in the United Kingdom and other parts of Europe. In 1997, the Eurozone experienced 203 bank mergers and acquisitions (M&As). In 1998, a bank with a capitalisation of US $688 billion was established in France, while a merger of two banks in Germany resulted in Germany's second largest bank with a capitalisation of US $541 billion in the same year. (Ikpefan, 2012). Banking institutions around the world have been expanding through M&As, in the hopes of lowering costs, increasing earnings and enhancing market share (Coccorese & Ferri, 2019). These strategies give merging firms a competitive advantage (Khan, et al., 2020).

Akinsulire (2002) pointed out that M&As is a technique for achieving a synergistic impact that has been carefully planned. Li, Qiu & Shen (2018) asserted that it bring about increased economic growth and also enhances market share. Gomes et al. (2017) stressed that M&As impact on the firm's local, as well as worldwide, operations, result in cost efficiency and the associated benefit of economies of scale inside the organization. Furthermore, Oloye & Osuma (2015) reported that M&As are important in boosting public trust, growing stakeholder assets, and improving operational productivity and economic stability. M&As, according to the Central Bank of Nigeria (2005), improve bank sustainability and performance while also expanding the economy's potential. However, in Nigeria, Soludo (2006) asserted that though consolidation which occurred in the financial industry was done exclusively to re-capitalize banks and strengthen their financial position yet its economic impact was negligible as there are still insolvent banks because of enormous non-performing loans. As a result, it is necessary to study the effect of M&As on the Nigerian economy.

Additionally, studies on M&As in Nigerian banks generate diverse range of outcomes. As an example, Altunbas & Ibanez (2004) reported that M&As improves banks ’profitability. Ahmed, Manwani & Ahmed (2018) also opined that M&As increased the performance and productivity of banking organization. Olagunju & Obademi (2012) concluded that M&As play a crucial role in the financial sector. However, some studies have mentioned the issue of M&As failure rates like Warter & Warter (2017) who admitted that the central issue in M&As remains the high rate of failure. Goyal & Joshi (2012) also agreed that failure rates of M&As have remained consistently high. Puranam, Singh, & Chaudhuri (2009) reported failure rates of between 60 % and 80%. Appah & John (2011) also commented that M&As failure rates are generally far above 50 % in the banking sector, Beitel et al (2003) reported that M&As have no substantial effect on DMBs. Arising from the inconsistencies in these findings; this work seeks to investigate the effect of Pre and Post M&A of banks on the Nigerian Economy.

In view of this, the research provided answers to the following questions:

i. What had been the effect of Pre- M&As of DMBs on Nigeria's Economic growth?
ii. Did Post-M&As of DMBs affected Nigeria's Economic growth?

Hypotheses of the Study
The following hypotheses were tested in the null form:

$^{1}H_0$: Pre- M&As of DMBs had no effect on Nigeria's Economic growth

$^{2}H_0$: Nigeria's Economic growth was not affected by Post-M&As of DMBs

Literature Review
This section presents the review of literature for this study. The chapter is presented in three sections consisting of the conceptual, theoretical and empirical reviews.

Conceptual Review

Mergers and Acquisition
A merger, according to Owokalade (2006), is a form of corporate pairing in which two or more entities integrates to constitute one, with one firm's equity being obtained by another and the owners of the smaller firm becoming shareholders in the larger company. An acquisition is referred to as a merger (Alao, 2010, Dubey, 2007). The acquirer maintains ownership of the purchased firm and can engage in competitive or friendly operations with it. Consolidations are not the same as M&As, which are corporate mergers in which two or more firms unite to establish a larger firm. Only the new entity remains active once all of the merging companies have been dissolved (Okonkwo, 2004). The two companies get a competitive edge in terms of performance, capital, and resources when they merge their activities. This lowers the number of competitors in the market, giving them an advantage over others (Geln, 2011; Okonkwo, 2004). When one firm buys the controlling shareholding interest of another, this is known as an acquisition. Two autonomous entities or corporations are normally formed at the end of the process.

Mergers and Acquisition Transactions in Nigeria
It is undeniable fact that Nigeria has progressed in recent years in terms of adopting mergers and acquisitions for the goals of restructuring firms or improving investment returns. It's a welcome change from previous years, when foreign-owned corporations accounted for the majority of M&As. The earliest case of M&As in Nigeria in 1912 is that of Anglo African Bank, formed by British Bank of West Africa, founded in 1892. These institutions spawned the First Bank of Nigeria Plc. Since then, several businesses have followed suit. The most notable M&As in Nigeria's private sector happened in the banking sector in 2005. The Central Bank of Nigeria (CBN) implemented policies to consolidate DMBs, facilitating their contribution towards economic growth. The CBN instructed banks that their shareholders' funds should be increased from two billion naira to twenty-five billion naira (25 billion naira). The population of Nigerian banks has declined as a result of

this policy, from 89 in 2005 to twenty-five in 2006, then to twenty-four in 2004. The incumbent banks' failure to meet the new policy's financial requirements caused the decrease. Following the Nigerian merger wave of 2005, another wave of mergers emerged in the banking sector in 2011, with the purpose of addressing operational issues such inadequate governance, poor financial planning, operational inefficiencies, and financial deepening (Ajayi, 2005).

The Nigerian Banking Industry before Mergers and Acquisitions

Before the recent bank M&As, which was propelled by the CBN 13-point reform plan and launched on July 6, 2004, DMBs in Nigeria had monopolistic tendencies, with noticeable qualities of market structure and dominance. According to Lemo (2005), the top ten (10) banks hold more than half of total assets, half of all deposit liabilities, and more than half of total credits. Accordingly, small banks with capital of less than $10 million (N1.4 billion) dominated the sector, making it heavily reliant on the government.

Effect of Mergers and Acquisitions on the Nigerian Economy

Mergers and Acquisitions or any other means of consolidation may have an impact on bank interest rates, competitiveness, and the working capabilities of monetary policy in the sense that increased size and reorganization potential may result in efficiency benefits that lower marginal costs, enhanced market power, or both. Enhanced performance would be achieved by broadening the scope of activities if there are economies of scale. Because reform is intended to improve effectiveness both in procedures and in the economy as a whole.

Theoretical Review

This study is hinged on Synergy Gain Theory.

Synergy Gain Theory

In 1955, Gunther proposed the Synergy Gain theory. He propounded the theory that 2+2 =5. In general, M&As happen because it produces 'synergy' between the acquirer and the target, which enhances the company's worth (Kathy 2005). M&As are embarked upon to achieve strategic advantages from the combined enterprises. The valuation of the combined company is assumed to outperform the value of the acquiring and acquired firms separately. Operating and financial synergies are developed as a result of economies of scale. That is to say, when the two firms link up, their fixed costs are spread across a wider manufacturing scale, therefore lowering fixed costs. Aside from economies of scale, there are also economies of scope, which include integrating acquirer's and target firm's matching resources to create synergy gains. Synergies, according to Kathy (2005), are advantages that can only be realized through the process of merging, rendering them merger-specific.

Empirical Review

Umoren & Olokoyo (2007) examined the effect of M&As on DMBs performance in Nigeria. Profitability, liquidity and solvency were the dependent variables with M&As being the independent variable. The study collected secondary data from the thirteen sampled (13) mega banks. Results showed that M&As resulted into improved financial performances on average. Okpanachi (2011) made a comparison between Pre and Post-M&As of DMBs in Nigeria. The study employed gross earnings, profit after tax, and net assets of some DMBs as indicators to measure performance of DMBs after M&As. The data showed that DMBs performance improved when evaluating the Pre and Post-M&As periods. Bakare (2011) investigated the pattern and economic implications of bank mergers in Nigeria using Sample Test methodologies and E-view statistical tools. The analysis discovered that banks are better capitalized and less volatile as a result of the M&As. It showed that recapitalization has a small but considerable impact on the economy. Kanu & Anyanwu (2015) investigated the post consolidation review of M&As and banking sector performance in Nigeria from 1999 to 2014. Findings revealed that M&As improved bank performance in terms of profit before taxes and total assets in a positive and significant way. Omoye & Aniefo (2016) studied the effects of M&As in the Nigerian corporate climate on performance, liquidity buy-outs, and share prices.

The research was conducted over a period of time. Findings revealed that M&As have considerable and positive influence on Nigerian businesses. In an exploratory study, Okafor (2019) investigated the performance enhancing components in M&As. Low acquisition purchase premiums, the timing of M&As, as well as related business purchases, were discovered to considerably boost the success rate of M&As. In contrast, Somoye (2008) researched into the effect of Post-M&As of government-induced banks in Nigeria. He discovered that M&As alone might not be sufficient to guarantee sustainable growth. According to the report, the consolidation program has had minimal impact on the banking industry's overall performance and has also contributed little to the real sector's long-term development. Suberu & Aremu (2010) investigated corporate governance and M&As of DMBs in Nigeria. They employed 25 DMBs stemming from regulatory pressure for M&As. The main conclusion was that DMBs are responsible for the economy's dismal performance due to their reliance on imports rather than long-term investment thus maximizing shareholder’s profit. Appah & John (2011) researched into how M&As affected DMBs profitability. Ex-post facto research design was employed with a sample size of ten banks. Findings revealed that DMBs performed better during Pre-M&As period. Owolabi & Ogunlalu (2013) discovered that M&As of DMBs doesn’t necessarily enhanced financial position of DMBs, DeLong & Deyoung (2007) and Amel et al. (2004) asserted that M&As have no meaningful effect on DMBs profitability. In the Post-M&As era of the Nigerian banking sector, Akinbuli (2013) explored the effects of M&As on the profitability of corporate organizations. Findings demonstrated that, while M&As are not a panacea for corporate financial hardship, they are a viable option. M&As were found to be simply a temporary remedy to financial difficulties, not a long-term answer.

Methodology

This section identifies the processes that were followed while conducting this study. This chapter's basic features are research design, population and sampling, data collection and analysis respectively.

Research Design

The research used *expo* facto design to examine the effect of M&As of DMBs on the economy. Data was collected for Pre-M&A period from 1990- 2004 as well as Post M&A period from 2005-2019. The data was analyzed, and performance in these areas? were compared to estimate the Pre- and Post M& As effect on Nigeria's economy.

Population of the Study

These are the entire Twenty- four (24) DMBs in Nigeria which have gone through M&As and hold the operating license issued by the CBN as at December, 2019.

Model Specification

This study adopted the model specified by Busari and Adeniyi (2017) and adapted it to suit the purpose of this study. Hence, the adapted study is specified thus:

RGDP = f(BCAP, BGC, BDE& CPS)………………………………Eq(1)

Eq (1) can be transformed into econometric model thus:

RGDP = β0 + β1BCAP + β2BGC + β3BDE + β4CPS + ut……………….Eq (2)

Taking the natural logarithm of Eq (2) produces:

logRGDP = β0 + β1logBCAP + β2logBGC + β3logBDE + βlogCPS + ut………Eq(3)

Where:

RGDP = Gross Domestic Product

BCAP = This is the total capitalization of all DMBs in Nigeria

BGC = Gross credit (or loans) given to the Economy by DMBs.

BDE = Density of DMBs operating in Nigeria

CPS = Credit granted to the private sector by DMBs in Nigeria

$\beta_0$denotes the regression constant.
$\beta 1$- $\beta 4$ = coefficients of the variables to be evaluated

Sources of Data

The CBN's Statistical Bulletin and the Annual Financial Statements of the selected DMBs provided secondary data for this study, which spanned for fifteen (15) years from 1990 to 2004 for the Pre-M&As era and 2005 to 2019 for the Post-M&As era. The Ordinary Least Square Regression Technique was used for data analysis.

Results and Discussion

Table1: Summary of Descriptive Statistics

	LRGDP	**LBCAP**	**LBGC**	**LBDE**	**LCPS**
Mean	10.04219	2.892059	5.388687	7.788155	12.81369
Median	9.989165	2.871670	5.609089	7.765569	12.81187
Maximum	10.46369	4.958110	7.325967	8.158230	14.23372
Minimum	9.862617	1.311759	3.258100	7.569928	11.23131
Std. Dev.	0.188548	1.367209	1.339798	0.167944	0.965563
Skewness	1.086478	0.237653	0.364755	1.063692	0.475997
Kurtosis	2.962860	1.517701	1.791312	2.133335	1.935674
Jarque-Bera	2.951948	1.514453	0.980940	2.839713	0.680708
Probability	0.428556	0.468965	0.612338	0.441749	0.711519
Sum	150.6328	43.38089	80.83030	116.8223	166.5779
Sum Sq.Dev.	0.497706	26.16964	25.13084	0.394874	11.18774
Observations	15	15	15	15	15

Source: Author’s Computation (2021)

Table 1 shows the results of the descriptive analysis performed in this study. It also displayed an overview of statistics, such as the mean, median, standard deviation, and metrics of the distribution's symmetry and normality.

Table 2: Summary of Regression Result (Pre-M&As Period)

Dependent Variable: LRGDP
Method: Least Square
Date: 08/06/21 Time: 09:36
Sample (adjusted): 1992 2004
Included observations: 13 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.100260	0.705750	7.226724	0.0001
LBCAP	0.116097	0.030088	3.858590	0.0048**
LBGC	-0.074422	0.047791	-1.557254	0.1580
LBDE	0.554471	0.056909	9.743182	0.0000**
LCPS	0.054295	0.062860	0.863743	0.4129

R-squared	0.788081	Mean dependent var	10.06939
Adjusted R-squared	0.782122	S.D. dependent var	0.188316
S.E. of regression	0.025180	Akaike info criterion	-4.241826
Sum squared resid	0.005072	Schwarz criterion	-4.024538
Log likelihood	32.57187	Hannan-Quinn criter.	-4.286489
F-statistic	165.7998	Durbin-Watson stat	2.057247
Prob(F-statistic)	0.000000		

LRGDP: Gross Domestic Product of Nigerian economy; LBCAP: Total capitalization of the entire DBMs; LBDE: Density of the DMBs; LCPS: Credit extended to private sector by DMBs : BGC gross credit (or loans) granted by the DMBs to Nigerian economy

Notes: ** 5% level of significance * 10% level of significance

Source: Author's Computation (2021)

The result of the Pre- M&As effect of the DMBs on the Nigerian economy was as indicated in Table 2 is stated as: RGDP = 5.100 + 0.1161BCAP – 0.0744BGC + 0.5544BDE + 0.0543CPS + e_0

From the above equation, all the proxies of banks' performances in the Pre- M&As era are positively associated with RGDP except BGC. In other words, banking capitalization (BCAP), bank density and expansion (BDE) and credit granted to private sector (CPS) are positively related to RGDP. However, while the relationship of BCAP and BDE are significant, that of CPS is not significant. Moreover, gross credit granted by the banks to economy maintains negative and insignificant relationship with RGDP.

Table 3: Summary of Regression Result (Post- M&As era)

Dependent Variable: LRGDP
Method: Least Squares
Date: 08/06/21 Time: 11:03
Sample: 2005 2019
Included observations: 15

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.171848	0.685532	9.003005	0.0000
LBCAP	-0.036971	0.171070	-0.216114	0.8332
LBGC	-0.073503	0.039953	-1.839742	0.0956*
LBDE	-0.012261	0.020911	-0.586361	0.5706
LCPS	0.354839	0.068756	5.160847	0.0004**

R-squared	0.734656	Mean dependent var	10.94125
Adjusted R-squared	0.708519	S.D. dependent var	0.220258
S.E. of regression	0.066619	Akaike info criterion	-2.318456
Sum squared resid	0.044381	Schwarz criterion	-2.082440
Log likelihood	22.38842	Hannan-Quinn criter.	-2.320970
F-statistic	35.75928	Durbin-Watson stat	0.883697
Prob(F-statistic)	0.000007		

LRGDP: Gross Domestic Product of Nigerian economy; LBCAP: Total capitalization of the entire DBMs; LBDE: Density of the DMBs; LCPS: Credit extended to private sector by DMBs: BGC gross credit (or loans) granted by the DMBs to Nigerian economy

Notes: ** 5% level of significance * 10% level of significance

Source: Author's Computation (2021)

The result of the Post- M&As effect of the DMBs on the Nigerian economy is as indicated in Table 2 which isstated as follows:

$$RGDP = 6.17 – 0.0369BCAP – 0.0735BGC - 0.0123BDE + 0.3548CPS + e_0$$

Findings revealed that all the banks' performance indicators in the Post-M&As era were negatively related with RGDP except CPS. On the other hand, credit granted to the private sector (CPS) still maintained considerable and positive relationship with RGDP, in such a manner that 1% increase in CPS produces 35% increasing resultant effect on RGDP and vice versa. Also, the relationship shown by CPS in the Post- M&As era was the only statistically significant relationship recorded in this period. On the other hand, gross credit granted by the banks to the economy remains negative and statistically insignificant.

Discussion of Findings

According to the descriptive analysis given in Table I, CPS had the highest mean score (12.81), followed by RGDP (10.04), BDE (7.79), and BGC (5.39), with BCAP having the lowest mean value (2.89). Also, the deviations from the mean values revealed that all the parameters cluster closely around their means values as they all had low values of standard deviations when compared with their mean values. The result of the skewness and kurtosis which measure the symmetry of the variables and the tail shape of the variables are also indicated in the table. Findings on skewness showed that all the variables under study were positively skewed which implies that their normal curve have long right tails. The coefficients of kurtosis showed that all the variables under consideration had tiny tails as their kurtosis coefficient were less than three. The Jarque-Bera statistics which is a test of normality revealed that all the variables had probability values that were greater than 0.05 critical values. Thus, the results demonstrated that all the parameters studied were properly distributed. The result of the regression analysis in Table 2 for the Pre-M&As era showed that the parameters tested accounted for 78.8% of changes in GDP while 21.2% is due to unspecified components in the model. The F-statistic value of 165.799 was significant. The constant parameter being 5.100 implies that economic growth would have increased by 5.100 units if all external factors were kept constant.

Total capitalization of banks (BCAP) was positively and significantly associated with economic growth in the Pre-M&As era. A unit increase in BCAP equals a 0.1161 increase in the economic growth indicator. Also, the density of banks (BDE) positively and significantly affected GDP in the Pre-Merger era. Having a value of 0.5544 revealed that a unit increase in BDE enhances GDP by 0.5544 units. This might be that as the number of banks increase, economic growth is also enhanced. Many people will have easy access to financial institutions thus increasing the rate of financial inclusion. Credit or loans granted to the economy (BGC) whose value is -0.0744 have no significant effect on GDP at the Pre-M&As era. This means that when BGC increases by one unit, GDP is reduced by 0.0744. Credit to Private Sector (CPS) has a value of 0.0543. This demonstrates that CPS has a small but positive influence on economic growth. GDP increases by 0.0543 units for every unit increase in CPS. As a result, bank credit to private businesses had not been efficiently channeled, and bank funds intended to them had not been optimally employed to boost economic growth during the Pre-M&As period. This outcome corroborates the results of Appah & John (2011) and Adeusi & Oke (2013) who reported similar findings. Moreover, in Table 3, for the Post-merger era, findings revealed that the parameters tested accounted for 73.5% of changes in GDP while 26.5% was due to unspecified components in the model. The F-statistic value of 35.79 was significant. The constant parameter shows that if all external factors remain constant, economic growth will increase by 6.172 units. BCAP is inversely proportional to economic growth, with a value of -0.036 indicating that a unit rise in BCAP caused a 0.036unit decrease in economic growth. Also, the coefficient of BDE which is -0.0123 portends a negative effect on GDP which signifies that a unit increment in BDE reduces economic growth by 0.0123 units. A possible explanation was that there were fewer banks in the country as a result of M&As. Thus, this could have affected the rate of financial inclusion, which might have detrimental effects on the economy. At 10% significance level, BGC with coefficient of -0.0735 had a noticeable but adverse effect on GDP. This indicated that every unit rise in BGC causes 0.0735 reductions in GDP. CPS had a positive and strong influence on GDP, with a coefficient of 0.354. This could be because M&As had repositioned Nigerian DBMs to lend more credit to the private sector in order for it to carry out productive activities, leading to a rise in GDP. Furthermore, gross credits created by the banks (BGC) was negative both in the pre as well as the post-merger and acquisition period. This showed clearly that loans and advances made by the Nigerian DMBs had not contributed significantly to economic growth. This could be owing to the discriminatory priority given to unproductive sectors in loan administration, resulting in ineffective credit utilization by the recipients. Finally, findings revealed that M&As have had minimal effect on Nigeria's economic progress. These findings are consistent with those of Sowore (2008), Bakare (2011), and Delong & Deyoung (2007), who concluded that DMBs mergers add very little to the country's economic growth.

Summary, Conclusions and Recommendations

Mergers and Acquisitions are strategic tools which improve operational efficiency and financial stability of an organization. In Nigeria, many researches on M&As had focused on manufacturing companies, very few studies analysed its effect on service industries especially banking sector as it relates to the Pre and Post M&As periods. Therefore, this research evaluated the effect of Pre and Post M&As of DMBs on Nigeria’s economic growth. The Pre-M&As effect of the DMBs was measured from 1990 – 2004 while the Post-M&As effect was from 2005 -2019. Data was analyzed with ordinary least square regression analysis. The research employed some performance indicators of DMBs to proxy M&As which other authors had not given attention over the years. These indicators were gross credit granted by DMBs, credit granted to private sector, the capital base of DMBs as well as density and population of DMBs in the Pre and Post M&As era. Findings revealed that, against theoretical expectation and postulations, the Post-M&As era contradicted the Pre-M&As effect on DMBs, with all bank indicators, except loans to the private sector, showing a negative connection with economic growth. This implies that M&As have had minimal effect on Nigeria's economic progress. In view of the findings, the study recommends that the CBN issue a special directive to the DMBs to extend more credit to the private sector as a means of accelerating economic growth.

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Effect of Brand Experience on Brand Loyalty: Mediating Role of Word of Mouth in the Mobile Money Service Brands

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Abstract: *This study examined the relationship between brand experience and brand loyalty in the presence of word of mouth as the mediator variable. Specifically, the study examined the effect of brand experience on brand loyalty and word of mouth (WOM), determining the effect of word of mouth on brand loyalty, and determining the mediation effect of WOM in the link between brand experience and brand loyalty. The study used an explanatory research design. Random sampling was used to select a total of 299 mobile money services users. This study used a structured questionnaire to collect data. Structural equation modeling was applied for data analysis in which SmartPLS 3 was utilized. The results indicate that brand experience has a positive and significant effect on brand loyalty and WOM. The findings also revealed that WOM had a positive and significant effect on brand loyalty. It was also found out that WOM partially mediated the link between brand experience and brand loyalty. This study concluded that brand experience and WOM were predictors of brand loyalty. It was also concluded that WOM plays a mediating role in the link between brand experience and brand loyalty. Thus, this paper recommended that mobile money network operators (MNOs) should provide a unique experience on every consumer-brand touch-point and devise strategies that would promote WOM recommendations that in turn would generate loyalty.*

Keywords: Brand experience, Brand loyalty, WOM, Mobile money service brands.

INTRODUCTION

Brand loyalty refers to consumers' commitment to continuously repurchase certain brands in the future, irrespective of the situation and marketing intentions of other brands possibly making those consumers switch brands (Semadi and Ariyanti, 2018). The majority of researchers and marketing practitioners have invested interest in this concept for many decades (Ardyan, Kurnianingsih, Rahmawan, Wibisono, & Winata, 2016; Hussein, 2018; Mostafa & Kasamani, 2021; Ong, Lee & Ramayah, 2018; Nysveen, Pedersen, and Skard, 2013). Loyal consumers recommend the firm's brands to other consumers, decrease price sensitivity and raise the market share for the respective firm (Jafari, Forouzandeh, Ghazvini, & Safahani, 2016). A study by Mwai, Muchemi, & Ndungu (2015) found out that loyal consumers decrease the cost used by firms for marketing activities as attracting a new consumer is six times more than the costs associated with retaining the old consumer. For that case, it is important to study the factors influencing the loyalty of consumers towards brands in particular the mobile money brands. Creating a loyal customer base seems to be the best option than using other means such as loyalty programs which are not sustainable and accompanied by short-term benefits. However, firms are facing a challenge in retaining consumers as consumers are still switching from one brand to another (Ndesangia, 2015; Yahia & Massimo, 2016). The switching behavior for example in the mobile money services has been facilitated by the rapid growth of the industry where there are many mobile network operators (MNOs) with similar offerings. The global report by GSMA (2021) points out that the mobile money service industry has experienced a high growth rate particularly in the COVID-19 pandemic era (GSMA, 2021). People have experienced locked downs in countries hit by the pandemic thereby preventing their free movement and hence mobile money services became the best option for financial services. The report by GSMA (2021) also reveals that there were 1.2 billion registered mobile money accounts globally in 2020 which processed over $2 billion transactions on daily basis. Sub-Saharan Africa registered 548 million accounts with a transaction value of 490 billion whereas East Africa alone registered 293 million accounts with a transaction value of 273 billion (GSMA, 2021). In Tanzania, the industry is also growing tremendously as of September 2021, there were 33.15 million registered mobile money accounts comprising of 38% M-Pesa, 25% Tigo Pesa, 21% Airtel money, 11% Halotel Pesa, 2% Ezy-Pesa, and 3% TTCL (TCRA, 2021). This notable development of the mobile money industry and the presence of various MNOs has augmented the competition among MNOs (Matonya, Jaensson, & Ngaruko, 2019). On the other hand, the majority of the existing MNOs provide consumers with the same offerings and prices leaving little room for differentiation and hence becomes easy for consumers to switch brands. Consequently, to retain consumers and have inimitable competitive advantages, MONs should cultivate positive brand experience and WOM recommendations which in turn builds stronger ties with consumers and guarantees survival in the marketplace (Matonya, 2018).

Brand experience refers to "subjective, internal consumer responses (sensations, feelings, and cognition) and behavioral responses evoked by brand-related stimuli that are part of a brand's design and identity, packaging, communications, and environments" (Brakus, Schmitt, & Zarantonello, 2009, p.53). Brand experience is regarded as a holistic concept involving four dimensions namely; sensory, affective, behavioral, and intellectual facets (Brakus et al., 2009). The sensory dimension refers to the visual and brand features that are experienced by the use of the buyer's sensory body part (Hwang and Hyun, 2012). According to Brakus et al. (2009), the visual features of brands can enhance sensorial experiences since they stimulate consumers' senses encompassing, touch, vision, hearing, and smell. The affective dimension, on the other hand, includes all kinds of consumers' subjective experiences associated with positive emotions and sentiments (Hwang and Hyun, 2012). The behavioral dimension of experience has been defined as the dimension which consists of physical experiences, lifestyles, and contacts with a particular brand (Zarantonello and Schmitt, 2010). Hence, consumers who have experience of a particular brand may continue to buy the products of this brand provided they get physical benefits from the brand. This behavioral facet lasts longer in consumers' minds and is hence regarded as an indispensable marketing practice. Lastly, the intellectual component is linked to consumers' feelings towards a brand (Kang, Manthiou, Sumarjan & Tang, 2017). Consumers approach brands that furnish them with memorable and unique experiences rather than objects (Mostafa & Kasamani, 2021). It is worth noting that, experiences provided by brands such as mobile money services build loyalty through the cognitive and behavioral choices consumers make while they interact with the particular brand (Moreira, Silva, & Moutinho, 2017). Previous studies have shown the major role played by brand experience in influencing the behavior of consumers in various industries (Mostafa & Kasamani, 2021; Yu, Yuan, Kim, & Wang, 2020). However, the brand experience realm is still at its infancy stage (Shahzad, Bilal, Xiao & Yousaf, 2018). Hence more studies are needed particularly in the service industry where there are limited studies (Khan & Rahman, 2015). On the other hand, word of mouth (WOM) is defined as the talks held by consumers on matters linked to uses, characteristics, and their personal experience regarding a certain product or service (Kumar, 2016). Individuals utilize these dialogs as a means for buying verdicts (Matonya et al., 2019). Assisted by the advancement of technology, WOM has become more influential on marketing outcomes and business operations (Tsai, Kuo & Tan, 2017). WOM is a cost-effective medium of communication as it involves less investment compared to traditional advertising (Ansary & Hashim, 2018; Warren, 2018). It is one of the marketing tools which can promote a company's products and services and build the loyalty of consumers (Ngoma & Ntale, 2019). Indeed WOM eliminates doubt and evokes consumer enthusiasm as well as prevents switching behavior as it stops consumers from breaking the relationship.

Moreover, WOM creates confidence in consumers towards a firm and its service and enables the consumers to feel that they have made the right choice. WOM also catches the attention of new consumers as the majority of consumers greatly depend on what the existing consumers talk about the particular firm and its services (Ngoma & Ntale, 2019). WOM generates a long-lasting relationship with brands as it is the most powerful communication tool to drive consumers' reactions toward a brand. It is established that WOM is a thousand times more influential than traditional marketing (Silverman, 2011). This power can be used either to build or tarnish the brand image. Consumers have more trust in the information given by their friends or relatives than those from the company. Hence, the views of others regarding the product or service or the seller robustly influence an individual's purchase intention (Huete-Alcocer, 2017; Husin, Ismail, & Rahman, 2016). Owing to its importance, studies have been conducted to examine the antecedents and consequences of WOM (Harris and Khatami, 2017). However, there are scant studies in the service industry that have considered WOM as the antecedent of brand loyalty (Matonya et al., 2019) and which regards WOM as the mediator variable in the relationship between brand experience and brand loyalty as with the current study.

It is worth noting that, various studies have been done on the relationship between brand experience and brand loyalty. However, scholars have come up with mixed results. For example, a study by Mostafa & Kasamani (2021) examined the effect of brand experience on brand loyalty for smartphone users in Lebanon and found that brand experience influences brand loyalty. Ong, Lee & Ramayah (2018) in Malaysia also studied the relationship between brand experience and brand loyalty in casual dining restaurants and established that the behavioural dimension of brand experience has no significant effect on repurchase intention. On the other hand, Hussein (2018) studied the influence of brand experience on brand loyalty in Indonesian casual dining restaurants. The findings of this study indicate that brand experience positively influences brand loyalty. Contrary to these findings, Ardyan, Kurnianingsih, Rahmawan, Wibisono, and Winata, (2016) used Samsung Smartphone users to study the relationship between brand experience and brand loyalty in Surakarta city of Indonesia. Their study found out that brand experience does not influence brand loyalty. Similarly, a study by Nysveen, Pedersen, and Skard (2013) found an insignificant relationship between brand experience dimensions and brand loyalty. Forsido (2012) also investigated the influence of brand experience on brand loyalty in Uppsala Sweden in the mobile industry. The findings of this study indicated that brand experience does not affect brand loyalty. However, this study hypothesized that: H1: Brand experience has a positive and significant effect on brand loyalty. On the other hand, studies on the relationship between brand experience and WOM are scant and equivocal. This calls for more studies to be done to uncover the link between the two constructs. Amongst the few studies is that of Klein, Falka, Esch, and Gloukhovtsev (2016) from the USA and UK for pop-up store brands which found a significant impact of brand experience on WOM. Mukerjee (2018) in the banking industry of India and Gomez-Suárez and Veloso (2020) in Spain hospitality reveals that brand experience has a positive and significant effect on WOM. Contrary to these studies, Almohaimmeed (2020) examined the effect of brand experience dimensions on electronic WOM in Arabic restaurants and found that the intellectual dimension of brand experience does not affect electronic WOM. Ong et al. (2018) in Malaysia reveal that the sensory dimension of brand experience does not have an impact on WOM. Hence, the current study hypothesized that: H_2: Brand experience has a positive and significant effect on WOM.

Scholars have shown different findings regarding the link between WOM and brand loyalty. Some scholars have found out that WOM is an antecedent of brand loyalty while others regard WOM as the consequence of brand loyalty. For example, Matonya et al. (2020) studied the link between WOM and brand loyalty in the mobile money service brands in Tanzania and found out that WOM recommendation builds the loyalty of consumers towards brands. Alhulail, Dick, and Abareshi, (2018) also conducted a study in Australia on social commerce websites and found out that WOM positively influences the loyalty of customers. Different from these studies, Niyomsart and Khamwon (2016) in Thailand studied the link between brand loyalty and WOM and found out that brand loyalty influences WOM. Nandukrishna and Mathew (2019) in India also studied the link between these constructs and established that brand loyalty influences WOM. Thus, it was hypothesized that H_3: WOM has a positive and significant effect on brand loyalty.

In addition, studies involving brand experience, brand loyalty, and WOM jointly are limited. The majority of studies have studied brand experience and brand loyalty or WOM and brand loyalty jointly. However, Mukerjee et al. (2018) studied these constructs jointly in the Indian banking industry while considering brand loyalty as a mediator variable. Their results confirm that brand loyalty mediates the relationship between brand experience and WOM. Murtiningsih, Ridwan, and Retnaningsih (2019) studied the interrelations of these constructs amongst other variables in the fashion brand in Surabaya city of India. The authors examined the relationships between brand experience, brand trust, brand love towards purchase intention in the presence of WOM, and brand loyalty as mediator variables. The findings of this study reveal that brand loyalty and WOM influence purchase intentions. However, contrary to these studies, the current study aimed at examining the mediating role of WOM in the relationship between brand experience and brand loyalty. Hence, the study hypothesized that: H_4: WOM mediates the relationship between brand experience and brand loyalty. It can be seen from the reviewed literature that various studies examined the relationship between brand experience and brand loyalty, brand experience, and WOM, brand loyalty, and WOM. However, the findings of these studies are equivocal. For example, some studies have found out a significant relationship between brand experience and brand loyalty (Mostafa & Kasamani, 2021). Other scholars have found out insignificant relationships between brand experience and brand loyalty (Ardyan, Kurnianingsih, Rahmawan, Wibisono, & Winata, 2016; Nysveen, Pedersen, & Skard, 2013). In addition, the relationship between WOM and brand loyalty has brought inconsistent results amongst researchers. Some scholars claim that WOM is an antecedent to brand loyalty (Alhulail, Dick, & Abareshi, 2018;

Matonya et al., 2020) while others have found that WOM is the consequence of brand loyalty (Niyomsart & Khamwon, 2016). These disagreements amongst scholars create a research gap that needs to be filled by doing more studies regarding the relationship between brand loyalty and WOM. This has helped to establish a theoretical foundation of the relationship between the two constructs. In addition, none of the studies has bothered to study the relationship between brand experience and brand loyalty in the presence of WOM as the mediator variable in the mobile service industry (to the best knowledge of the author). This study aimed at filling this void. On the other hand, the majority of brand experience studies have focused on the developed economies such as; the USA, UK, and Australia leaving the developing economy under-researched (Khan & Rahman, 2015). In addition, there are limited brand experience studies in the service sector (Khan and Rahman, 2015). Thus, this study was an attempt to evaluate the link between brand experience and brand loyalty in the presence of WOM as a mediator variable in the developing economy of Tanzania to add knowledge in the brand management literature.

The current study was guided by the Social Exchange Theory (SET) which elucidates the causal relationship by applying the principle of generalized reciprocity (Lee, Huang, & Hsu, 2007). This principle explicates that people have a mutual sense of indebtedness (Majali & Bohari, 2016) i.e. partners who receive benefits from other people feel the need to pay back for what they have received. Thus, consumers who receive a positive brand experience reciprocate by becoming loyal to the respective brand (Jafari et al., 2016). They also offer positive WOM recommendations to other consumers (Klein et al., 2016) which in turn lead other consumers to be loyal to the brand (Praharjo & Kusumawati, 2016; Ntale, Ngoma, & Musiime, 2013). SET has been used by this study as is amongst the theories that explain well the links between the consumer and the firm, and between the consumer and the product as well as their effects on the outcome (Mabkhot, 2016). This study contributes to the brand management literature by uncovering interrelationships between brand experience, brand loyalty, and WOM. It also contributes to the literature particularly in the area of inspiring purchasing decisions and on how to create demand for goods and services by using WOM. The study also gives insights regarding the moderating role of WOM in the links between brand experience and brand loyalty. Practically, the study provides marketing practitioners and MNOs with a better understanding of how to build the loyalty of customers particularly in the service brands.

Methodology

This study used positivism research philosophy, deductive research approach, and utilized an explanatory research design that aims at establishing the causal relationships among the variables. The study covered two Councils namely; Sumbawanga and Mpanda Municipal Council from Rukwa and Katavi Regions respectively. These areas were characterized by low bank networks compared to other cities like Dar es Salaam, Mwanza, Mbeya, Arusha, and Moshi (BOT, 2015). Hence individuals in these areas were likely to use mobile money services as they are easily accessible and user-friendly. A structured questionnaire was used to gather data from 299 randomly chosen research participants. The collected data were inspected for missing data, outliers, multicollinearity. Mahalanobis D statistic was used to check the data for the presence of outliers as suggested by Mahalanobis (1936). Data values with Mahalanobis distance (D2) value greater than the Chi-square values of the items applied are considered as outliers (DeSimone, Harms & DeSimone, 2015). On the other hand, multicollinearity was examined using Variance Inflated Factor (VIF). According to Hair, Black, Babin, and Anderson (2010), VIF values greater than 5 suggest a multicollinearity problem. It is worth mentioning that, there were no outliers and multicollinearity problems. The collected data were analyzed using SmartPLS 3.

Results of the Study

Measurement Model

The study assessed the measurement model which explains the association between the constructs and their respective indicators. During the assessment, all indicator variables with factor loading lower than 0.60 were deleted. Using this criterion, one item (WOM8) and three items (BLT3, BLT8, and BL10) from WOM and brand loyalty constructs respectively were deleted. The reliability of the measurement model was assessed by using Cronbach's Coefficient Alpha (CA) and composite reliability (CR). The threshold values of 0.70 by Hair, Celsi, Money, Samoul, and Page (2016) were used for Cronbach's Coefficient Alpha and the cutoff point of 0.70 for CR was applied (Ringle, Sarstedt, Mitchell, & Gudergan, 2018). Appendix 1 revealed that the Cronbach's Coefficient Alpha for brand experience, brand Loyalty, and WOM were 0.930, 0.894, and 0.90 respectively. The CR for brand experience, brand loyalty, and WOM were 0.942, 0.917, and 0.921 respectively. These results revealed that all the constructs attained the required Cronbach's Coefficient Alpha and CR. Convergent and discriminant validity was also considered. Convergent validity was measured by using Average Variance Extracted (AVE) with the threshold value of 0.5 (Ringle et al., 2018). Appendix 1 also indicates that the AVE for brand experience, brand loyalty, and WOM were 0.644, 0.612, and 0.627 respectively. On the other hand, discriminant validity was assessed using Fornell-Larcker Criterion, cross-loadings, and Heterotrait Monotrait (HTMT) ratio. Appendix 2, Appendix 3, and appendix 4 revealed that discriminant validity was attained (Henseler et al., 2015). Thus, the reliability and validity tests guaranteed the next step which was measuring the structural model which aimed at testing the hypotheses of the study.

The Structural Model

The structural model was used to test the hypotheses as it indicates the relationships between the studied constructs. H1 aimed at assessing whether brand experience influences brand loyalty. The results from Table 1 revealed that brand experience had a significant influence on brand loyalty ($\beta = 0.507$, $t = 11.906$, $P<0.001$). Thus, H_1 was accepted. H_2 examined whether brand experience influences WOM. The findings from Table 1 indicated that brand experience had a significant influence on WOM ($\beta = 0.540$, $t = 9.678$, $P<0.001$). Hence, H_2 was accepted. H_3 on the other hand assessed the influence of WOM on brand loyalty. Table 1 revealed that WOM had a significant influence on brand loyalty ($\beta = 0.436$, $t = 7.331$, $P<0.001$). Hence, H_3 was supported.

Table 1: Relationship among Variables

	Path Coefficient	Standard Deviation	T Statistics	P values
H_1: Brand experience -> brand loyalty	0.507	0.043	11.906	0.000
H_2: Brand experience -> Word of mouth	0.540	0.056	9.678	0.000
H_3: Word of mouth -> brand loyalty	0.436	0.060	7.331	0.000

Mediation Analysis

H_4 assessed whether WOM mediated the relationship between brand experience and brand loyalty. The results indicated that the total effect of brand experience on brand loyalty was significant and positive (β= 0.507, t = 11.906, P<0.001). When the mediator variable was added to the model, the influence of brand experience on brand loyalty remained significant and positive (β= 0.272, t = 4.247, P<0.001). The results indicated that the indirect effect of brand experience on brand loyalty was significant and positive (β= 0.236, t = 5.250, P<0.001). Therefore, the findings from this study confirm that WOM partially mediated the relationship between brand experience and brand loyalty.

Discussion of the Findings

This study aimed at determining the relationship between brand experience and brand loyalty with WOM as a mediator variable. The findings indicated that brand loyalty had a direct relationship with brand loyalty, hence H_1 was supported. This connotes that providing unique experiences at all consumer–brand touch points was indispensable for generating strong brand loyalty. The current study confirmed that the experience encountered by consumers from mobile money services brands in the emerging markets builds the loyalty of consumers towards brands. These findings also supported the social exchange theory which asserted that partners who received benefits from other people felt the need to pay back for what they had received. For this study, the findings suggested that when customers were exposed to positive experiences from mobile money services; they felt the need to reciprocate by being loyal to the respective mobile money brands. Similar findings were found by Mostafa & Kasamani (2021) in the Lebanonian smartphone industry and by Hussein (2018) in the Indonesian dining restaurant industry.

However, these findings were different from that of Ong et al. (2018) in the Malaysian dining restaurant which found the insignificant influence of brand experience on brand loyalty. The findings of this study were also contrary to the study of Ardyan et al. (2016) in the Smartphone industry of Surakarta city in Indonesia which revealed the insignificant relationship between brand experience and brand loyalty. The findings also revealed that brand experience positively influenced WOM in the mobile money service brands. Thus, H_2 was supported. This suggests that when consumers are exposed to the positive experiences of mobile money services, they tend to show reciprocity which is associated with WOM recommendations. These findings also supported the social exchange theory. Hence, to enjoy WOM which is the cost-effective and most powerful marketing tool, MNOs should offer unique experiences on every touch point of consumer-brand encounters. Previous researchers (Falka et al. 2016; Gomez-Suárez & Veloso, 2020; Mukerjee, 2018) also came up with similar findings. Contrary to these findings, Almohaimmeed (2020) has found out that the intellectual dimension of brand experience does not affect WOM whereas Ong et al. (2018) has revealed that the sensory dimension of brand experience does not influence WOM. On the other hand, the findings indicated that WOM had a positive and significant influence on brand loyalty. Therefore, H_3 was supported. This implies that WOM recommendations build the loyalty of consumers. Since WOM is a cost-effective and most powerful marketing tool compared with traditional marketing like advertising; it is high time for MNOs to consider investing in this marketing tool as it influences the loyalty of consumers which is important to the growth and success of the business firms. Alhulail et al. (2018) also conducted a study in Australia and found out similar results. However, other scholars have found out different relationships between these constructs. For example, in their study, Niyomsart & Khamwon (2016) in Thailand and Nandukrishna & Mathew (2019) in India confirm that brand loyalty influences WOM. These studies differ from the current study which establishes that WOM is an antecedent to brand loyalty and not a consequence of brand loyalty. The current study also confirmed that WOM partially mediated the relationship between brand experience and brand loyalty in the service industry. This implied that brand experience influences brand loyalty in the presence of WOM. This also connotes that for MNOs to evoke WOM recommendations from their customers, they should invest more in imparting positive experiences on every touch point of their services. This in turn would build the loyalty of customers towards mobile money services.

Conclusion and Recommendations

This paper studied the relationship between brand experience and brand loyalty and the mediating role played by WOM in the relationship between brand experience and brand loyalty. The findings revealed that both brand experience and WOM positively influence brand loyalty. Thus, it is concluded that brand experience and WOM are predictors of brand loyalty in mobile money brands. In other words, if MNOs want to make their customers loyal, they should invest in generating positive experiences from their services and offer services that arouse WOM recommendations. The findings also revealed that WOM partially mediated the relationship between brand experience and brand loyalty. Hence, this study concludes that WOM plays a big role in mediating the link between brand experience and brand loyalty. It is recommended that, for MNOs to have a large loyal customer base, they should invest more in imparting positive experiences from their mobile money services. They should also offer services that arouse WOM recommendations from customers which in turn builds the loyalty of customers.

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Appendices

Appendix 1: Reliability and Validity Test

Construct	Item	Loading	Alpha	rho_A	CR	AVE
Brand Experience (BEX)	BEX1	0.686	0.930	0.934	0.942	0.644
	BEX2	0.797				
	BEX3	0.794				
	BEX4	0.842				
	BEX5	0.841				
	BEX6	0.845				
	BEX7	0.779				
	BEX8	0.793				
	BEX9	0.835				
Brand Loyalty (BLT)	BLT1	0.717	0.894	0.901	0.917	0.612
	BLT2	0.804				
	BLT4	0.829				
	BLT5	0.865				
	BLT6	0.795				
	BLT7	0.751				
	BLT9	0.702				
Word of Mouth (WOM)	WOM1	0.801	0.900	0.902	0.921	0.627
	WOM2	0.829				
	WOM3	0.855				
	WOM4	0.824				
	WOM5	0.806				
	WOM6	0.697				
	WOM7	0.716				

Appendix 2: Cross Loadings

Scale items	BEX	BLT	WOM
BEX1	**0.686**	0.315	0.329
BEX2	**0.797**	0.425	0.439
BEX3	**0.794**	0.436	0.412
BEX4	**0.842**	0.481	0.481
BEX5	**0.841**	0.428	0.443
BEX6	**0.845**	0.428	0.459
BEX7	**0.779**	0.363	0.427
BEX8	**0.793**	0.391	0.449
BEX9	**0.835**	0.372	0.44
BLT1	0.436	**0.717**	0.542
BLT2	0.44	**0.804**	0.484
BLT4	0.462	**0.829**	0.428
BLT5	0.428	**0.865**	0.475
BLT6	0.348	**0.795**	0.493
BLT7	0.35	**0.751**	0.383
BLT9	0.262	**0.702**	0.33
WOM1	0.354	0.427	**0.801**
WOM2	0.395	0.455	**0.829**
WOM3	0.519	0.462	**0.855**
WOM4	0.469	0.415	**0.824**
WOM5	0.478	0.499	**0.806**
WOM6	0.389	0.469	**0.697**
WOM7	0.358	0.495	**0.716**

Appendix 3: Fornell-Larcker Criterion

	BEX	BLT	WOM
BEX	**0.803**		
BLT	0.507	**0.782**	
WOM	0.54	0.583	**0.792**

Appendix 4: Heterotrait Monotrait (HTMT) ratio

	BEX	BLT
BEX		
BLT	0.543	
WOM	0.583	0.638

Contribution of Education Policy Reforms Towards Gender Dynamics and the Formalization of Domestic-work Sector: A Case of Mafinga Town Council, Tanzania

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Abstract: *Currently, Tanzania is experiencing the policy of free education up to secondary school level. On the other hand, in Tanzania, domestic work is one of the sectors with the highest share of informal employment. However, after the introduction of free education policy up to form four, the availability of domestic workers has became somehow difficult whereas the formalization of the domestic sector has also gained paceThis background has been a bench-mark to this study that analysed the influence of the current educational policy towards the formalization of domestic sector in Mafinga Town. The study was qualitative in nature whereby the interview of 30 domestic workers, 10 employers and 5 individuals from workers' union was conducted. The study found out that the new education policy has contributed towards the increase of the age to domestic sector from 12 years to 17 years, the number of daily routine workers has increased as opposed to residential workers, domestic works involved both males and females, there was the increase of the middle men to facilitate the availability of domestic workers. Due to increased awareness, domestic workers were demanding their rights including the vacation from their employers and better salaries. In addition, there had been scarcity of domestic workers that has led to the mushrooming of day care centers. Needless to say, domestic workers faced unlimited number of challenges including overworking with low wages, delayed payments, harsh working climates as well as low social recognition. The study hereby recommended for the improvement in the education sector in favor of females. That would relieve domestic workers from the involvement in the informal sectors such as domestic sectors.*

Keywords: *Education, Policy reforms, Domestic work sector, Gender, and formalization of domestic workers sector.*

INTRODUCTION

Background Information

The International Labour Organization (ILO) has been in the forefront in the debate on formalization of the informal sector with one of the recommendations being the transition of workers from the informal to the formal economy (ILO, 2015). Domestic work is also a sector that is poised to grow. With the aging of the population, continually increasing rates of female labor participation, and a preference for home-based care (Eurofound, 2013), families are increasingly turning to domestic workers to care for their homes, children, and ageing relatives. While an increasing share of domestic work is part of the formal economy, domestic work remains one of the sectors with the highest share of informal employment. In addition, domestic labor as a special category of workers received special attention during the last one or two decades, largely due to the rising prominence of the sector in terms of female employment (IHRC, 2013). Concurrently, there has been a growing body of literature on the domestic sector particularly in their personalized and informal service (John, 2010), social and economic devaluation of care and its gender, class, and caste characteristics. However, most of the studies are based on the form of regional studies (Nadasen, 2009; Neetha, 2008) whereas this paper deals with specific area of Mafinga town in Tanzania. On the other hand, the outcome of the transformations in the agrarian and industrial economy has resulted into an unprecedented mobility of labor including the domestic workers to urban areas (Neetha, 2004; Mehrotra, 2010 & John, 2010). The new ILO report calls for a combination of incentives and compliance to reduce high levels of informality in domestic work. Domestic work is characterized by a high incidence of informal arrangements and contributes significantly to informality, especially among women. The ILO estimates that there are 67 million domestic workers, aged 15 years and older, worldwide (ILO, 2015c). About 70% of people in Tanzania are estimated to be in informal employment (IMED, 2016) making it one of the sectors with the highest share of employment.

In Tanzania Conservation, Social Services and Consultancy Workers Union (CHODAWU) strongly advocacy for the review and amendment of the labor laws as herein provided, in order to secure equal treatment of domestic workers. To this end, CHODAWU further advocates for the ratification of the ILO Convention No. 189 regarding Decent Work for Domestic Workers (IDWN, 2013). However, Tanzania Gender Networking Programme (TGNP), stands at the forefront fight against women associated violence and discriminations; several female headed, Non-Government Organizations (NGOs) like Tanzania Media Women's Association (TAMWA), The Atrial Fibrillation NETwork (AFNET). Environmental, Human Rights Care and Gender Organisation (ENVIROCARE) and Legal and Human Rights Centre (LHRC) work hard in supporting the TGNP movements (TGNP, 2004). On the other hand, ILO organized a session on domestic work in June 2011 to discuss rights and legislations for domestic workers. The results of the discussion among others was to enhance decent work for domestic workers. One of the principal functions of the ILO is setting international labor standards through the adoption of conventions and recommendations. All adopted ILO conventions are considered international labor standards regardless of how many governments have ratified them. The coming into force of a convention results in a legal obligation on the part of countries that have ratified it to apply its provisions (ILO, 2011).

Problem Statement

Literatures indicates that domestic workers' studies have mostly been conducted in India followed by the United States of America (Fraga, 2013). In India, the household work has always been considered as below someone's dignity and the duty of the woman (Rani, 2017). The domestic work sector therefore has optimized the scarcity of information and statistical justification of the study in context. In Europe, some countries like Austria, Belgium, Bulgaria, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Spain, Italy, the Czech Republic, Holland, Norway, Portugal, Sweden and Switzerland have developed specific legislation while in some countries like Germany, Iceland and Switzerland there are also collective agreements among the parties. However, in other countries such as; Croatia, Cyprus, Estonia, Latvia, Luxembourg, Lithuania, Poland, Slovakia, Slovenia, Turkey and the United Kingdom, there is neither legislation nor any type of regulation (ETUC-CES, 2012). In Africa, domestic work is a significant source of employment, accounting for 2.2 per cent of labor force (ILO, 2011). Female domestic workers accounted for 74 per cent in Africa. Of all female paid employees in Africa, 13.6 % are domestic workers (ILO, 2013). Most African domestic workers, working in cities and towns are internal migrants–they are not from other countries, but come from rural, often less developed and poorer areas within their own African countries (ibid). Domestic sector has been less documented in Tanzania despite its prevalence.

This paper was guided by the following questions:

i. What was the contribution of education policy reforms towards gender dynamism and the formalization of domestic sector?

ii. What were the challenges of domestic workers at Mafinga Town Council? What are the challenges facing employers in a course of dealing with domestic workers? and

iii. What were the potentials for future direction and formalization of domestic work sector?

Literature Review

This section presents the conceptual elements as a theoretical underpinning of the paper. The three areas addressed are; definition of domestic worker as first part, followed by the empirical reviews which summarizes selected studies related to the theme and lastly is a part that cover the theoretical literature review. A domestic worker is a person who is entrusted with household staffs involving cleaning house, chopping vegetables, washing clothes and cooking. McClelland's (2011) argues that a level of development of domestic work sector is correlated with achievement motivation and social classes within the society.

Empirical Reviews

Categories of Domestic Work

Domestic work means work performed in or for a household or households. ILO (2011) states that a person who performs domestic work only occasionally or sporadically and not on an occupational basis is not a domestic worker. This is based on the ILO Convention 189 (Decent Work for Domestic Workers). Domestic work is generally defined in terms of types of work performed and the time spent at work to the employer’s home. Live out and live in are two distinct categories of domestic work. According to John (2010), live-out work is primarily of two types: first, those who work in one house for the whole day and go back to their homes in the evening and secondly, those who work in different houses, moving from one to the other, performing one or more tasks in each household; the tasks involve cleaning the houses, chopping vegetables, cooking and washing clothes. However, the number of visits depends on the implied conversations between the two parties (Mehrotra, 2010). Another form of part-time live-out work is in terms of piece-rate which is often applied to washing clothes (John, 2010). Some women and girls migrate to the city to work as domestic workers, especially those who work as live-in workers (Neetha, 2003) in order to sustain their household expenses unable to be met within the wages of their husbands.

Women who work as live-out part-timers are primarily migrants who move to the city with their families or are female construction workers who enter domestic labor when no construction work is available and others are landless laborers who are displaced when rural areas are absorbed by cities (John, 2010). On moving to the city, they mainly reside in difficult conditions. They begin work at one or two houses and gradually take up more, depending on their individual capacities, the money needed and their specific stage of life cycle, for example, women with very young children prefer to work in fewer households than older women without children (Mehrotra, 2010). Besides learning work, domestic workers have to adapt to urban ways of living and a culture different from their own. According to Neetha (2009), mostly, domestic work is characterized as ‘part-time’ from the perspective of the employer that the employees may work in more than one household. Domestic workers also note that this form of work may be flexible but is also unstable as workers shift out of the sector, change employers, stop working for a few years due to marriage or childbirth and also have constant issues with their employers. Yet, in terms of time spent at work, it may be as much or more than a live-in worker. The fragmented nature of domestic work, the multitude of tasks, a multiplicity of employers and the instability of employment pose challenges in documenting them and in attempts to organize them (Neetha, 2008). The full-timers live with the employer’s family (John, 2010). Several studies (Jagori, 2004; Neetha, 2004; Nadasen, 2009) have reported that they often have no specified work hours, some working for eighteen hours a day; further they do not get rest during the day while others may not be given proper food or living space. Non-payment of wages, no weekly leaves or holidays, verbal and sexual abuse are also reported. Domestic workers have no option to any form of assistance when they face verbal, physical or sexual harassment. The fight for their remedies is upon their shoulders (Mehrotra, 2010). In developing countries such as Tanzania large number of full-time workers are hired through recruiting agents or specifically some lobbying agents who pick them from rural areas. The agents also collect their wages, often withholding a substantial part; the private work agents often recruit girls in villages and bring them to cities (Neetha, 2003). Some agents provide basic training for a couple of days and then send them to homes as domestic workers for those who seem to be employable as formal emplyees or they may send them untrained. There is no state mechanism to check these agents or their functioning. These agencies are difficult to trace as they frequently change their identities, location and phone numbers. They also charge a large amount from employers for providing domestic helpers (Jagori, 2004). Sexual exploitation by recruiting agents has also been reported. It is important to point out that most agencies are commercial in nature and do not focus on the welfare of workers. The condition of domestic workers has not improved with the growth of placement agencies (Neetha, 2004; 2009).

The Socio-Economic Significances of Domestic Workers

Domestic work has been placed in the larger context of patriarchy and suppression of women; the patriarchy contexts controls women's mobility, economic resources, productive and reproductive power to men; both biological and social reproduction are carried out by women in most societies (Pendame, 2006). According to Jagori, (2004), Social reproduction refers to all the caring and nurturing activities necessary to ensure human survival and maintenance such as cooking, feeding, washing, cleaning, nursing and other household activities. Although these are necessary for human survival, they are neither considered work nor economic in nature and hence are invisible, unrecognized and unpaid. TGNP (2004) argues that usually it is women and girls who perform socially reproductive work all across the world although the endless and repetitive labor provided by them is not acknowledged as valuable work. Domestic work includes mental, manual and emotional aspects, including care work that is necessary to maintain people and communities (Anderson, 2000). Domestic work is thus viewed as reproductive work that creates not only labor units but also people and social relations. It is important to note in this context that domestic works reflects the relation between genders, race and class. Apart from being the 'wife' or the 'mother', it is often paid domestic workers who reproduce social relationships and social beings. Yet, the status of the domestic worker is lower than the woman employer who can be considered as her manager. Social reproductions are not recognized as work hence domestic workers receive no recognition and also, they are being paid low wages (TGNP, 2004).

The Employer- Employee Relationship in Domestic Work

Home is also the site of the interplay of intimate human relations. The domestic worker, especially a nanny or caregiver, may begin employment as a stranger, an outsider, but rapidly enters into an intimate relationship with the family that employs her/him (Nadasen, 2009). Domestic worker spends long stretches of time in someone else's private space, tending to emotional and physical needs. Further, domestic worker may be privy to the increasing frailty and confusion of an elder with dementia or to the anguish of a troubled child. Also, domestic worker may hold secrets with which s/he never wanted to be burdened. This intimacy can become an emotional entanglement that confuses employers and disarms workers, potentially undermining their already structurally limited ability to negotiate terms of employment (Mehrotra, 2010). Nadasen (2009), provided that the employer-employee relationship is a complex one and is viewed as one of domination, dependency and inequality. Domestic work sector is an area of work where the employer and the employee are mostly females. As a home is the site of work, relations between employer and employee are often not limited to work but spill over as larger support systems. In a capitalist world the domestic sector confuses and complicates the conceptual clarity between family and work, custom and contract, affection and duty because the hierarchical arrangements and emotional registers of home must coexist with those of workplace. Mehrotra (2010) in the study of domestic workers, conditions, rights and responsibilities portrayed that women who work as domestic workers over long time period have little or no savings for their old age. They are not entitled to any old-age pensions, gratuity or bonus. They have no medical insurance and or any other means for illness; hospitalization of self and family are borne by the worker. Neither do they have any coverage for childbirth, injury at work place or loans to build houses or other social responsibilities. Such loans or grants, as all other benefits, depend on their relation with the employer and the employer's goodwill.

Challenges Connected to Working Conditions of Domestic Workers

The tasks performed by categories of domestic workers may include but not limited to cleaning sweeping, swabbing and dusting, washing clothes and dishes, or even putting machine-washed clothes on the clothesline or/and folding them. Others include; cooking, or preparation for cooking such as chopping vegetables and making dough, or cooking a part of meal, ironing, housekeeping and extensions of these works outside the home such as shopping (ILO, 2013). Domestic work may also include childcare or care of the aged. There are no standard norms that decide working conditions. Wages depend on the bargaining power of the domestic workers and their employers although to a large extent employers decide about the wages of their workers (Mehrotra, 2010). Other factors that influence decisions about wages include the type of tasks performed and the neighborhood. Rates vary according to the task, for example, cooking attracts more wages than cleaning. Wages also depend on the socio-economic profile of employers (Pendame, 2006). There is no guarantee of employment as employers can ask workers to leave with no prior notice or financial compensation (Jagori, 2004; Neetha, 2008). Studies (Pendame, 2006; Mehrotra, 2010) also note that only few workers get a weekly off; paid leave is often the result of difficult negotiations with the employers. Getting sick leave also depends on the good will of the employer. Instances of workers losing their jobs due to long leave taken at time of childbirth or ill health are often reported. Some also lose their jobs when they visit their villages (IHRC, 2013). Many domestic workers living in large cities also face constant threats of demolitions of their slums and relocation to newer areas on the fringes of the city or towns. This often leaves them both homeless and jobless. Most urban poor live in different types of slum settlements and work in the informal sector (ILO, 2013). The relocation of the poor to resettlement colonies takes them far away from areas of economic activity in the city, thus making it impossible for them to even earn sustainable livelihood (Neetha, 2008). In this context, it has been well documented that the process of relocation and displacement has led to problems of sustained access to livelihood, education, basic services and healthcare where women suffer the most. Building a house in the resettlement area takes up a large part of the family's income. Even if these workers start work after relocation, living on the margins of the city implies that work will mostly be in areas that are far. Regulating directions become a major issue both in terms of cost and time (Pendame, 2006). In the resettlement areas (and in the slums), women spend a large part of their time accessing essential services such as water and toilets. The double burden that they face is compounded due to harsh living conditions. This has been documented for other areas of Delhi as well (Jagori 2004). Besides this, they have no access to any form of childcare services. They often leave their own children alone while they go to take care of others' children. Neetha (2009) has noted that domestic workers highlight their lack of access to institutional care facilities that provide quality care at affordable rates in their neighborhoods.

Theoretical Review

The article had three theories which build a basis for its thesis, namely; social change theory, universality of human right theory and inter-sectionalists theory. The theories explain the real situation of domestic workers in Mafinga Town Council.

The Theory of Social Change

Domestic workers are entrusted with all household stuffs; since they have to perform all the assigned domestic tasks which involve cleaning in one house, chopping vegetables in another and washing clothes in the third. Others may perform only one task, such as cooking. McClelland's (1961) on the theory of social change portrays that a level of development is correlated with achievement motivation. The classes within the societies are authored as the driver towards change. The theory of social change portrays that a level of development is correlated with achievement motivation. The classes within the societies are authored as the drivers towards change (McClelland's, 2011). Hagen (1962) attempted to explain why the achievement motivation varies between societies, their classes and strata. He argues that in traditional societies the status of individuals are fixed. The insecurity and frustration leads to changed behavior which has consequences on the family structure. In considering the economic strategy theories, Rosenstein-Rodan, (1970) argue that there must be devotion of resources for the success to be revealed. Therefore, it is worth noting that domestic workers have the primary purpose to contribute economically to their families and households Thus, with reasonable wages other working conditions being constant, the domestic work will be contributing to the domestic workers' welfare and their household in general.

Universality of Human Rights Theory

Nickel (2006) argues that human rights can be divided into seven families of rights which are:

i. Security rights which deal with protecting against assault's on one person such as; torture, murder, and rape;
ii. Due process rights which concern about protecting against legal abuses such as imprisonment without trial, secret trials, and excessive punishment;
iii. Fundamental personal freedom rights which emphasize on protecting the freedom of belief, expression, individuals private life, association, assembly and movement;
iv. Rights of political participation which aim to provide individuals a democratic political process;
v. Equality rights which concern about equality in all aspects of life and emphasize to eliminate all forms of discrimination;
vi. Social rights which ensure access to subsistence coupled with employment, healthcare, education; and
vii. Minority combined with group rights which are addressing the problems of distinctive groups by different forms or specific protections that go beyond the protections already offered by other rights such as rights in practicing culture for minority group.

Therefore, this theory contemplates that the domestic workers have various rights such as security rights, protection from legal abuses, personal freedom rights, political participation rights and social rights.

Inter-Sectionalists Theory

This theory is a useful analytical tool in tracing how certain people can be positioned as different and marginalized in a society. There are numerous concepts that are created by scholars in describing the idea of intersectionality. Ritzer (2007) explains that intersectionality is 'the view that women experience oppression in varying configurations and degrees of intensity'. The varying degrees and configurations of oppression which contain inherent power differences that domestic workers experience is socially constructed. These power differences are varied within every aspect of social life from identities and self-concepts, interpersonal interactions, operation of firms, organization of economic and legal systems. Meanwhile, Collins, (2000) argues that 'cultural patterns of oppression are not only interrelated, but are bound together and influenced by the intersectional system of society such as race, gender, class and ethnicity.' (pp 107-133). Ethnicity and race are a set of socially constructed boundaries in political, economic, cultural and social contexts in which it can become the basis for segregation, conflict, stereotyping, inequality, prejudice and social hierarchy. Gender is a category that is socially constructed through social interaction to maintain social hierarchy. It emphasizes the differences between men and women that transcend any biological/psychological differences. Moreover, the social construction of gender in the society contains inherent power differences. Zinn & Eitzen, (1990) describe that external social forces or attributes (education, wealth, employment status and many more) of individuals or families in a society shape and construct a power and position in the society. It can be seen that discrimination and oppression on domestic workers are constructed by the various system of society such as race, ethnicity, gender and class. This theory is used to depict the relation between employers and domestic workers in Mafinga Town. In other words, this theory attempts to illuminate the intersection of class, gender, race and ethnicity in shaping the opportunities and experiences of domestic workers.

Methodology

Research Approach and Methods

The study used the qualitative research approach which is a type of scientific research that systematically uses a predefined set of procedures to answer the question, collects evidence, produces findings that were not determined in advance and produces findings that are applicable beyond the immediate boundaries of the study (Creswell, 2013). The researchers opted for the cross-section study design instead of the longitudinal study design, to which the researcher had to go once to the field within a short period of time. The researchers collected and obtained primary data through interviews and observation whereas the secondary data were obtained through reviews of various documents including the related education policies such as free education policy.

The Study Area, Population and Sample.

Mafinga Town Council was selected as the area for this study, because it is a newly developed relatively middle- and upper-class residence area where many households have the economic capacity to hire domestic workers. Also, Mafinga had a readily available domestic workers, others travelling in numbers to the big towns such as; Dar es Salaam, Mwanza, Dodoma, Arusha and Morogoro. The district has 09 wards which are; Boma, Wambi, Upendo, Kinyanambo, Changarawe, Rungemba, Isalavanu, Ifwagi and Bumilayinga. The targeted population in this study included households in Mafinga Town Council with domestic workers. Kothari (2005) defines sampling as a process of selecting a number of individuals or objects from a population such that the selected group contains elements representative of the characteristics found in the entire group (Kombo, & Tromp, 2006). This study employed stratified sampling and simple random sampling. The reason of using stratified sampling was the existence of groups (strata) like employees employers and the household heads. The stratified sampling was used for different categories in the household. This categorized the sample from their position and experience of living with/close to the domestic workers. Simple random sampling was used because most of respondents of this study do relates in their occupation. Therefore, simple random sampling was used when a sample was taken from a single category, for example employees or employers. Based on the household population, the study selected 45 samples whereby 30 were for domestic workers, 10 were employers of domestic workers and 5 were key respondents.

Data Analysis Methods

Data analysis is the examination of what has been collected in a research and making deduction (Kothari 2005). It involves uncovering underlying structures; extracting important variables, detecting any anomalies and testing any underlying assumptions. Data analysis on the other hand involves scrutinizing the acquired information and making inferences. In this research content analysis was used, where themes were considered and the acquired information was summarized, coded and tabulated for data analysis.

Ethical Concerns

This study was conscious of ethics relating to the conducts of the research. The ethics were observed to protect the rights of the research participants (Trochim, 2006). Thus, the principle of voluntary participation required that respondents do not get coerced in participating to this study, but to have the willing heartfelt in participating to the study. The information was protected with high degree of confidentiality and the anonymity was observed during the study to protect the participant's identities. On validity and reliability, the study observed measures to ensure quality tools are used and then quality information is gathered. The pilot study assisted to improve the clarity of the items in the instruments. Second, to ensure the validity and reliability of findings, multiple methods were used in data collection, analysis, and presentation of the study findings. The use of multiple methods was useful in enriching each other, thereby supplementing the drawbacks of one another (Babbie, 2010; Cohen, 2007).

Results Presentation and Discussion

Introduction

The presentation and discussion of the findings were based on the following areas namely; the contribution of education policy reforms towards gender dynamism and the formalization of domestic sector, challenges of domestic workers at Mafinga Town Council, challenges employers in a course of dealing with domestic workers and the potentials for future direction and formalization of domestic work sector.

General Respondent's Profiles

Distribution of Respondents by Gender

The study involved 30 interviewees that were administered to domestic workers. The female respondents constituted 64.52% of the sample size whereas 35.48% were males as shown in figure 1. Therefore, the findings showed that more females were involved in the study which revealed that females were prone to the domestic sector as opposed to their male counterparts.

Pie chart below represents gender composition of participants by percentages

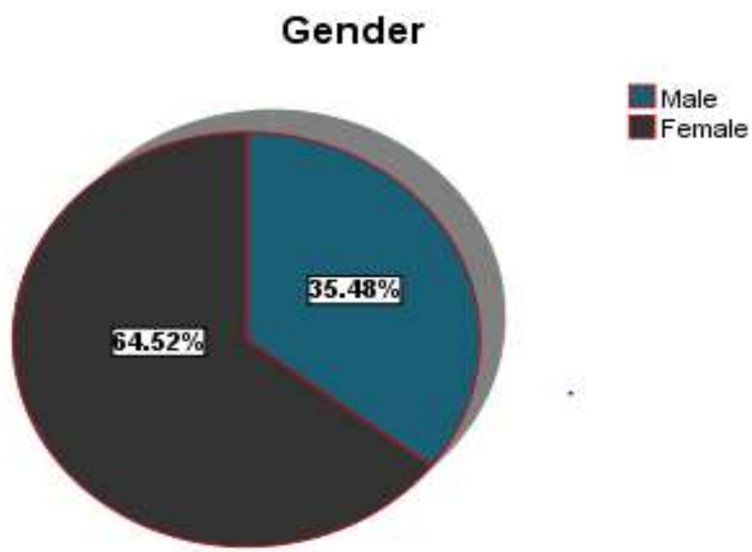

Figure 1: Distribution of Respondents by Gender

Source: Field Data (2019)

IHRC, (2013) argued that the household work is considered as typical women's occupation, and not perceived as employment. In line with that, three quarters or more worldwide are female: ranging from 74 per cent in Belize to 94% in Israel (ILO, 2010). In addition, a far higher percentage of the female workforce than of the male workforce is engaged in domestic work. In Latin America, 12 per cent of the female urban workforce, compared to 0.5 per cent of the male urban workforce, is engaged in domestic work (Tokman, 2010). The implication was that many females were fit for domestic works, and they were the ones employed with high percentage in this sector, especially in homes, even though in today's world domestic works are for both sexes.

Distribution of Respondents by Marital Status of Domestic Workers

The diversity of respondent's demographics was observed and revealed in this study; here the questionnaires were set to track the disparities on marital status among domestic workers in the study sample. The findings are as shown in Table 1:

Table 1: Marital Status of Domestic Workers

Marital status	Frequency	Percentage
Single	25	83.3
Married	5	16.6
Total	**30**	**100.0**

Source: Field Data (2019)

The findings showed that 83.3 % of domestic workers were single while 16.7% were married. This generally implied that most of employees in domestic work sector were single. For instance, on the case of Tanzania most of domestic workers range from the ages 12-20 years which is difficult for these ages to be involved in marriages. The findings were similar to the study conducted by ILO which revealed that most of the domestic workers were single (ILO, 2016). Therefore, domestic work sector was dominated by single workers as it was shown in the Table 1.

Distribution of Domestic Workers by Age

Table 2 showed that,29.0% were between the age of 14 – 19 years, 33.3% were between the age of 20 – 25 years, 19.4% were between the age of 26 – 30 years ,6.5% were between the age of 31 - 36 and the respondents who had the average age between 37 years and above scored 9.7%. Social Welfare division works under the guidelines of child laws of 2009 and education laws of 1978 in preventing child employment (under 18 employments according to Tanzanian laws) and advocating education provision to children. According to CHODAWU (2014), children of 15 years may be allowed to work in domestic work sector but they should be given the chance for further knowledge. The findings indicated that the average age of domestic workers were between 20 to 25 years followed by 14 to 19 years. Table 2 shows the distribution of respondents by age.

Table 2: Age of Domestic Workers

Age	Frequency	Percentage
14-19	9.0	29.0
20-25	10	33.3
26-30	6.0	19.4
31-36	2.0	6.5
37-&	3.0	9.7
Total	**30.0**	**100.0**

Source: Field Data (2019)

Working Locations of Domestic Workers

The study showed that 48.39% of respondents were from Wambi Ward, 16.13% of respondents were from Boma Ward, 12.90% from Kinyanambo Ward, 12.90% from Changarawe Ward, 6.45%

from Rungemba Ward and 3.23% of respondents were from Ifwagi Ward. This was due to the fact that most of respondents were from Wambi Ward because most of dwellers in Wambi area had the capacity to hire domestic workers as the area was populated and found at the heart of Mafinga as compared to other wards in Mafinga Town Council. In addition, the area had higher economic status because most of the economic activities such as petty business was taking place in this area. Figure 2, below shows the working locations of domestic workers in the sample.

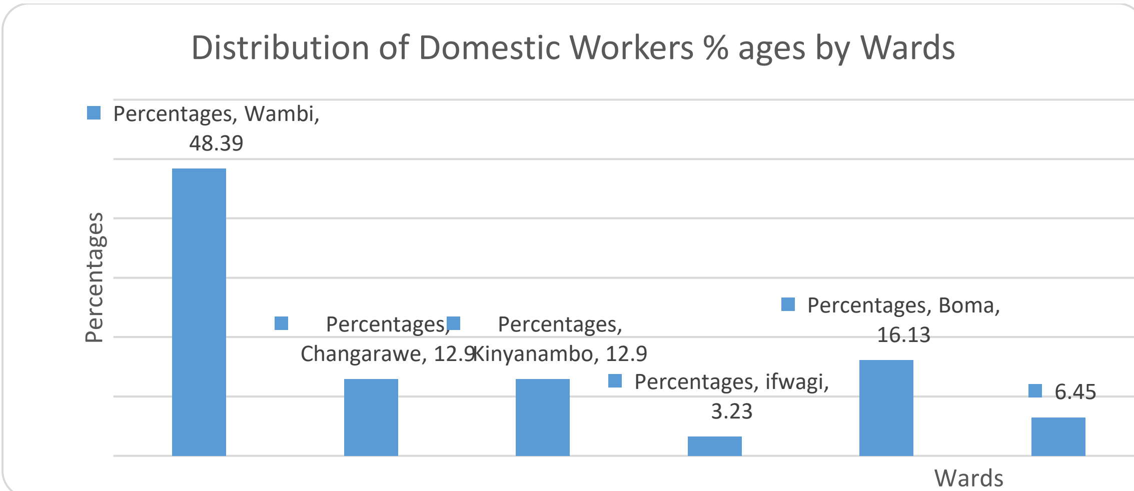

Figure 2: Domestic Workers Working Locations
Source: Field Data, (2019).

Distribution of Respondents by Education Level

Table 3 below showed the percentage distribution of the respondents by their education level. The study revealed that about 56.6% of the respondents had primary education 40.0% holds secondary education and 3.3% had no formal education. There was therefore a possibility that over 87.1% of the domestic workers in Mafinga Town had local skills for performing their work in a proper way. The Education Law, (1978) states that children under 18 school including domestic workers had the right to attend primary and secondary. The study found out that the large number of employees with primary education was quite different if we draw a decade back when the number of domestic workers with primary education were more limited in the country; most of domestic workers back then had informal education, only few had finished standard sevenDue to the change of education policy i.e. free education up to secondary level, most of the children are given the chance to study at least on secondary education.

Table 3: Respondents (Domestic Workers) Education Level

Education Level	Frequency	Percentage
None	1	3.3
Primary Education	17	56.6
Secondary Education	12	40.0
Total	**30**	**100.0**

Source: Field Data (2019)

The Contribution of Education Policy to the Domestic Workers' Sector

The employers had different observations on the trends and availability of domestic workers around their vicinities. First and foremost, employers commented that the contribution of the education policy (free education policy) had contributed much to the trickling down on the availability of domestic workers. The observations of about 53.5% of the employers in the study sample, were based on the contexts of availability, tolerance and wages demanded by the domestic workers. On the other hand, 26.15% of the respondents indicated that currently there was variation in domestic workers' levels of education as well as trust as factors that had altered the atmosphere in the sector and the rest 20.35% of the respondents perceived the consideration of human rights. The employers stated that that was the reason why to-date the media discloses a lot of cases, which in most cases they are assumed to be new in our societies; but the fact is not they did not existed previously to put light on the evils which were conducted against domestic workers. One of the respondents during interview said:

> '*It is very difficult currently to find domestic workers, different from the previous time where it was easy to get them. Most of the girls after standard seven they proceed with Form One in community secondary schools'*. (*researcher- translation)*

This means that there had been a formal development trend in the domestic work sector because the domestic workers were decreasing as compared to the previous period of time where the domestic workers were many moving from their villages to town to find a jobs. One employer during the interview commented that:

> *'Now days employers put order for more than three months in order to get a domestic worker. The situation is caused by the policy of free education to secondary level where most of children in the villages are send to secondary education and other vocational trainings'.*

Also, the study found out that previously the rate of employing domestic workers was low because many of house wife were not employed instead they were doing works in the house, but things have changed women were working as men and this situation increased the high demand of domestic workers so as to take care for the house and children.

One respondent said,

> *``The availability of domestic workers is low now; I had to opt for day care center because no one is taking care of my family when I am at work.' (Researcher-translation)*

The scarcity of domestic workers stimulated other employment opportunities as people started to think on opening day centers so that children could get the services formerly given by domestic workers while their parents were working. This might have relieved the childcare burden to families in Tanzania. The study revealed that previously domestic workers had n0 access to education as one respondent said;

> '*During the past time, most of domestic workers were not educated, even attending primary school education in rural areas was an issue but to-date we observe major changes where many domestic workers are standard seven leavers and also very few fail to get to secondary school education. This situation caused the scarcity of domestic workers.'*

This indicated that access to education has caused the scarcity of domestic workers, because currently children must attend primary and secondary education in urban and rural areas which according to the Tanzanian Education Policy, is considered as the basic education. There has been a shift in age of employment, that the transformation in education structures and systems has led to the young girls of fourteen years to be taken as domestic workers. The lowered age of starting primary school has also lowered the age of completion of primary school, thus with failure to join secondary school girls and boys at very young ages hold lots for economic independence. However, most of them see these changes and trends as the signs to enlightenment and economic recognitions. One of the house maids said,

> *'In the past most of our parents did not know the significance of education, things are different now where most of them understand and send their children to primary schools, sometimes even to secondary education*.'

This argument reflects the shortage of domestic girls as most of them are required as a matter of principle to attend secondary schools, making them unavailable for domestic employments. It was revealed during this study that majority of the employees in domestic work sector had finished standard seven and if they passed the national examination they were required to go further for secondary education.

A Reflection on Social Change Theory

From the development of domestic workers' sector in line with social change theory, the theory explained how the society changes from time to time. In 1970s, most of the domestic workers were not educated. At that time many employers used to take their relatives for home care but later the situation changed. The policy of free education now enables children to attend school up to secondary education level. From gender perspective, previously the domestic work sector was regarded as the work of females, that was why the large percentage of domestic workers were females, but nowadays, due to social change, people are educated, and they understand that domestic work is a work of both genders. This study revealed that 35.48% of the domestic workers were males. This is a reasonable percentage as compared to previous experience. It is predicted that years to come the percentage of males and females will be the same because of social change.

On the other hand, the study found out that free education policy had influenced the age of domestic workers. In 1980s to 1990s, most of employed domestic workers were between 9 to 18 but later things started to change where currently the appropriate age for employing domestic workers is around 15 up to 30 years depending on the nature of the work and the interest of the employer but legally 15 age is appropriate age for domestic workers (ILO, 2016). Through the policy of free education, most of the domestic workers attend their education up to secondary school level. Also, the sector is becoming more formal as people are being employed at age where they were aware and capable to enter into contracts with their bosses.

The Experiences of Domestic Work Sector in Work Setting

The study revealed that 54.84% of respondents had been in this sector for 1 year, 32.26% had worked between 2-4 years, 6.45% worked for 5-7 years and 6.45% of respondents worked more than 7 years. On the other hand, the representative from the workers' union revealed that domestic sector was facing the challenge of part-time workers mostly staying in a short time with little experience but in need of high salary. Therefore, for the domestic workers who stayed for a short time to the office it was a challenge to union membership because giving them contractswas unacceptable (CHODAWU, 2014). Therefore, from this study most of the respondents worked for short time say 1 year due to the nature of the work which they were doing. There was a possibility that sometime they found the works to be difficult for them to handle, that's why they worked for short time.

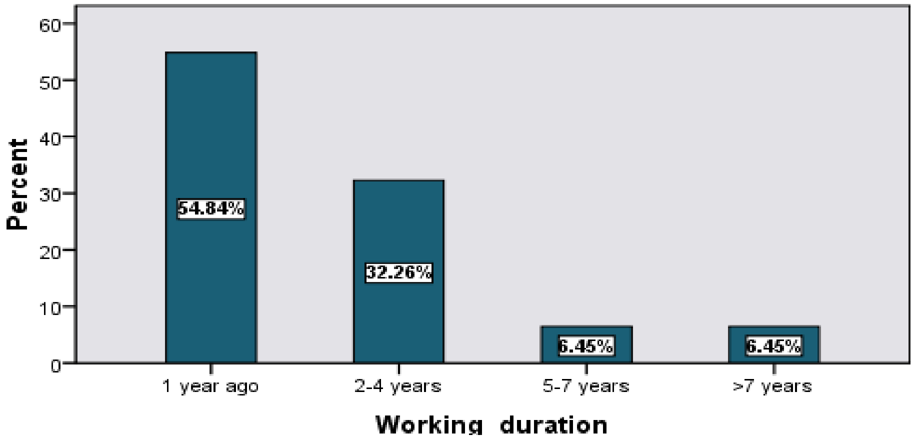

Figure 3. The Duration of Domestic Workers at Work Station
Source: Field Data (2019)

Challenges of Domestic Workers at Mafinga Town Council

The study revealed that 38.71% of domestic workers were working under harsh working condition, 16.13% were overworked, 16.13% encountered the problem of low wages, 9.68% suffered delay of payment, 6.45% said low cooperation stood as obstacle on performing their responsibilities, 6.45% experienced delayed eating time, 3.23% lacked freedom on their working areas and lastly 3.23% of domestic workers faced low social appreciation from the society. The findings were in line with the National Labour Surveys (2011) which reported the average hours of domestic worker reaching nearly 66 hours a week in Malaysia and between 60 to 65 hours a week in Tanzania to mention a few. Moreover, the findings are supported by (ILO Report, 2013) that many domestic workers were subjected to serious abuses including slavery, excessively long working hours without breaks, days or holidays.

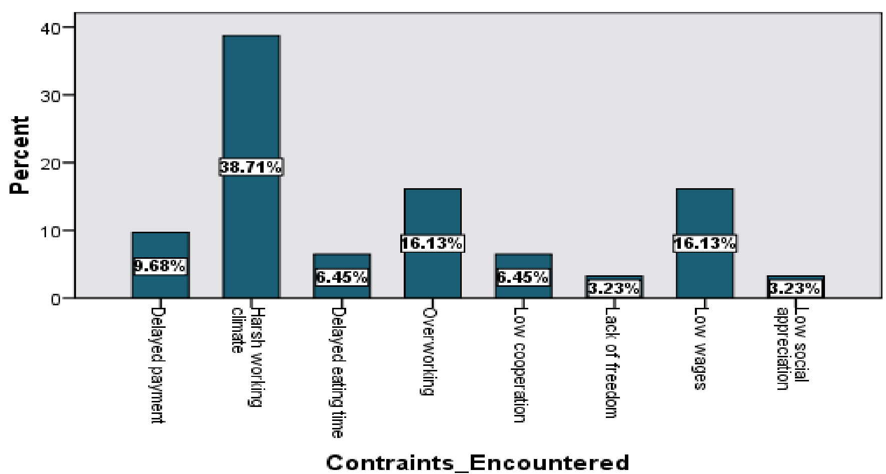

Figure 4: Domestic Worker Challenges at the Work Place
Source: Field Data (2019)

Challenges Facing Employers in a Course of Dealing with Domestic Workers

The study revealed that 33.33% of employers in the sample were affected in dealing with domestic workers due to lack of trust, 16.67% were affected because of ruddiness of the domestic workers. Further, 16.67% were due to loneliness of workers, 16.67% due to failure to perform duties, and 16.67% of employers in the sample were affected because of big salary demand. Therefore, in this sector not only domestic workers were being affected but also employers were suffering from employing domestic workers. This happened because most of domestic workers when employed did not have any skill and some of them when employed failed to learn the gap between them and their employers. This study further revealed that trust was the cross cutting constraint affecting employers in the domestic sector.

Table 4: The Challenges Affecting Domestic Workers in the Sector

Issues	Frequency	Percentage
Lack of Trust	2	33.33
Ruddiness	1	16.67
Loneliness of workers	1	16.67
Failure to perform Duties	1	16.67
Big salary demanded	1	16.67
Total	**6**	**100.0**

Source: Field Data (2019)

The study revealed that domestic workers were less valued and protected as their employers sometimes treated them in a way that they abused their rights and human beings. Domestic workers were not given the chance to prepare themselves from leaving the work station as a punishment after they made a mistake nor were they given salary or any other attached benefits which could help them to return home safely. Similarly, several studies (Jagori, 2004; Neetha, 2004; Nadasen, 2009; Mehrotra, 2010) have reported that domestic workers often had no specified working hours; further they did not get any rest during the day while others were not given proper food or living space. Non-payment of wages, no weekly leaves or holidays, verbal and sexual abuse were also reported. They had no option to any form of assistance when they face harassment in terms of verbal, physical or sexual and the fight for their remedies was upon their shoulders.

Potentials for Future Direction and Formalization of the Domestic Work Sector

Two perspectives were noted in the study area, one from employers and the other from employees. Their views were as follows:

Employers perspectives

From the trends and experiences observed by employers, employers had arguments to pose in relation to future developments of domestic worker sector in the coming five years. About 86.5% of the interviewed employers claimed on the transformation of education sector in the country and general global awareness which affected the availability of domestic workers. One of the employers said;

> '*In five years to come, getting domestic workers will be a disaster, they will be much matured and they will be very expensive, and they will be part time workers coming morning and leaving at evening just as like other workers*.'

The other said;

> '*In five years to come people will decide to work on their own without hiring domestic workers because domestic workers will be expensive and difficult to hire due to their education level and economic status.' (Researcher-translation)*

However, about 13.5% of employers interviewed believed that with increasing population and the unemployment rate among the skilled jobs, the skilled young personnel would be pushed to low paying jobs. Thus, there would be competition among unskilled young personnel towards domestic works and other low paying jobs.

A Perspective from Domestic Workers

During interviews, domestic workers shared their opinions and projections on the domestic work sector. Most of the domestic workers claimed that general global awareness and education transformation will foster competition as currently even the form four leavers were seeking for domestic work opportunities. They argued that in future, only educated people will be employed in domestic work sector. One employee commented,

> '*In five years to come, only God knows the situation of getting domestic workers because nowadays difficult life forces people to apply for any job for survival so it is very difficult to predict the future of domestic sector.' (researcher-translation)*

However, about 23.5% of the interviewed domestic workers had different views that domestic workers will find ways to quit this sector because of low salary and poor protection. In addition, one respondent (welfare worker) was interviewed to provide the projection of the future domestic workers;

> *'I think in five years to come, the number of form four leavers will increase in Tanzania, and the situation will cause the employers to employ aged people above 18 years. The employment system will be more formal because people*

with 18 years and above are allowed to enter into contracts; hence some of the challenges of domestic workers by that time will be reduced in high percentage'.

CHODAWU (2014) reported that in five years to come, if the government would accept signing ILO convention 189 agreement, domestic workers would enjoy, improved salaries and other domestic workers' benefits. It is also expected that the laws and policies of the United Republic of Tanzania of 2004 and the guideline for civil servants would be complimented by ILO Convention 189. Therefore, the sector would be on the better position and domestic workers would be considered to do decent works just like in other sectors. The situation would create equal chance for everyone to work in this sector because people would change their wrong perception that domestic work sector is a sector for those with low level education.

Conclusion

In mapping development trends in domestic work sector into recent times; the study found out that the sector has sustained pressure leading to potentials of formalization. To a greater extent the pressure is associated with reforms in education sector. As more primary school leavers transit to secondary education, potential employees has to spend four years of mandatory secondary education. This had led to a search for alternative source of employees where older members of community are engaged. The gender composition in the sector was also notably taking more males as opposed to female dominated setting in the past. This was attributed to the facts that there was limited availability of preferred girls leaving employers to consume what was available regardless of gender. This has consequently restructured work pattern at household level, terms of employment, conditions of engagements and to in several cases leading to life styles change at family level. Given an increased in education levels of employees in domestic work sector, there is possibility that potentiality to join the sector remains even after secondary education.

However, there were various challenges facing employers in a course of dealing with domestic workers. The study noted the lack of trust among the employees, ruddiness of the domestic workers, failure to perform their duties properly, and the employees demand of big salaries. Therefore, in this sector not only domestic workers were being affected but also employers were suffering from employing domestic workers. In addition, most of domestic workers when employed did not have any skill and some of them when employed failed to learn the gap between them and their employers. On the other hand, the relationship between CHODAWU and the group it represents was notably weak as participants in this study seem not to be aware of the basic information related to it including workers' rights in domestic work sector as much as it is in other sectors. The potentials for future direction and formalization of domestic work sector were expanding mainly from education reforms and other socio-economic changes in the society. According to the ILO (2016) and CHODAWU framework of operation, changing patterns in the domestic work sector gives potentials for its formalization. The average age of employees which was seemingly increasing gives a room for legal contracts which was otherwise not possible in earlier settings where school dropouts and primary school leavers could not, at their entry time. Visibility of the sector and presence of CHODAWU operations as trade union forms a fertile land for the sector to grow. Gender dynamics were featured in activities re-organization in homes and societal re-organization resulting from socio-legal changes in the sector. The study recommends that formalization of domestic work sector should be enhanced by socio-economic developments in the society. Sector recognition matches other sector development, rules and operational frameworks, except the trade union settings under CHODAWU where domestic workers do not seem to engage and secure representation as the case was in other sectors. Domestic work sector seems to build on middle class growth in the society as employers which means its development depends on economic stability of this class. Furthermore, this study recommends that there was need to build a wider understanding of this emerging sector by studying and establishing an extensive knowledge, among others, likelihood that the sector to benefits from other policy unintendedly. There was a need as well to study the socio-economic impacts that developments in domestic work would potentially have on other sectors.

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Effects of Monetary Policy Shocks on Domestic and Foreign Banks Lending in Tanzania

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Abstract: *This study investigated the effect of monetary policy shocks on bank loans extended by domestic and foreign banks in Tanzania over the period from 2006 to 2020. It adopted the impulse response functions and the variance decomposition analysis to study the responses of these types of lending to monetary policy shocks. The studyfound out that foreign banks do not react negatively to a monetary policy shock, supporting the view that foreign banks in Tanzania did not abandon the domestic market in times of economic distress. The policy implication was that the foreign banks in Tanzania had been supportive of the domestic economy even in times of economic distress. Empirical evidence provided by this study supported the positive role played by the foreign banks in contributing to the financial and economic stability of the Tanzanian economy. The theoretical contribution of the study is that despite a tight monetary condition, the foreign banks continued to resume lending, implying that the "capital flight" argument* did not apply to the foreign banks' *operations in Tanzania.*

Keywords: Bank lending, domestic banks; Foreign banks: Monetary policy: Vector Autoregression Model.

INTRODUCTION

Monetary policy is used by the central banks to influence intermediate targets by using monetary policy tools namely the money supply in most developing countries and interest rates in developed countries to influence production, prices, employment and exchange rates (Shokr & Karim, 2021). Macro-level variables can be influenced by monetary policy through traditional exchange rates, asset price channels and credit (Shokr & Karim, 2021). Monetary policy as an aspect of macroeconomics uses money supply and interest rates to regulate the supply, value and cost of money in the economy in line with the expected economic activities level of a country (Ayodele, 2014). In developing countries such as Tanzania, the objectives of monetary policy include full employment, domestic price stability, adequate economic growth and external sector stability. The supplementary objectives of monetary policy include smoothening of the business cycle, prevention of financial crisis and stabilization of longterm interest rates and real exchange rate (Mishra & Pradhan, 2008: Ayodele, 2014). The purpose of monetary policy is to control the credits conditions and money supply for the aim of achieving diverse macroeconomic objectives. Monetary policy and banking system are inextricable. The assessment of the banking system in the area of loans and advances can be evaluated via the monetary policy tools performance which is classified into the market intervention and portfolio control (Ayodele, 2014). Commercial banks decisions on loans are influenced by various factors such as the volume of deposits, prevailing interest rates, the level of their domestic and foreign investment and liquidity ratios (Olokoyo, 2011: Ayodele, 2014). Central bank influences the level of reserves of the banks through monetary policy tools. Such tools include; credit market, liquidity ratio and cash reserve requirement. All these activities affect the banks in their operations and thus influence the cost and availability of loanable funds. Thus, monetary policy tools are critical in the demand for and supply of reserves held by depository institutions and consequently on the availability of credit (Ayodele, 2014). The central bank affects the rate of growth of money supply, the level of interest rate, security prices, credit availability and liquidity creation from the commercial bank by manipulating these monetary policy tools. The effect of monetary policy shocks on banks' lending has received enormous attention in macroeconomic theory and among central banks in the world. It is generally argued that the monetary policy affects output and prices by influencing key financial variables such as interest rates, exchange rate and monetary aggregates (Bashagi et al, 2019). Atanda (2012) provides empirical evidence to support the effect of monetary policy changes on loan supply of less liquid banks, deposit base and induce banks' ability to perform their expected roles within the financial system. Ogunyemi (2013) in his study of monetary policy effect in Nigeria reported some monetary policy tools are not in favour of an increase in the volume of loans and advances of commercial banks due to the high cost of operating and poor infrastructural facilities.

For the case of Tanzania, several studies on the monetary policy effects have been conducted and yielded some conflicting views but agreed on the weakness of the monetary policy effect on the banking system such as (Davoodi et al., 2013: Mbowe, 2015 and Montiel at al., 2012). Despite several empirical pieces of evidence that found the efficacy of monetary policy lies on the effectiveness of the real sector; how those monetary policies had influenced the volume of commercial banks loans and advances in Tanzania remains unresolved and demand investigation. This study, therefore empirically evaluated and investigated whether monetary policy affects commercial banks' lending activities in Tanzania. The study examined the effect of monetary policy shocks on bank loans extended by domestic and foreign banks in Tanzania over the period from 2006 to 2020 and verify the validity of the arguments in the context of the Tanzanian experience. In particular, the study examines the reaction of foreign and domestic banks to monetary policy shocks by analysing the behaviour of major balance sheet items, namely; deposits and loans to a positive innovation in interest rates. It used aggregated data to compare the differences in the behaviour between foreign and domestic banks. The investigation of the impact of monetary policy shocks on domestic and foreign banks in Tanzania contributes to the literature in several aspects First, this study provided empirical evidence on whether the presence of foreign banks in Tanzania benefited the domestic banking sector; secondly, the findings of this study provided some policy recommendations to policymakers concerning the liberalization of the banking sector in Tanzania: third, to our knowledge, no studies had been conducted so far in investigating the effect of monetary policy on domestic and foreign banks' lending in Tanzania employing the aggregated data methodology. The rest of the study is organized as follows; a brief theoretical and empirical literature review on monetary policy shock effects which is provided in Section 2. In Section 3 methodology and data were discussed. Section 4 presented the results and findings and Section 5 concluded this study.

Review of Literature

Theoretical Literature Review

In the literature, the leading theory and the bank lending channel theory are the fundamental theories explaining the effect of monetary policy instruments on commercial banks' lending. The leading theory (Stiglitz & Weiss, 1981) explains the credit markets imperfections and frictions and how they hamper spending within the economy. The theory is based on the understanding that lenders consider the financial fundamentals of borrowers' and their banks' balance sheets before extending credit (Mishi &Tsegaye, 2012). The evidence has shown that credit markets are imperfect, as asymmetric information problems lead to credit rationing. How commercial banks adjust and respond to their internal strategies in the face of monetary policy shocks will determine the impact and success of that policy. The operation of this channel mostly depends on the supply of loans and the factors that determine their course. In particular, a restrictive monetary policy leads to a reduction in bank reserves and deposits and, consequently, to a fall in loan supply (Mishi &Tsegaye, 2012). The bank lending channel theory explains a special role to commercial banks in the monetary transmission mechanism. The theory stipulates that the tightening of the monetary policy can affect not only the demand for loans via the interest rate channel but also the supply of bank loans, which in turn, further influences investment and consumption (Mishi &Tsegaye, 2012). Monetary policy affects not only borrowers but also banks. The role of banks is important as it addresses the problem of information asymmetries in the credit market (Jimborean, 2008: Mishi &Tsegaye, 2012).

Empirical Studies on Impact of Monetary Policy on Banks

The above theoretical literature review assigns an inimitable role to banks in the monetary policy shocks. However, it is necessary to review empirical works on the subject to identify what has been concluded thus far, if any. Several empirical studies on the effect of monetary policy on banks' lending practices and activities have been carried out by different researchers. However, some of the famous studies are the ones that incorporated various monetary instruments in evaluating the effect of macroeconomic stability on banks' lending and activities. Amidu and Wolfe (2008) examined the constrained implication of monetary policy on bank lending in Ghana and found out that banks in Ghana lending behaviour are affected significantly by monetary policy changes. Gambacorta and Iannoti (2005) found out that banks adjust their loan prices at a faster rate during a period of monetary tightening. Ogunyomi (2011) examined the impact of monetary policy instruments on the volume of loans and advances of commercial banks in Nigeria and found out that monetary policy was ineffective for increasing the volume of commercial banks loans and advances in Nigeria. Shokr and Al-Gasaymeh (2018) examined the effect of monetary policy on banks on loans in Egypt and found a negative and significant relationship between monetary policy and bank loans in Egypt. Zulkhibri (2018) examined the impact of monetary policy on Islamic bank financing in Malaysia by using panel regression methodology and found out that there was no significant difference between Islamic Bank financing and conventional bank lending behaviour concerning changes in monetary policy. Shokr et al. (2019) investigated the effect of monetary policy on banks in Egypt and found out that variations in monetary policy tools (interest rate and money supply) had significant relationships with the exchange rate, inflation, and output in Egypt. Auer et al. (2019) studied the effect of monetary policy on banks employing bank-level data in Canada and Switzerland and found that banks in Canada was affected by domestic monetary policy. Civcir and Varoglu (2019) investigated the effect of monetary policy in the United States and the Euro area and found out that inflation, domestic industrial production interest rates real effective exchange rates respond to change in monetary policy. Shokr (2020) in his study on monetary policy effect confirms a significant impact of real interest rates on bank loan supply in Egypt, which highlights the essence of the bank lending channel in Egypt. Shokr and Karim (2021) examined the impact of international monetary policy shocks on bank loans and other macroeconomic indicators in Egypt and found out that foreign monetary policy shocks significantly affect loans, inflation, interest rates, and output in Egypt. Some empirical studies in Tanzania examine the effect of monetary policy shocks on internal macro-level variables. Montiel et al, (2012) investigated the effect of monetary policy in Tanzania using the VAR model for the period from 2002 – 2010. The findings showed an increase in lending rate and reduction in prices as a result of monetary policy expansion. Balele, et al, (2018) examined the effect of monetary policy in Tanzania and found out that monetary policy seems to influence core inflation. Bashagi et al, (2019) examined the effectiveness of monetary policy transmission channels in Tanzania and found out that monetary policy has a significant contribution in influencing the dynamics supply of credit to private in fostering the growth of the economy. Although there are several previous empirical studies on the effect of monetary policy instruments such as those of Balele, et al, (2018): Bashagi et al, (2019) that were conducted in Tanzania none of the studies mentioned above investigated the effect of monetary policy shocks on banks' lending extended by domestic and foreign banks. Therefore, this study aims to cover that gap in the empirical description of the effect of monetary policy shocks on banks' lending extended by domestic and foreign banks in Tanzania.

Methodology

Model Specification

This study used the Vector Autoregression (VAR) model too examine the effect of monetary policy shocks on domestic and foreign banks' lending. The VAR model is one of the most successful, flexible, and easy to use models for the analysis of multivariate time series. It is a natural extension of the univariate autoregressive model to dynamic multivariate time series. The VAR model has proven to be especially useful for describing the dynamic behaviour of economic and financial time series and for forecasting. It often provides superior forecasts to those from univariate time series models and elaborate theory-based simultaneous equations models (Stock & Watson, 2001). Forecasts from VAR models are quite flexible because they can be made conditional on the potential future paths of specified variables in the model. In addition to data description and forecasting, the VAR model is also used for structural inference and policy analysis. In structural analysis, certain assumptions about the causal structure of the data under investigation are imposed, and the resulting causal impacts of unexpected shocks or innovations to specified variables on the variables in the model are summarized. These causal impacts are usually summarized with impulse response functions and forecast error variance decompositions (Tsay, 2001). The model has been extensively used when assessing the monetary policy transmission mechanism. See example (Bashagi et al, 2019: Pham, 2016: Nguyen, 2014: Davoodi et al, 2013). The model used in this study start by considering a system of simultaneous equation represented in vector form by omitting constant and deterministic terms in the following form

$$Ay_t = B(L)y_t + u_t$$

(3.1)

Where y_t is an n x 1 vector of endogenous variables, $B(L)$ is a matrix polynomial in the lag operator L, and u_t is a white noise vector of the disturbance terms for each variable. This disturbance term captures any exogenous factors in the model. The square n x n matrix A, where n is the number of variables, that contains the structural parameters of the contemporaneous endogenous variables. The problem with the representation in (3.1) is that the coefficients in the matrices are unknown and the variables have contemporaneous impacts on each other and it is not possible to uniquely determine the values of the parameters in the model.

Pre-multiplication of (3.1) by A^{-1} transforms (3.1) into a reduced form model is represented in the following equation:

$$y_t = G(L)y_{t-1} + e_t$$

(3.2)

Where $G(L)=A^{-1}B(L)$ and $e_t=\grave{A}_0u_t$. It should be noted that the error term e_t is a linear combination of the structural form errors (u_t). As a result, even though the structural form errors are assumed to be uncorrelated with each other, reduced form errors e_t is correlated in general. The structural form variance-covariance matrix can be expressed as $\Sigma_u=E(u_tu_t') = A_0\Sigma_e A_0'$ where Σ_e is the variance-covariance matrix for the reduced form error terms. It can be observed from this decomposition that if one knew the structural form matrix A_0, then it would be possible to solve for the structural form error variances from the reduced form variance-covariance matrix $\Sigma_{e.}$ Accordingly, the task of the researcher is to impose identification restrictions on the contemporaneous coefficients' matrix A_0 to recover the structural error series. Once the structural model is identified, interrelationships between the variables can be investigated via impulse response functions and forecast error variance decompositions, which show the evolution of economic shocks through the system. A common practice in identifying the structural system is to assume a lower triangular structure for the A_0 matrix. This type of identification has been extensively employed in the literature ever since it was pioneered by Sims (1980). The decomposition implies that the first variable responds only to its exogenous shocks, the second variable responds to the first variable and the second variable's exogenous shocks and so on. Thus, the results from VARs can be quite sensitive to the ordering imposed. Before the estimation of the model, the study examined the time-series properties of each of the variables in the model, two popular unit root tests were performed on these time series: the augmented Dickey-Fuller (ADF) test, the Kwiatkowski, Phillips, Schmidt, and Shin (KPSS) test. The overall results suggested that most variables under consideration had a unit root in a level form but are stationary in the first-order log-difference form.

Sample and Data

The banking sector in Tanzania is classified into two main groups. The first group comprises domestic and foreign banks and the second group comprises of 10 large banks, 19 medium banks and 9 regional and small banks (EY, 2020). There are 35 banks in the banking sector in Tanzania in 2021, 11 banks were domestic banks and 24 banks were foreign banks (BoT, 2021). The sample comprises mainly of domestic and foreign banks in Tanzania that operated at any time within 15 years of study covering the period from 2006 to 2020. The sample size comprises of all 10 large commercial banks 6 domestic banks and 4 foreign banks. The reason for selecting all 10 large commercial banks is that they were comprise of more than 75% of the market share of the total assets of the banking sector in Tanzania (EY, 2020) (see Table 3.1). The study used secondary data and a time series analysis covering the period of 2005-2020 which were obtained from the Central Bank of Tanzania and the National Bureau of Statistics (NBS). The financial statements of domestic and foreign banks were collected from the bank's websites. The macroeconomic variables: consumer price index, real exchange rate, interest rate and policy rate are taken from various issues of the Quarterly Statistical Bulletin published by the Central Bank of Tanzania.

Empirical Results

Data Preliminary

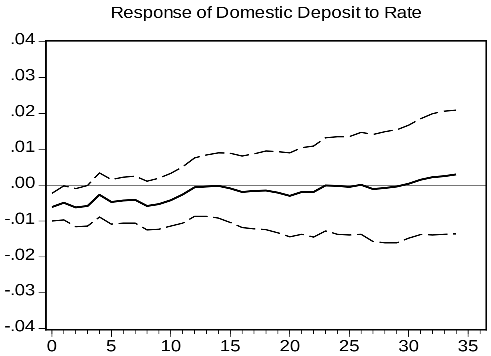
Table 4.1 summarizes the results of test statistics. It can be observed from the results of the ADF test that fail to reject the null hypothesis of unit root for all variables. However, the first differences of these variables were found to be stationary at a 5% significance level. Contrary to the ADF test, the KPSS test considers the null hypothesis of a stationary series against the alternative of a unit root, thus complementing the ADF test's results. As shown in Table 4.1, the KPSS test statistics confirm the results of the ADF test. Since both the ADF and KPSS tests can very likely be biased in favour of the unit root process (Perron and Vogelsang 1992) in the event of structural breaks. The study used the Zivot and Andrews (1992) test which is employed to test for unit root properties in the event of the presence of a structural break. Having applied this test, the results were found to remain quantitatively unchanged. Both trace and Max-eigen value tests indicated their series set under consideration were cointegrated at the 5% level of significance. When there is evidence of cointegration among the variables of a VAR system, such information can be incorporated into the VAR system. Therefore, a modified version of VAR which is known as the Vector Error Correction (VEC) model can be estimated. In the VEC model, the lagged cointegration vector(s) are added to the list of explanatory terms on the right-hand side of the VAR equations that are specified in the first differences. The cointegration vectors are presumed to be the long-run equilibrium relationships among the variables.

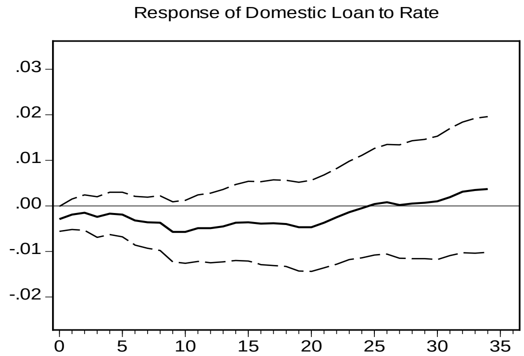
However, the cointegration constraints are not undertaken in the study analysis. The justification attributed to First, the analysis is generally focused on short-run constraints and the short-run dynamic response of the system. When cointegration constraints are excluded, this only implies that the long-run response of some variables is not constrained and might follow a divergent path. However, the short-run analysis is still valid. Second, Sims *et al* (1990) proved that standard asymptotic inference is not affected even when the variables included in the VAR in levels are cointegrated. Finally, although estimates were no longer efficient if cointegration constraints are not included, they remain consistent. Hence, the lower efficiency in the estimates can be justified by the difficulty in the economic interpretation of some of the cointegration constraints showed by the data (De Arcangelis *et al*, 1999). Table 4.2 represents an examination of the residual correlation matrix indicates that the ordering of the variables is important for the model. Since the ordering is important in the VAR model, the best strategy is to compare the results to the IRF obtained by reversing the ordering. However, the results from different orderings show no significant differences. For this study, the interest rate is ordered first and the exchange rate is ordered last. The rationale for this is that the study aims to analyze the effect of monetary policy shocks on the different loans rather than the reaction of interest rate to change in other variables. Therefore, the study ordered the interest rate in the first position, followed by the domestic loan and deposit, foreign loan and deposit, output, price and exchange rate.

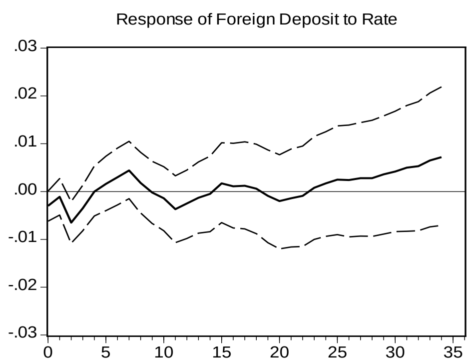
The Effects of Foreign Monetary Policy on Domestic and Foreign Bank's Deposits and Loans

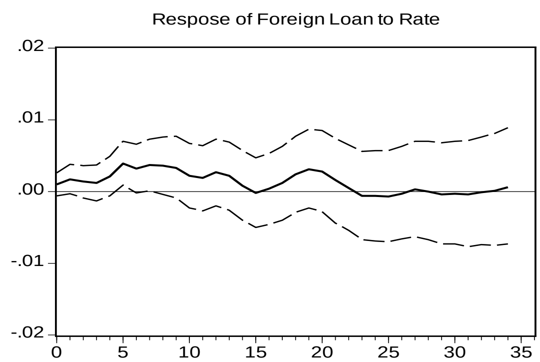
Figure 1 represents the responses of the domestic and foreign banks' deposits and loans, industrial production index, consumer price index and real exchange rate to one-standard-deviation shock in the interest rate. The figure indicates that domestic deposits responded negatively to a one-standard-deviation shock in the policy interest rate, implying that deposits of domestic banks decline due to a tight monetary condition. In contrast, foreign deposits, while initially declined for the first five months, responded positively starting the sixth month until the tenth month. This could be reflective of the withdrawal of deposits from the domestic banks to the foreign banks during times of a high-interest rate environment. This could be explained by the possibility that depositors shift their deposits to foreign banks in which they have more confidence during times of economic distress. Shifting to loans, domestic loans contracted following a positive one-standard deviation interest rate shock, implying that domestic banks curtailed lending during the tight monetary condition. However, as indicated by the error band, the impact of interest rate shock on domestic loans is not significant. Further, foreign loans showed the opposite reaction to interest rate shock. The findings showed that foreign loans responded significantly positive to interest rate shock, implying that the foreign banks resume lending despite the tight monetary condition. The foreign banks have been complementing the role of the domestic banks in providing credit during times of tight monetary conditions.

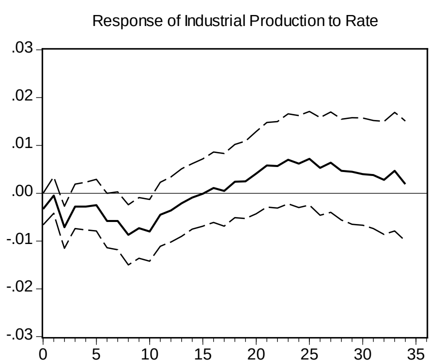
At this juncture, it can be concluded that the foreign banks do not abandon the domestic market as being shown by the significantly positive impulse response function of the foreign loans to the interest rate shock. As for the rest of the variables, their responses to interest rate shocks are as predicted and consistent with the traditional Keynesian macroeconomic framework. A monetary policy shock leads to output contraction in the short run but leaves no significant impact in the long run. Meanwhile, price decreases initially but increase later following an interest rate hike. A lower domestic price induced by a negative monetary policy shock causes the real exchange rate to depreciate promoting the country's exports and decreasing its imports and thereby improving the trade balance followed by an appreciation of the real exchange rate. The findings are consistent with previous studies by (Amidu & Wolfe (2008: Shokr & Al-Gasaymeh, 2018: Shokr et al. 2019: Shokr, 2020) who found out a significant relationship between monetary policy and banks' lending. However, the findings of the study are contrary to Ogunyomi (2011) who found out that monetary policy was ineffective for increasing the volume loans and advances.

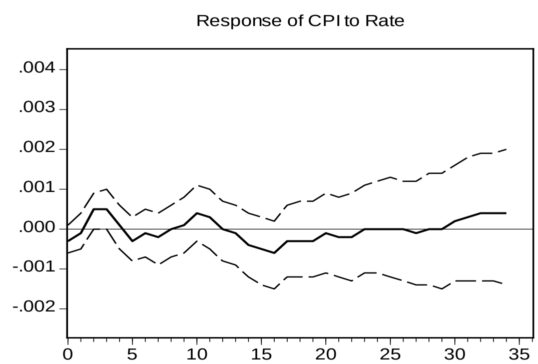

Response of Domestic Deposit to Rate
.04
.03
.02
.01
.00
-.01
-.02
-.03
-.04
0 5 10 15 20 25 30 35


Response of Domestic Loan to Rate
.03
.02
.01
.00
-.01
-.02
0 5 10 15 20 25 30 35


Response of Foreign Deposit to Rate
.03
.02
.01
.00
-.01
-.02
-.03
0 5 10 15 20 25 30 35


Respose of Foreign Loan to Rate
.02
.01
.00
-.01
-.02
0 5 10 15 20 25 30 35


Response of Industrial Production to Rate
.03
.02
.01
.00
-.01
-.02
-.03
0 5 10 15 20 25 30 35


Response of CPI to Rate
.004
.003
.002
.001
.000
-.001
-.002
0 5 10 15 20 25 30 35

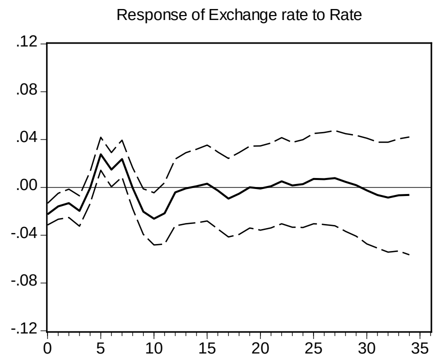


Figure 1: Impulse Response Functions of the Variables to One Standard Deviation of Interest Rate Shock

Note: The horizontal axis in the graphs represents the time horizon, extending from three months to thirty-six months

Results based on the Variance Decompositions

Table 4.3 shows the effects of the structural shocks on the macroeconomic variables which are analysed by measuring the variance decompositions of the forecast errors based on the VAR. The findings showed that most variations in the domestic deposit were caused by its innovation in the first 10 months but from then on, the innovation in domestic loans started to be significant, accounting for about 35 per cent and followed by industrial output at around 30 per cent. While it is unclear how a decline in domestic loans contributes to the variations in the domestic deposits, a decline in output is affecting the deposits of the domestic banks through the liquidity effects. Variations in foreign deposits are widely explained by the innovations in industrial production and domestic loans contributing around 17 per cent in the longer-term horizon. As in the case of the domestic deposits, the contribution of the innovations in industrial output in explaining the variations in foreign deposits is rather clear, that is, higher economic output means that the economy is booming, thus more deposits into the banking system.

The fluctuation of domestic loans is mainly attributed to its innovation in the first one and half years but from then on, the innovations in industrial production attributed to about 30 per cent of the fluctuation of domestic loans. This indicated that the economic situation had a significant impact on the loans being extended by the domestic banks. In comparison to the foreign loans, the contribution of industrial production in explaining the forecast error variance of foreign loans was smaller at around 20 per cent. This could mean that foreign loan was more stable compared to domestic loans when there was output fluctuation. Interestingly, innovations in foreign deposits are also significant in explaining the variations in foreign loans, contributing to around 30 per cent at the longer time horizon. This could explain the reason why foreign loans continued to expand despite the tight liquidity condition. The variance decomposition analysis on the IPI shows that the variations in IPI were mainly due to its innovations and the domestic loans and deposits together, contributing around 30 per cent of the variations in IPI. In comparison, innovations in foreign loans and deposits together contributed less than 20 per cent to the variation in the economic output. This implies that innovations in domestic loans and deposits have more impact on domestic economic activities compared to foreign loans and deposits. Even though the innovation in itself plays a major role in the short run, the shock in domestic loans and output tends to play a major role in the fluctuation of price. In the short run, the innovation in exchange rate explains most of its fluctuations and followed by monetary policy and foreign loans, but in the long run domestic deposits and foreign loans explain about 50 per cent while the price and domestic deposit accounts for about 32 per cent of the fluctuations of the real exchange rate. The findings were consistent with (Auer et al. 2019: Civcir & Varoglu, 2019).

Conclusion

This study examined the effect of monetary policy shocks on bank loans extended by domestic banks and foreign banks in Tanzania over the period from 2006 to 2020. In doing so, it analysed the responses of major balance sheet items of the foreign and domestic banks to monetary policy shocks using the impulse response functions based on the VECM. It also used the variance decomposition analysis to further substantiate the results of the impulse response functions. The novelty of this studystudy was that it used aggregated data over a longer period to capture a more general view of the subject matter. The study findings showed that foreign banks did not react negatively to a monetary policy shock, supporting the view that foreign banks in Tanzania did not abandon the domestic market in times of economic distress. Several implications can be derived from this study. Among others, the domestic banks could learn the best risk management practices from the foreign banks that would have enabled them to not be adversely affected by the tight liquidity condition. Adopting best banking practices such as continuously being prudent in lending and continuous monitoring of existing accounts to enable "early-warning" problem recognition proved to ensure that foreign banks were more resilient to weather shocks in times of tight liquidity conditions. From the policy implementation point of view, the study showed that the effect of monetary policy shocks was uneven across the banking industry with the domestic banking institutions being more adversely affected by the tight monetary policy.

More importantly, the study had shown that the fluctuations of the domestic banking institutions had a substantial impact on the economic output. In this regard, it is crucial to ensure the health and stability of the domestic banking industry due to its significant influence on the domestic economy. Despite this, further investigation could shed greater details on the findings of the study. In particular, while it is clear that the aggregated foreign loans increase following the interest rate shocks, it is important to analyze the components of the loans being extended. It could be possible that the increase in foreign lending is not due to continuous lending to the retail businesses and consumers, but due to higher interbank loans to the domestic banking institutions which are grappling for liquidity in times of economic distress. The theoretical contribution of the study was that despite a tight monetary condition, the foreign banks continued to resume lending, implying that the "capital flight" argument did not apply to the foreign banks' operations in Tanzania. To a large extent the findings of the study provided several interesting results. Importantly, it made a significant contribution to the limited literature on the effect of monetary policy on Tanzanian banks' lending. However, it should be noted that this study like any other empirical study had some limitations. First, the dataset was limited to only 10 large banks due to the difficulties in obtaining data of other banks. Second, a longer timeframe if applied to this study would have better revealed any noticeable trends over the financial sector reforms. This would have disclosed a more comprehensive analysis of monetary policy effects on banks' lending. Despite the existence of the limitations, the findings are to be interpreted with the understanding of the context of the study. Future research can be undertaken for the effect of international monetary policy shocks on Tanzanian banks' loans.

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Appendix

Table 3.1: List of Domestic Banks Involved in the Study

Domestic Banks	1	Azania Bank LTD
	2	CRDB Bank PLC
	3	EXIM Bank Tanzania LTD
	4	National Microfinance Bank PLC
	5	National Bank of Commerce Limited
	6	Tanzania Commercial Bank PLC
Foreign Banks	1	Citibank Tanzania LTD
	2	Stanbic Bank Tanzania LTD
	3	Standard Chartered Bank Tanzania LTD
	4	Diamond Trust Bank Tanzania LTD

Source: EY (2020)

Table 4.1: ADF and KPSS Unit Root Tests Results: 1978Q1:1-2003Q4

Time series	**ADF**		**KPSS**	
	Level	First Difference	Level	First Difference
DD	-1.38	-12.64***	0.2321	0.1463
DL	-1.16	-9.68***	0.2568	0.1668
FD	-1.62	-12.58***	0.3464	0.0764
FL	-1.36	-14.26***	0.3262	0.0834
IPI	-1.61	-7.38***	0.2460	0.0622
CPI	-1.82	-14.24**	0.3824	0.1323
RER	-1.62	-12.36***	0.1664	0.1428
Rate	-1.82	-22.44**	0.1148	0.0588

Notes: ***, and ** denotes significant at 5%, and 1%

Table 4.2: Residual Cross-Correlation Matrix

	Interest Rate	Domestic Deposit	Foreign Deposit	Domestic Loan	Foreign Loan	Industrial Production	Price Index
Interest Rate	1.000						
Domestic Deposit	-0.186	1.000					
Foreign Deposit	-0.224	0.286	1.000				
Domestic Loan	-0.123	0.256	-0.084	1.000			
Foreign Loan	-0.064	0.133	0.027	0.316	1.000	0.054	
Industrial Production	-0.068	0.124	0.0896	0.076	0.045	1.000	
Price Index	0.128	0.076	0.086	-0.088	-0.124	-0.048	1.000
Real Exchange Rate	-0.266	-0.072	0.278	0.044	0.184	-0.034	-0.142

Table 4.3: Variance Decomposition Analysis

Variable / Horizon	Rate	DD	DL	FD	FL	IPI	CPI	RER
Variance decomposition of DD								
3	4.84	86.48	1.26	0.04	6.28	0.86	1.25	0.68
6	5.84	76.43	0.81	0.28	9.42	3.08	3.42	1.83
9	6.18	68.59	1.88	0.67	11.31	2.88	4.49	4.08
12	6.27	56.07	10.02	0.90	9.22	8.27	3.71	5.66
18	3.62	32.06	23.41	0.86	5.68	26.21	3.15	5.42
24	2.43	19.98	35.56	2.11	5.49	27.82	3.05	3.97
30	1.93	15.71	37.21	3.24	6.68	29.44	2.65	3.48
36	2.44	14.97	34.89	3.58	7.72	31.73	2.46	3.47
Variance decomposition of DL								
3	1.49	16.95	78.97	0.91	0.15	1.13	0.02	0.34
6	1.53	24.37	64.40	7.56	0.18	1.21	0.27	0.87
9	2.04	22.60	55.04	14.96	0.14	3.21	1.60	0.62
12	3.11	21.23	50.63	14.56	0.11	8.27	1.37	0.73
18	3.01	16.73	44.78	14.40	0.08	17.69	1.11	2.21
24	2.59	13.20	44.66	11.21	0.37	23.67	0.98	3.33
30	2.21	10.67	42.46	8.52	1.60	28.39	2.04	4.11
36	2.73	11.57	37.49	6.88	3.90	30.01	3.84	3.88
Variance decomposition of FD								
3	3.42	10.11	1.31	82.88	1.63	0.09	0.33	0.36
6	4.48	6.23	1.41	83.30	1.34	0.34	0.89	2.02
9	4.15	6.32	1.41	77.96	1.99	1.45	0.84	6.90
12	3.44	5.65	2.65	68.32	1.79	11.80	0.76	7.60
18	2.44	3.80	9.16	39.96	1.71	33.93	2.51	6.48
24	1.76	2.76	16.91	29.60	4.88	36.30	2.91	4.77
30	1.78	2.46	17.00	30.76	7.85	33.32	2.71	4.13
36	3.17	3.45	15.72	32.06	9.63	30.29	2.87	3.80
Variance decomposition of FL								
3	1.86	3.42	4.58	0.28	74.80	9.34	5.64	1.80
6	2.34	2.21	3.62	6.90	58.29	11.77	11.89	3.26
9	4.85	1.95	3.74	23.72	36.29	11.72	15.41	2.48
12	4.72	1.53	3.04	39.11	26.12	10.78	13.22	1.62
18	3.91	1.69	3.16	43.07	24.86	13.53	9.65	2.24
24	3.99	3.27	6.82	39.89	20.72	15.62	7.48	2.61
30	3.51	3.19	10.66	36.25	19.05	18.12	6.80	2.72
36	2.96	4.25	14.93	30.59	16.41	19.93	7.67	3.58

Table 4.3: (continued) Variance Decomposition Analysis

Variable / Horizon	Rate	DD	DL	FD	FL	IPI	CPI	RER
Variance decomposition of IPI								
3	1.29	2.28	3.72	0.35	0.11	86.05	0.64	5.55
6	4.17	3.90	5.21	2.52	0.36	75.01	0.61	8.22
9	5.23	5.76	8.17	6.33	0.74	64.43	0.76	8.57
12	8.85	7.19	11.93	7.85	0.86	54.63	0.74	7.95
18	8.17	7.65	14.63	8.12	2.41	48.85	2.68	7.48
24	9.11	15.41	12.07	7.21	7.33	38.39	4.27	6.22
30	12.00	19.30	10.53	7.46	9.89	31.01	4.11	5.72
36	12.35	19.22	13.23	7.79	9.78	28.33	3.81	5.49
Variance decomposition of CPI								
3	0.89	1.78	5.86	2.41	2.05	0.98	85.78	0.26
6	2.88	3.98	8.25	4.90	1.71	1.77	75.51	1.01
9	2.61	6.92	10.95	8.08	6.17	3.24	60.63	1.41
12	2.49	5.21	24.69	9.66	6.47	3.66	46.67	1.15
18	3.51	16.48	25.78	8.64	5.33	5.66	33.66	0.95
24	3.02	16.36	24.59	6.84	3.93	17.08	24.95	3.23
30	1.94	11.10	23.25	4.45	3.75	34.81	16.38	4.32
36	1.60	8.20	24.98	3.66	5.44	39.87	12.08	4.17
Variance decomposition of RER								
3	12.38	4.38	0.32	8.63	16.52	0.85	0.24	59.99

6	12.18	5.26	4.94	7.65	22.49	0.92	2.20	45.68
9	15.84	7.38	11.76	7.80	14.62	2.84	8.28	33.13
12	11.18	12.68	16.41	6.88	8.54	3.03	20.57	19.40
18	6.87	18.84	25.32	10.09	6.26	3.22	22.36	8.93
24	5.26	15.43	28.26	14.64	6.64	3.09	21.12	7.61
30	5.88	16.46	24.87	18.84	5.47	3.04	19.73	7.20
36	4.22	13.33	35.77	24.65	5.20	3.11	17.39	6.73

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