

EXAMINING THE CONTRIBUTION OF COMMERCIAL BANKS TO INTERNATIONAL TRADE IN TANZANIA

Gladness Gladson

Zhejiang University of Science
and Technology

CHINA

gladnessmatolo@yahoo.com

Asare Gideon

Nanjing University of Posts
and Telecommunications

CHINA

asaregideon015@gmail.com

ABSTRACT

This research aimed to examine the contribution of banks in Tanzania to international trade. Trade activities between Tanzania and other nations required the support of accredited and licenses banks due to financial regulations on money laundering, exchange rate policies and trade finance rules in practice by international standard organizations, international monetary fund and other economic integration unions. The literature suggests that the contribution of international trade to economic growth is well studied but banks impact on international trade has received little attention. The author designed two set of questionnaire; one for international trade dealers thus exporters and importers and the other for some selected commercial and private banks in Tanzania. The researcher administered all the questionnaires personally to all the 100 participants. Using descriptive statistics and multivariate regression model, the study presented the results of the data in SPSS. The paper revealed that banks have available exports and imports credit schemes to international trade dealers and also provide enough education on guarantee and credit support requirements. Again, the banks make available changes and updates on trade finance regulations from union and government policies. Also, the descriptive statistics show that banks have flexible and comprehensive schemes to encourage export and import business. Moreover, this study found that there is a positive relationship between international trade and banks contribution (LC, DC, RM and CDC). All the banking categorical variables were statistical significant. However, exchange rate (XE) services was not statistically indicator of international. Based on the conclusions, the author suggests that all relevant organizations such as government, central bank of Tanzania etc. should improve awareness of trade policy issues through better communication or internet site. Strengthen analytical skills of public officials for policy reform and trade negotiations.

Keywords: International trade, trade finance, banks contribution, letter of credit, document collection.

INTRODUCTION

Understanding how banking institutions affect country's and firms' internationalization is central to international business. Banks represent an important category of the global transaction services organizations, which embody important aspects of the institutional environment and are important contributors to the growth of international business (Eriksson et al., 2017). Banks play a critical role in international trade by providing trade finance products that reduce the risk of exporting (Friederike & Schmidt, 2014). Eriksson et al. (2017) argued that banks specialize in screening and monitoring economic agents and supply firms with credit and other financial services. Banks involvement in international trade is crucial since they facilitate payments and security of transactions. Domestic banks representation for home countries and firms is crucial in terms of international trade (export and imports). Especially nowadays, where international trade has become inevitable both for

companies and countries (Susmus & Ozgur Baslangic, 2015).

Banks play a crucial role in facilitating international trade by providing a wide range of trade service products like letter of credits, documentary collections, consignment, advance payment, supplier's credit to name a few. The two most common trade finance instruments provided by banks are letters of credit and documentary collections (Niepmann, 2014). According to Kalpana & Taidala (2017) Tanzania banks have always played an important position in the country's economy. They play a decisive role in the development of the industry and trade. The monetary and banking system which establish relationship among the suppliers and receivers of funds promotes the growth of the real economy. Although the traditional banks undertake this task all over the world, it is very important to take the domestic participating financial system and to ensure that the real sector benefits from these funds (Cansu et al, 2019). Many researchers have delved into improving Tanzania financial service system, banking service qualities and monetary policies to improve these banks. However, a little attention has been directed to contributions of banks in Tanzania towards international trade. This study aims to examine the contributions of commercial banks to international trade in Tanzania.

LITERATURE REVIEW

Overview of International Trade

No country can exist in isolation, international cooperation and trade antecedent of economic power and growth as well as industrialization. The unequal distributions of resources and globalization have results to interdependency among nations. Because of this, both the developed and developing nations engage in international trade. Tian et al. (2018) asserted that trade is sought out by nations to aid in their economic development and countries seek out a share of the "trade pie". Trade globalization has led to international economic integration that systemically links nations, and plays an important role in affecting sustainable economic development and ecological dynamics amongst nations (Jomo and Rudiger, 2009). International trade flows are associated with comparative advantages for nations and regions. To further argue for its urgency, comparative advantages occur for many reasons, some of which are natural resources availability and capabilities, such as water, land and carbon efficiency resources. Tian et al (2018) affirmed that beneficial aspects of international trade and natural resources may be exemplified by global water. Advancing the motivation behind international trade and its necessity, Countries and regions rich in water resources may be beneficial partners to those regions with water scarcity. For example, it has been found that international global water resources trade of agricultural products is 352 cubic gig meters per year (average over the period 1997–2001), greatly aiding water scarce areas (Chapagain et al.,2005). Another example is exports growth of carbon-intensive goods from Australia to China. This international trade relationship has helped in global carbon emissions reductions since Australian goods manufacturing carbon intensity is much less than China goods manufacturing carbon intensity (Tan et al., 2013).

However, International trade may result in resources and environmentally detrimental balances and trade shifts. This type of trade may allow one country to partially decouple its domestic economic and ecological systems while consuming goods from other national economic systems Tian et al (2018). Sometimes, the ideology behind cross nations trade varies. Countries may seek to save their own environmental and resources capacity by shifting away from natural resources and pollutant-intensive activities in the manufacture of their goods. They can do this through importing high environmentally and resource burdensome products from other regions of the world. Under these circumstances, global

issues such as “carbon leakage” and “ecologically unequal exchange” may occur across nations, resulting in greater overall environmental and natural resources degradation (Hoekstra and Mekonnen, 2012; Moran et al., 2013).

Inter-relational quantitative assessments incorporating socioeconomic systems and the natural environment have gained attention with respect to global international trade. The major international trade assessment metrics and environmental indicators are called “embodied flows” (Bruckner et al., 2012; Giljum et al., 2011). Embodied flows quantify the natural resource or environmental quantities required directly or indirectly to make a product or provide a service. Embodied flows analysis helps identify and illustrate environmental burden shifts associated with raw materials extraction and processing, and product manufacture. Further analyses help to identify international trade balances.

An important line of research focuses on “unequal ecological exchange” amongst nations. To date, studies on trade-based embodied flows typically focus on either environmental or resources dimensions, based on different methods, such as Input-Output Analysis (IOA), Material Flow Analysis (MFA) and other relevant methods. These studies also aim to identify driving factors influencing embodied flows transfer, so that more appropriate policies can be raised to help address resources and environmental losses from trade (Caro et al., 2014; Wu et al., 2016).

Banks Participation in International Trade

In the field of banks supplement effective implementation of international trade has seen many literatures from various banks and countries. Kabongo and Okpara (2019) analyzed the timing and speed of internationalization of 23 African banks using data from corporate annual reports, company websites, and media reports from the period ranging from 2010 to 2018. The findings from the qualitative analysis suggest that entry timing is influenced by the firm's ownership structure and board members' experience and diversity.

In the study of Jiménez et al. (2017) who use a credit register to study the impact on the supply of credit of the singular introduction and subsequent modifications of one macroprudential policy, i.e., the dynamic provisioning in Spain, which affected all banks concurrently. Fraisse et al. (2019) and Juelsrud and Wold (2019) similarly focus on a one-off change in capital requirements that affected all banks, in respectively France and Norway, during the most recent crisis, while Auer and Ongena (2016) study the compositional changes in banks' supply of credit using variation in their holdings of residential mortgages on which extra capital requirements were uniformly imposed by the countercyclical capital buffer introduced in Switzerland in 2012.

Global and local banks support international trade through a wide range of products that help their customers manage their international payments and associated risks, and provide needed working capital. The term “trade finance” is generally reserved for bank products that are specifically linked to underlying international trade transactions (exports or imports). One of the most common and standardized forms of bank-intermediated trade finance is a letter of credit, it reduces payment risk by providing a framework under which a bank makes (or guarantees). Banks play an important role in an economy of a nation. According to Sergeant (2001), banks contribute to investments, employment creation and the process of economic growth and development. They are the corner stone of an economy of a given nation. Global trading allows the different countries to participate in global economy encouraging the foreign direct investors.

Under the new international regulatory framework for banks - Basel III - regulators agreed to vary minimum capital requirements over the cycle, by instituting procyclical bank capital requirements (De Jonghe, 2019). Other researchers focused on how banks requirements affect their international participation affecting inter-country transactions. Among are Gropp et al. (2018) analyze how the outcome of the capital exercise conducted by the European Banking Authority in 2011 affect banks' balance sheets, syndicate lending and firm outcomes. Finally, Célérier et al. (2016) study the effect of tax reforms abroad (in particular in Italy and Belgium) and find that the resulting decrease in the cost of equity leads banks to raise their equity ratio, and to concurrently expand their balance sheets by increasing the amount of credit supplied in Germany.

In accrediting banks in Tanzania for international recognition, the Bank of Tanzania plays a major role. For credit lines, this implies that they look at the total amount of credit that is available, and not at the portion that is taken up by the borrower. This gives more credibility to the banks involved as concluded by Du (2018) that good news made by the major international credit rating agencies had a significant impact on the market only before the introduction of Abenomics.

Many researchers have delved into improving Tanzania financial service system, banking service qualities and monetary policies to improve these banks. However, a little attention has been directed to contributions of banks in Tanzania towards international trade and this study will explore that. A growing body of empirical research shows that shocks to a country's banks affect international trade. For example, Amiti and Weinstein (2011) show that shocks to the financial health of Japanese banks led to a drop in the number of exports from Japanese firms for which these institutions acted as a main bank, holding everything else constant

Common Trade Finance Instrument by Banks

When an exporter and an importer trade they have to decide how to settle the transaction under one option, the exporter produces the good and the importer pays upon receipt (open account). Importer and exporter have to decide how to settle the trans-action. The most common trade finance instruments provided by banks are open account, letters of credit, documentary collections, advance payment, export letter of credit, export documentary collection, consignment and guarantee

Documentary collection

The Uniform Rules for Collection (URC) defines documentary collection as “the handling of documents (financial and or commercial) by banks in accordance with instructions received, in order to: Obtain payment and/or acceptance, or Deliver documents against payment and/or against acceptance, or Deliver documents on other terms and conditions” Therefore: Banks are only agents (of Exporter) in collections, they are bound to follow the instruction of whoever their principal is.

A process governed by international rules by which the supplier is able to collect from an overseas buyer through an intermediary –i.e. banks. It comprises between open account and advance payment and simpler but less secure than letter of credit (URT training manual). The two types of collections are clean collection and Documentary collection (Niepmann, 2015) Clean collection – contain financial documents only It is an alternate of open account where seller ships, sends commercial documents to buyer but sends financial documents I.e. draft through the banks for collection The payment is effected without reservation and conditions by the principal or his bank. Some element of trust exists between buyer and seller (URT

training manual).

Documentary Collection - contain financial and commercial documents Seller ships and then sends all documents (both financial and commercial) through the banks for handling Seller still retains a constructive control over goods through the banks (URT training manual).

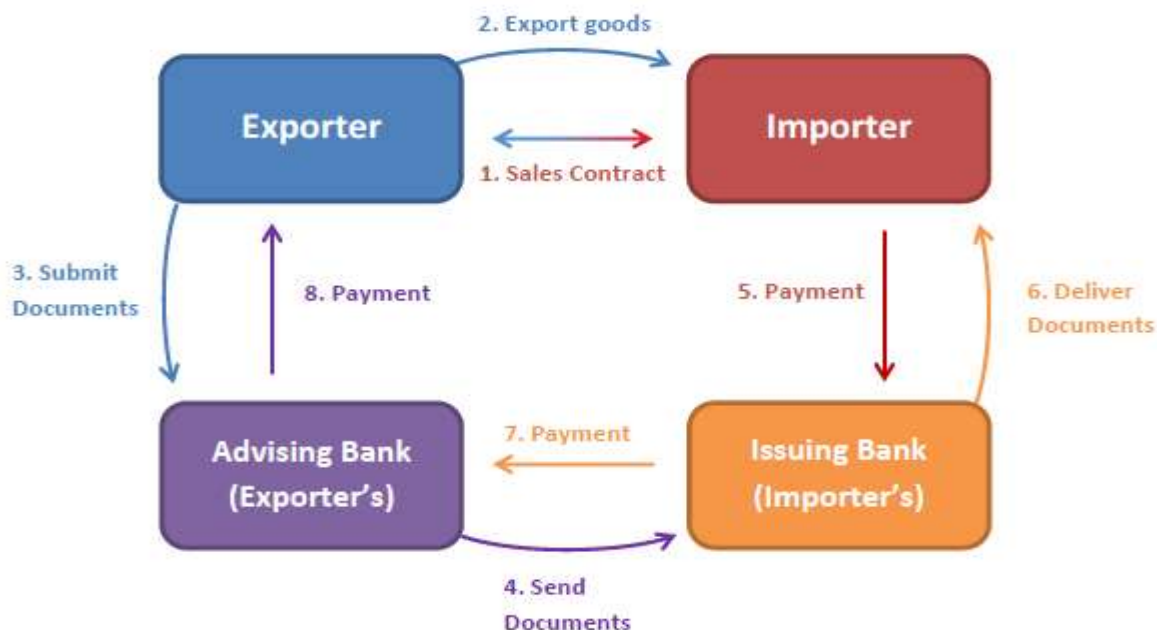


Figure 1. How document collection works (Niepmann, 2015)

Letter of credit (LC)

Letter of credit is an undertaking given by a bank to the seller at the request and/or instructions of the buyer to make payment or accept and pay bills of exchange (Draft) drawn by the seller up to a stated sum of money within a prescribed time limit and against stipulated documents, provided that the terms and conditions of the credit are complied with. (TS procedure ,2012). According to Niepmann and Schmidt-Eisenlohr (2015) when a trade is settled with an LC, banks do not only hand over documents to the importer as in a DC but they may also advance the importer's payment. The exporter is paid as soon as it proves that it has delivered the goods. Because banks may incur a loss if the importer does not pay, they screen importers much more actively when they issue an LC than when they engage in a DC. Accordingly, we assume that the share of importers that try to get away without paying decreases by more with an LC than with a DC. At the same time, the fixed fee that the bank charges for an LC to cover screening, monitoring and document handling costs is higher than for a DC.

The market for letters of credit is highly concentrated, with a few local banks dominating the issuance of letters of credit in each country. The confirmation of letters of credit is usually done between banks that have long-standing relationships, both in the issuing of letters of credit and other financial transactions (Klein, 2006). A number of papers focus on the bank credit channel, while controlling for the international trade finance channel. For example, Paravisini et al. (2015) show that the intensive margin of exports drops for Peruvian firms whose local banks were negatively affected by an international funding shock.

In Demir et al. (2017) they suggested three major facts on commercial letters of credit, rather than the standby letters of credit typically used for credit enhancement. Secondly, other main methods of payment in international trade are “cash in advance” (in which the importer bears the transaction risk by paying the exporter prior to shipment) and “open account” (in which the exporter bears the transaction risk by getting paid by the importer after the reception of goods). Finally, in some countries, for example, the United States, the confirmed letters of credit can be sold in the money market as bankers’ acceptances.

Although the main objective of a Letter Credit is to reduce financial risk, it comes with a price and so tends not to be used in either the least risky or riskiest situations. This finding can be explained by the optimal contract choice of firms. The basic intuition is that the value of risk mitigation through bank intermediation is offset to a degree by the cost of the intermediation (Niepmann and Eisenlohr, 2015).



Figure 2. how document collection works

Export letter of credit-(“Documentary Letter of Credit”)

shall mean an undertaking given by a bank to the seller at the request and/or instructions of the buyer to make payment or accept and pay bills of exchange (Draft) drawn by the seller up to a stated sum of money within a prescribed time limit and against stipulated documents, provided that the terms and conditions of the credit are complied with. (Commercial bank of Ethiopia Trade Service Process Procedure, 2012)

Consignment Payment

It’s a method of payment in which the title to the goods remains with the seller until an agent (distributor) in foreign country sells them. Payment is made to the seller if and when the agent (distributor) sells the goods. (Commercial bank of Ethiopia Trade Service Process Procedure, 2012)

Letter of Guarantee-

It is issued by a bank is a written promise/ irrevocable obligation by the bank to compensate (pay a sum of money) to the beneficiary (local or foreign) in the event that the obligor fails to honor his/her/its obligations in accordance with the terms and conditions (Birhane, 2018).

Contribution of Banks to International Trade

Previous research results have their own great advantages and shortcomings on how banks contribute to international trade. Due to trade policies, organized groups and economic alliances standard terms and regulations are observed duly in trade finance.

Cansu et al (2019) examined banks contribution to international trade in Turkey using panel data approach. Their results indicate that the funds allocated by banks increase the exportation in Turkey and it's important to inflow foreign exchange to the country through export channels from the point of Turkey's economy and the value of Turkish Lira. The study is relevant since it points out the positive relationship between the country's banks and export trade active. This encourage real sector to support economic growth for development. On the contrary, they did not include banks contribution to importation, and the variance of the banks performance in export and import contribution. It is therefore necessary to assess the individual item bank activity and the impact than to make a generalization.

Also, Kabongo et al., (2019) studied time and speed with internationalization in Africa banks. They use inductive analysis based on multiple case study of the internationalization process of 23 top African multinational banks. They asserted that the banks are the main support for trade activities. However, certain underlying developments were highlighted; the banks observe trends in the banking industry abroad, extend capabilities and enter strategic alliances with foreign partners. This helps make international trade activities easier among such nations, banks and traders in the circle of these alliances. Their study gives clue on the important of making smooth transaction when a foreign bank have partnership with a local one, facilitating trade. For instance, the operation of China Commercial Bank in Tanzania makes it easier to get yuan for foreign transaction, and Tanzania banks is similarly expected to be in China for same purpose. With this, these two countries can co-operate and trade with less documents required.

Moreover, Susmus and Baslangic (2015) investigated payment terms and its effects on international business. Their placed much emphasize on bank payment obligation (BPO) principle. The study provided evidence of a new dimension of international financing where the BPO is the main mediator, moderator and guarantor to both parties. They concluded, in practice, BPO will replace letter of credit and cash against goods payment terms which will ease trade activities. They argued for with these key points;

- Easy to follow due to the electronic presentation, provides objective and quick match, reduces paper usage.
- Can be traced to supply chain process.
- BPO, legal obligation and cannot be changed after TMA (Transaction Matching Application) match.
- BPO has been standardized by ISO 20022 messages and ICC rules.
- Do not have latency costs, price and currency risks such as tax, penalty, nationalize.
- There is no operational risk, people do not review physical documents, TMA compares data automatically.

Tabash and Dhankar (2014) also proved that in the long run Islamic banks' financing is positive and significantly correlated with international trade and economic growth in the Qatar, Bahrain and United Arab Emirates. Although Islamic banking still represents a relatively small share of the economy and financial system has positive impact on growth. Tafesse and Skallerud (2017) conducted a systematic review on trade show market, they found inconsistencies concern trade show activity stages. Although a large proportion of

articles researched multiple activity stages, little progress has been made in understanding how these activities interact with each other.

Therefore, a critical research priority should be to explore the organizational mechanisms and processes used to integrate the activity stages into a coherent marketing strategy. Most of the previous studies used a single item (bank and international trade) without giving out the specific underlying variables. This study overcame the gap by identifying the most regular accessed bank activities towards international trade, and find out the individual contribution. Letter of credit, document collection, exchange payment services are among the frequent activities. Multiple regression analysis gives out unit coefficient thus contribution, inter correlation matrix and significant factor therefore it was necessary for this to adopt the model for investigation.

Study Framework

The literature reviews most common methods of payment, such as open account, letter of credit, cash in advance, documentary collections, factoring, etc. Includes credit-rating and collection agencies in this country. Includes primary credit or charge cards used in this country. For international trade transactions, documentary credits such as letters of credit (LOCs), documentary collections and drafts are widely used. Prepayment, cash with order and cash-in-advance, are the most desirable terms by local sellers. Based on the literature, the study proposes that Letter of credit (LC), Document collection (DC), Exchange rate Risk mitigation and guarantee (RM), Custom duty collection (CDC) have positive relationship with International trade (INT). To advanced, given that the equation of the multiple regression is defined mathematically as $INT = \alpha + b_1LC + b_2DC + b_3XE + b_4RM + b_5CDC + \text{error}$. Where LC, DC, XE, RM, CDC are independent variable, INT is dependent variable, with 'a' the intercept (or 'constant') and 'b' the slope of line.

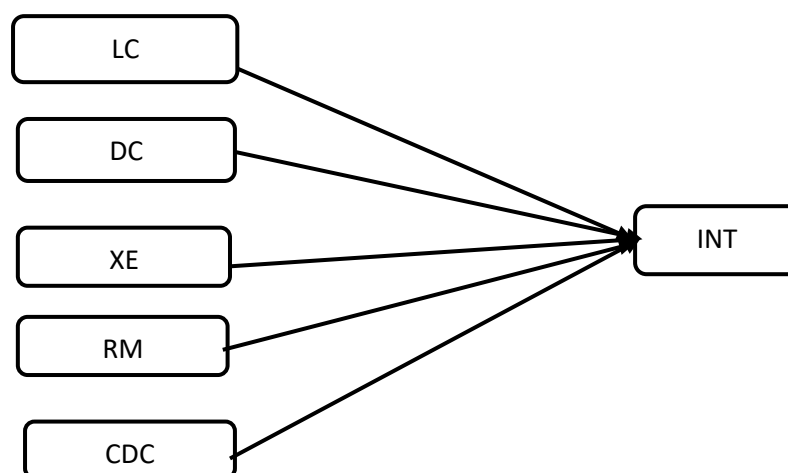


Figure 3 Conceptual framework

The study expects that the banks contribution towards international trade in Tanzania could be much experienced in the independent variables thereby measuring their contributions to cross border trade activities.

Methodology

The study participant comprises of two groups; private exporters, importers, and government agencies that handles exports and imports on behalf of the Republic of Tanzania. Secondly,

workers from five fully fledged commercial banks were represented. In all, 100 respondents are involved in the study.

Table 1 sample size

Category	Number
Importers/exporter individuals (includes government and private officials)	50
Bank of Tanzania	10
Exim Bank Tanzania	10
CRDB Bank Plc	8
GT Bank Tanzania	8
Barclays Bank (Tanzania)	6
Ecobank (Tanzania) Limited	4
Equity bank (Tanzania) Limited	4
Total	100

The primary data for this study was collected using questionnaire. The questionnaires were designed for the two groups; mainly importers/exporters and staff of participating trade finance banks in Tanzania. The questionnaire has three sections; background information of respondents in section "A", Tanzania international trade questions in section "B" and banks contribution assessment in section "C". Different measuring scales are used in different sections but predominantly the Five Likert Scale ranging from Strongly Agree (SA) = 5, Agree (A) = 4, Neutral (N) = 3, Disagree (D) = 2 and Strongly Disagree (SD) = 1.

Statistical Package for Social Science (SPSS version 25) and Microsoft Excel are the statistical tools for the data analyses.

RESULTS

Firstly, the study presents the reliability statistics of the research questionnaires and respondents background information. Table 2 illustrates the reliability statistics using Cronbach's Alpha, mean, variance and number of items in each category. Internal consistency reliability is used for multi-item measures. Internal consistency reliability is typically measured by a statistic called Cronbach's alpha coefficient (Cortina, 1993). An alpha coefficient greater than 0.70 is acceptable. The international trade question items have reliability coefficient of 0.79, N=15. All the bank categorical variables have reliable value which is greater than 0.70. For example, letter of credit ($\alpha=0.816$, N=5), document collection ($\alpha=0.75$, N=4), exchange payment support ($\alpha=0.89$, N=4), risk guarantee ($\alpha=0.80$, N=4) and custom duty collection ($\alpha=0.72$, N=4). The data also shows their respective mean statistics with document collection 4.04 as the highest average among all. The aforementioned statistics reveal that the data is reliable for further analysis and conclusion.

Table 2 Reliability statistics

Description	N	Cronbach's Alpha	Mean	Ave	F	Sig
Int. trade questions	15	0.79	2.91		33.15	0.000
Letter of credit	5	0.816	3.852	0.083		
Document collection	4	0.75	4.04	0.27		
Exchange payment	4	0.89	3.74	0.19		
Risk Mitigation and Guarantees	4	0.80	3.82	0.67		
Custom duty collection	4	0.72	4.00	0.15		

Table 3 indicates the gender of the respondents. From the table, 60% represents males and 40% are females. This shows that more males are engaged in international trading activities as compared to females.

Table 3 Gender

Description	Frequency	Percent
Male	60	60.0
Female	40	40.0
Total	100	100.0

Table 4 The majority age range among the respondents is 21-30 years. Followed by 41-50 years and 31-40 years. The least is below 20 years and they are 12 people mostly students in petty online import activities.

Table 4 Age of respondents

Description	Frequency	Percent
below 20	12	12.0
21-30	32	32.0
31-40	17	17.0
41-50	26	26.0
Above 51	13	13.0
Total	100	100.0

The nature of trade finance requires a little educational background for smart transactions. With this study, the data obtained shows that 61% have college or university education whilst 12% have postgraduate achievement.

Table 5. highest educational level

Description	Frequency	Percent
high school	16	16.0
college/university	61	61.0
Postgraduate	12	12.0
non- formal education	11	11.0
Total	100	100.0

Respondents were asked the number of banks they depend for their trade finance business. In the table shows that 46 participants use one bank and 42 respondents indicated they depend on two or three different banks. Lastly, 12 of the respondents also use more than three banks for their international trade activities.

Table 6 Number of banks

Number of banks	Frequency	Percent
One	46	46.0
two/ three	42	42.0
more than three	12	12.0
Total	100	100.0

To effectively understand and know respondents level of experience in international trade business and interactions with the banks, the years of dealing with banks was important question. From the table, 53% of the respondents said 6-10 years, those less than 5 years are 29% whilst those above 16 years are 11%. 11-15 years' experiences were the least people with 7% of the total respondents.

Table 7 Years dealing with banks

Description	Frequency	Percent
less than 5 years	29	29.0
6-10 years	53	53.0
11-15 years	7	7.0
above 16 years	11	11.0
Total	100	100.0

Multiple Regression Analysis

Multiple factors of banks affect trade of exports and imports in Tanzania. It is therefore logical to evaluate the banks individual factors than to assess the overall bank contribution. For this reason, the contribution of banks to international trade were evaluated using multivariate regression model based on the categorical bank measurements in the questionnaire. Using SPSS (version 25), the data were analyzed. The model summary showing R squared and adjusted R squared is shown in table 5.10. R-squared is the most important parameter in the model summary statistic's table and is a measure of model fit (i.e., it is the squared correlation between the model's predicted values and the real values). It explains how much of the variance in the dependent variable the independent variable(s) in the model explain.

The R-squared value of 0.736 implies that the independent variable (letter of credit LC, document collection DC, risk mitigation and guarantee RM and custom duty collection support SCD) explain 73.6% of the variance in the dependent variable (international trade INT).

Table 8 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.858 ^a	.736	.727	.92776

a. Predictors: (Constant), CDC, RM, LC, XE, DC

The ANOVA table indicates whether the banks has a predictive relationship with international trade in Tanzania. The F-test represents the significance level of the model. In the table 5.11, the F statistical value is (80.19, 0.000)

Table 9 ANOVA^a analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	345.128	5	69.026	80.194	.000 ^b
	Residual	123.945	144	.861		
	Total	469.073	149			

a. Dependent Variable: INT

b. Predictors: (Constant), CDC, RM, LC, XE, DC

Looking at the significance level, the table depicts that four variables are statistically significant LC (0.11, $p < 0.05$), DC (0.64, $p < 0.05$), RM (0.77, $p < 0.05$) and CDC (0.35, $p < 0.05$). For XE variable, the significance level is higher than 0.05. Hence, it is concluded that this indicator does not international trade.

Table 10 Coefficients^a of the variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.717	1.123		.638	.524
	LC	.113	.027	.196	4.113	.000
	DC	.644	.051	.756	12.642	.000
	XE	.073	.040	-.092	1.820	.071
	RM	.767	.046	.741	16.610	.000
	CDC	.345	.070	-.248	4.927	.000

a. Dependent Variable: INT

Finding The Best Contributing Factors (Best Model Fit)

Here, the researcher is interested in analyzing the best fit model for the study. The adjusted R Squared is used as benchmark because the adjusted R-squared is a measure of model fit that allows us to compare different models. For each other predictor included in the model, the adjusted R-squared increases only if the new term improves the model beyond pure chance. Stockemer (2019) outlined a simple procedure for detecting best model. He said using the adjusted R-squared as a benchmark to find the best model: (1) start with the complete model, which includes all the predictors, (2) remove the non-statistically significant predictor with the lowest standardized coefficient, and (3) continue this process until the adjusted R-squared does no longer increases. From the table 11, the full model has R Squared of 0.736 and an adjusted R Squared of 0.727. model 1 has the highest statistical explanatory power as well as the adjusted R Squared. Any successive deduction of the predictor variable resulted to decrease in both R Squared and an adjusted R Squared. Meanwhile the change in the R Square in each model (1-5) is statistically significant.

Table 11 Fit Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df 1	df2	Sig. F Change
1	.858 ^a	.736	.727	.92776	.736	80.194	5	144	.000
2	.839 ^b	.705	.697	.97736	-.031	16.919	1	144	.000
3	.665 ^c	.442	.430	1.33919	-.263	129.113	1	145	.000
4	.641 ^d	.411	.403	1.37068	-.031	7.994	1	146	.005
5	.170 ^e	.029	.022	1.75438	-.382	95.459	1	147	.000

a. Predictors: (Constant), CDC, RM, LC, XE, DC

b. Predictors: (Constant), CDC, RM, XE, DC

c. Predictors: (Constant), CDC, RM, XE

d. Predictors: (Constant), CDC, RM

e. Predictors: (Constant), CDC

Table 12 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.717	1.123		.638	.524
	LC	.113	.027	-.196	4.113	.000
	DC	.644	.051	.756	12.642	.000
	XE	.073	.040	-.092	1.820	.071
	RM	.767	.046	.741	16.610	.000
	CDC	.345	.070	-.248	4.927	.000
2	(Constant)	.599	1.134		.528	.598
	DC	.566	.050	.665	11.363	.000
	XE	.068	.042	-.085	1.601	.112
	RM	.766	.049	.739	15.743	.000
	CDC	.341	.074	-.245	4.619	.000
3	(Constant)	5.925	1.340		4.422	.000
	XE	.146	.052	.184	2.827	.005
	RM	.642	.065	.620	9.886	.000
	CDC	.015	.092	.011	.162	.871
4	(Constant)	7.730	1.206		6.411	.000
	RM	.649	.066	.627	9.770	.000
	CDC	.093	.089	.067	1.047	.297
5	(Constant)	15.462	1.164		13.281	.000
	CDC	.236	.113	.170	2.098	.038

a. Dependent Variable: INT

DISCUSSION

The overall banks contribution to international trade were evaluated based on the literature. As earlier studies and models have shown that (letter of credit LC, document collection DC, risk mitigation and guarantee RM and custom duty collection support SCD) are the principal and core activities to facilitate international trade. Assessing the significance of individual or combination of factors, the researcher used multivariate regression model. From the statistics, the model or banks' contribution factors explain 73.6% of the variance in international trade activities. Using the adjusted R Squared as benchmark for correcting difference in the multiple factors

The study continued to analysis the predictive power of the bank categorical variables on international trade. In this case, F-test represents the significance level of the model and a positive F statistical value is (80.19, 0.000) was obtained to strengthen the significant relationship of banks and international trade in Tanzania.

Furthermore, assessing the significance level of individual explanatory factors called for the use of hierarchical linear regression method through the "removal approach". Here, the best fit model is model 1 with LC, DC, XE, RM and CDC present. The full model has R Squared of 0.736 and an adjusted R Squared of 0.727. Any successive removal of the banks variables leads to a decrease in both R Squared and an adjusted R Squared. Meanwhile the change in the R Square in each model (1-5) is statistically significant; LC (0.11, $p < 0.05$), DC (0.64, $p < 0.05$), RM (0.77, $p < 0.05$) and CDC (0.35, $p < 0.05$) except XE (0.07, $p > .05$).

CONCLUSIONS

This research aimed to study the contribution of banks in Tanzania to international trade. Trade activities between Tanzania and other nations required the support of accredited and licenses banks due to financial regulations on money laundering, exchange rate policies and trade finance rules in practice by international standard organizations, international monetary fund and other economic integration unions.

Firstly, this study found that there is a positive relationship between international trade and banks contribution. All the banking categorical variables were statistical significant. Also, the descriptive statistics show that banks have flexible and comprehensive schemes to encourage export and import business. In general, the exporters and importers are satisfied by the banking activities and policies towards international trade. This boost the Tanzania economic growth as studies by Zirek et al. (2016) revealed that an increase in the share of Islamic deposits, assets and loans in total banking instruments results in an increase economic growth for Islamic cooperation countries. Whiles Tabash and Dhankar (2014) also proved that in the long run Islamic banks' financing is positive and significantly correlated with economic growth in the Qatar.

Secondly, banks activities toward export and import schemes were found to be essential to international trade development and facilitate cross boundaries trade. For instance, the flexibility of the credit scheme allows account holders to access credit and expand exporting and importing commodities, as advance against Export on Consignment Basis and discount of bill receivables finance goods for exhibition sales pre-shipment credit.

Thirdly, the asserted that the banking sector undertake many activities to upkeep trade finance. Some of the these are "bank fulfil loan requirements for export", "extension of line of credit for longer duration" etc.

RECOMMENDATIONS

Based on the study conclusion and findings, the author provides the following recommendations to exporters and importers, international trade partners, banks in Tanzania as well as government institutions that oversees cross nations trade activities.

First of all, relevant organizations such as government, central bank of Tanzania etc should improve awareness of trade policy issues through better communication or internet site. Strengthen analytical skills of public officials for policy reform and trade negotiations.

Secondly, critically assess existing export restrictions with a view to phasing them out. Finance sector development funds from the budget rather than through export levies. Expedite duty drawback refunds in order to reduce anti-export bias. In doing these, a special assistance office should be set by the government to give technical support to facilitate international trade between Tanzania and all other countries.

Banks and credit investment firms should coordinate with international trade dealers, explain available credit schemes, exchange payment plans, requirements for international trade documentation and letter of credit, loans, guarantees and others to all people who engage in global trade.

This paper recommends future researchers to conduct a survey, increase the sample size and banks to get full representation and generalization of ideas. Also, longitudinal study using panel data analysis would be better to get judgmental view from the panel contribution. This is because international trade and financing have many technical terms and practices.

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REFERENCES

- Amiti, M. & Weinstein, D. (2011). Exports and financial shocks. *Quarterly Journal of Economics*, 126:1841–77.
- Cansu, Ş. & Merve, B. E. (2019). The Contribution of Participation Banks to the International Trade in Turkey: A Panel Data Analysis. *Procedia Computer Science*, 158, 964–970.
- Caro, D., Lopresti, A., Davis, S.J., Bastianoni, S. & Caldeira, K. (2014). CH₄ and N₂O emissions embodied in international trade of meat. *Environ. Res. Lett.* 9, 1–13.
- Célérier, C., Kick, T. & Ongena, S. (2016). Changes in the cost of bank equity and the supply of bank credit: when it rains in milano or brussels, does it drizzle in Frankfurt? *Mimeo Int.* 198, 50–59.
- Chapagain, A.K., Hoekstra, A.Y. & Savenije, H.H.G. (2005). Water saving through international trade of agricultural products. *Hydrol. Earth Syst. Sci.* 10, 455–468.
- Demir, B., Tomasz, K.M. & Evren, O. (2017). Risk-Based Capital Requirements for Banks and International Trade, Oxford University Press, 3970 3970–4002.
- Du, W. (2018). Who carried more credibility? An analysis of the market responses to news from the Japanese government, the Japanese central bank and international credit rating agencies. *Journal of Economics and Business*, 98, 32–39.
- Eriksson, K., Øystein, F. & Jonssona, S. (2017). Transaction services and SME internationalization: The effect of home and host country bank relationships on international investment and growth. *International Business Review*, 26, 130–144.
- Fraisse, H., Lè, M. & Thesmar, D. (2019). The real effects of bank capital requirements. *Management Science*, forthcoming, 4, 12-20.
- Giljum, S., Burger, E., Hinterberger, F., Lutter, S. & Bruckner, M. (2011). A comprehensive set of resource use indicators from the micro to the macro level. *Resource Conservation. Recycle.* 55, 300–308.
- Gropp, R., Mosk, T., Ongena, S. & Wix, C. (2018). Banks Response to Higher Capital Requirements: Evidence from a Quasi-Natural Experiment. *The Review of Financial Studies*, 32, 04, 266–299.
- Hoekstra, A.Y. & Mekonnen, M.M. (2012). The water footprint of humanity. *Proc. Natl. Acad. Sci. U. S. A.* 109, 3232–3237.
- Jiménez, G., Ongena, S., Peydró, J. & Saurina, J. (2017). Macro-prudential policy, countercyclical bank capital buffers, and credit supply: Evidence from the Spanish dynamic provisioning experiments. *Journal of Political Economy*, 125, 2126–2177.
- Juelsrud, R. & Wold, E.G. (2019). Risk-weighted capital requirements and portfolio rebalancing *Journal of Financial Intermediation*, forthcoming.
- Kabongoa, D. & O. Okpara, O. (2019). Timing and speed of internationalization: Evidence

- from African banks. *Journal of Business Research*, 102, 12–20.
- Kalpana, B. & Taidala, V.R. (2017). Banks and SMEs. *International Journal of Management and Applied Science*, 3, 2394-7926.
- Niepmann, F., & Schmidt-Eisenlohr, T. (2017). International trade, risk and the role of banks. *Journal of International Economics*, 107, 111–126.
- Schmidt-Eisenlohr, T. (2013). Towards a theory of trade finance. *Journal of International Economics*, 1, 96–112.
- Susmus, T. & Ozgur, B. (2015). The New Payment Term BPO and Its Effects on Turkish. *International Business. Economics and Finance*, 33, 321 – 330.
- Tabash, M. I. & Dhankar, R. S. (2014). The flow of Islamic finance and economic growth: An empirical evidence of middle east. *Journal of Finance and Accounting*, 2(1): 11-19.
- Tan, H., Sun, A. & Lau, H., (2013). CO2 embodiment in China-Australia trade: the drivers and implications. *Energy Policy*, 61, 1212–1220.
- Tian, X. Yong, G., Sarkis, J & Zhong, Z. (2018). Trends and features of embodied flows associated with international trade based on bibliometric analysis. *Resources, Conservation & Recycling*, 131, 148–157.
- Wu, R., Geng, Y., Dong, H., Fujita, T. & Tian, X. (2016). Changes of CO2 emissions embodied in China-Japan trade: drivers and implications. *J. Clean. Prod.* 112, 4151–4158.
- Zirek, D., Füsün, K. & Hasan, M. (2016). The Islamic banking and economic growth nexus: A panel var analysis for organisation of Islamic cooperation (OIC) countries. *Journal of Economic Cooperation and Development*, 37(1): 69-100.