

ENABLERS OF BANK CREDIT FLOW TO AGRO-PROCESSING SMEs: THE ROLE OF BANK CREDIT TRANSPARENCY IN TANZANIA

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ABSTRACT

This research aimed to determine how bank credit transparency increases the flow of loans by mediating the relationship between credit risk management and credit flow to agro-processing SMEs. Since previous studies favored demand-side transparency, this study aims to fill the research gap by investigating the supply side. Information was gathered using the survey method. 397 Tanzanian bank branches were approached and asked to complete the questionnaire. Partial least square structural equation modeling (PLS-SEM) was applied to analyze the data. The empirical data revealed that information asymmetry and credit risk management negatively influence bank loan flow. Institutional lending structures had a significantly positive effect on bank credit flow. Policymakers and practitioners can use the findings of this study to improve bank credit transparency to borrowers and for the sustainability of agro-processing SMEs.

INTRODUCTION

The World Bank collection of development indicators reported that 65.3 per cent of the population in Tanzania engages in agricultural activities, utilizing 44.6 per cent of agricultural land (World Bank, 2020). With this potential agricultural activity within a country, the agro-processing industry is the best prospect sector identified by Tanzania as the icon of the industrial economy by 2025 (the United

Republic of Tanzania, 2011). Similar to other SMEs, agro-processing SMEs are crucial for employment creation and income generation in developing countries (Martinez et al., 2022). It is a sector that absorbs workers as they are directly employed in firms that process agricultural-related products (Diao et al., 2018). However, most crops sold are unprocessed. Tanzania produces tons of fruits and vegetables, but only 4 per cent is processed. Similarly, Tanzania processes only 10 per cent of the cashew nuts and only 20 per cent of the country's cotton produced. In other words, the agro-processing SMEs in the country are performing under capacity (Tisimia, 2014).

There has been an increased recognition that additional attention needs to be paid to this area as the agro-industrial sector in Tanzania continues to be undeveloped with no considerable capacity in terms of institutional, technical, and financial support (Swai, 2017). According to Nkwabi and Mboya (2019), most Tanzanian agro-processing SMEs face financial constraints contributing to their decline in productivity. Credit unavailability is attributed to barriers imposed by commercial banks, including banks' unwillingness to provide loans to SMEs due to perceived opaqueness, riskiness, and insufficient loan information (Magembe, 2017; Song et al., 2020). Commercial banks impose strict requirements like formal registration, proper financial records, good collateral, and suitable credit history on SMEs to protect them against risks. These conditions have undermined SMEs from accessing sufficient capital from banks and other financial institutions (FinScope, 2017).

Following the insufficient loan availability for agro-processing SMEs, this study examined the mediating role of credit transparency in Tanzania's commercial bank lending industry and its impact on the delivery of credit from the supply side. Lack of loan information puts SMEs in a dilemma in identifying details of credit conditions and how and where to

apply for a loan. It is self-evident that if loan information is not shared with potential SMEs, the number of SMEs approaching banks for loans will be limited (Mashenene, 2015). SMEs need better and more information about rating and scoring procedures, credit transactions, credit decisions, and bank values to learn and prepare for a good rating before entering loan contracts. This study aims at bridging the bank credit gap in the Tanzanian agro-processing sector and suggests how credit availability could be improved for the agricultural industry and other SMEs. Alongside bank credit transparency (CT), other financial intermediation theory was also examined to identify their impact on credit delivery through bank lending to agro-processing SMEs in Tanzania.

PROBLEM STATEMENT

One of the weaknesses of asymmetric information theory and financial intermediation theory is its focus on the demand side of credit but not on the supply side (Osano & Languitane, 2016). Prior studies in Tanzania showed that when SMEs apply for loans, they are confronted with the unavailability of loan information from lenders (Ertan et al., 2017; Mashenene, 2015). SMEs' lack of knowledge and information about available credit services makes it challenging to obtain funding from banks to the point where some are entirely discouraged from making loan applications. Looking at it from the angle of commercial banks, the leading lenders to SMEs, this study has incorporated the constructs of bank credit transparency as a mediator. It also incorporated the financial intermediation theory that examines the relationships of transaction costs (TC), information asymmetry (IA), credit risk management (CRM), and institutional lending structures (ILS) on credit flow (CF). Since limited studies were conducted on agro-processing SMEs, this study aims to fill the knowledge gap.

LITERATURE REVIEW

Transaction Costs

Transaction costs (TC) are banks' total direct and indirect costs when extending loans to SMEs. These costs are time and costs of transport, local authority, lawyers, meeting facilitation, business viability measuring costs, security evaluation, contract breaching costs (case filing costs, debt collectors hiring costs), and other charges (Nguvava & Ngaruko, 2016). Lending costs increase lending rates and reduce the loan by deducting the processing fees. In certain circumstances, bankers could reject loan proposals (Berger & Udell, 1995; Ekpu, 2015; Mutezo, 2015). Scholtens and Van Wensveen (2003) argue that recent modernization in the banking business has reduced TC to the extent that it is no longer a reason for banks to ration credit to SMEs. This study reasonably examines the effects of TC on lending to the agro-processing sector in a developing country like Tanzania. It is expected that high TC on the banks' side limit CF to agro-processing SMEs, and as such, we hypothesize that:

Hypothesis 1 (H1). *Transaction costs have a direct and negative effect on the flow of bank credit to agro-processing SMEs.*

Information Asymmetry (IA)

Past studies posted that a lack of information or the mismatch of banks' information on SMEs is a barrier to CF (Berger & Udell, 1995; Mutezo, 2015). IA negatively and significantly influences CF (Bonini et al., 2016; Distinguin et al., 2016). Even though bank credit is appreciated as the most essential and overall external source of SME financing, SMEs' information asymmetries have left them unfinanced.

However, other literature, such as Cheng and Qu (2020) and Sheng (2020), suggest that the IA problem is reducing drastically due to technological advancement in the banking sector. Financial and technological advances,

such as electronic banking, big data, and big data analytics, and the introduction of credit reference bureaus, have helped bankers quickly obtain the information necessary to supply credit to SMEs (Campanella et al., 2013; Mutezo, 2015) especially in the developing countries, has been identified as the major bottleneck in realising socio-economic potentials of SMEs in those countries. However, one of the major ways of addressing the challenge of inadequate funding that exists within the SME sector is the use of bank credit. This study was therefore undertaken to explore the role of commercial banks in the provision of credit to the SMEs in South Africa. This study focuses on the issue of the relationship between the banking industry and SMEs. In particular, the problem of credit rationing of, and discrimination against SMEs by commercial banks was investigated. Because credit rationing and finance gaps can stem from imperfections on either supply-side (banks). Overall, this study asserts that if bankers have all relevant information on the agro-processing SMEs, a credit supply will likely increase as banks tend to approve loans to SMEs with more transparent information, lower lending rates, and minimum collateral requirements. Based on this fact, this study predicts that:

Hypothesis 2 (H2). *Information asymmetry directly and negatively affects the flow of bank credit to agro-processing SMEs.*

Institutional Lending Structures (ILS)

The studies of bank credits also denoted a significant impact of ILS, such as the lending culture of the particular bank, credit policies, lending principles, and procedures to have a significant positive effect on the supply of bank credit (Kakuru, 2008; Totoro, 2015). Differences among banks in terms of credit policies, organizational structure, training of its credit staff, internal guidelines, upward recommendation system, authorization limits, and head office directives influence the credit flow to SMEs (Bruns & Fletcher, 2008; Moro & Fink, 2013). Thus, banks are challenged

to create a framework that will increase lending activities by facilitating credit officers' decisions; otherwise, it becomes a problem.

Banks have regularly marginalized SME sectors in their lending policies in certain circumstances. To a more considerable extent, the supply side of credit has been one of the main reasons for SMEs' credit constraints. Kentucky argues that there are three reasons why lenders face credit constraints: (1) Prospective SMEs may not apply for credit because they are discouraged by a particular bank's available processes and criteria; (2) Second, SMEs might have applied but were declined due to the credit risk assessments of a particular bank; and (3) The accepted SMEs might get unfavorable credit terms compared to what was expected. Therefore, the study hypothesized that:

Hypothesis 3 (H3). *The institutional lending structure has a direct and positive effect on the flow of bank credit to agro-processing SMEs.*

Credit Risk Management (CRM).

Nikolaidou and Vogiazas (2014) depict that CRM involves a set of coordinated tasks and activities for controlling and directing credit risks faced by commercial banks. As illustrated in the financial intermediation theory, CRM has been demonstrated by most studies to negatively influence bank credit supply to SMEs and other borrowers in general (Boushnak et al., 2018; Chepkoech, 2014). It is important to note that risk management procedures are not designed to eradicate risks; instead, they control the opportunities and dangers that can lead to risk.

The CRM of most SMEs has rationed the number of loans extended to them from banks as most banks refrain from lending to SMEs due to default risks. The bank's perception of high default risk in SMEs is transformed into a high and strict collateral requirement. Most SMEs mention the lack of collateral as the significant

reason for their loan proposals being rejected by banks. Many empirical studies show a significant relationship between collateral and borrowers' risk (Duarte et al., 2016). Commercial banks have adopted different credit risk assessments before credit extension, like the 5Cs of lending. These approaches have negatively influenced SMEs' credit flow because most of them do not qualify for loans out of the assessment. Based on this fact, this study predicts that:

Hypothesis 4 (H4). *Credit risk management has a direct and negative effect on the flow of bank credit to agro-processing SMEs.*

Credit Transparency (CT)

According to Losada-Otálora and Alkire (2019), it is believed that greater transparency within the banking business may help consumers, especially borrowers, to make better credit decisions. In the context of this study, transparency is considered beyond disclosure, whereby it refers to the relevance, timely disclosure, clarity, and accuracy of shared credit information from banks to SMEs about credit terms and conditions, assessment procedures, and any other credit aspects (Díez & Sotorrio, 2018). Bank transparency has helped countries like UK and US assess which kind of SMEs the banks are lending money to and who remains outside of their lending activities (Thomas et al., 2006). Transparency is likely to deepen the understanding of SMEs' trends in the credit market and other products and services that banks serve in the local markets (Bulyga et al., 2020; Yeyi Liu et al., 2015).

The lack of CT discourages SMEs from their prospects of obtaining loans from banks. This discouragement happens before and after applying for loans by SMEs. In addition, a lack of credit transparency discourages potential borrowers who do not attempt to apply for loans because they fear their applications will be rejected (Kon & Storey, 2003). Furthermore, credit conditions are not uniform among lenders but customized to the

needs of the borrowers. A particular bank can reject SME loan proposals but may be accepted by another bank. If SMEs had complete information from all lenders, they could have approached a bank likely to accept their loan proposals (Glavanits, 2007). However, optimal credit transparency may not be reached because demands and expectations constantly change. When assessing SMEs' low growth in Tanzania, Mashenene (2015) reported that a lack of knowledge or information on available financial services hinders SMEs' chances of financing from banks.

In general, the credit transparency require from banks that could increase credit access includes credit terms and conditions, credit transaction process, credit decisions,

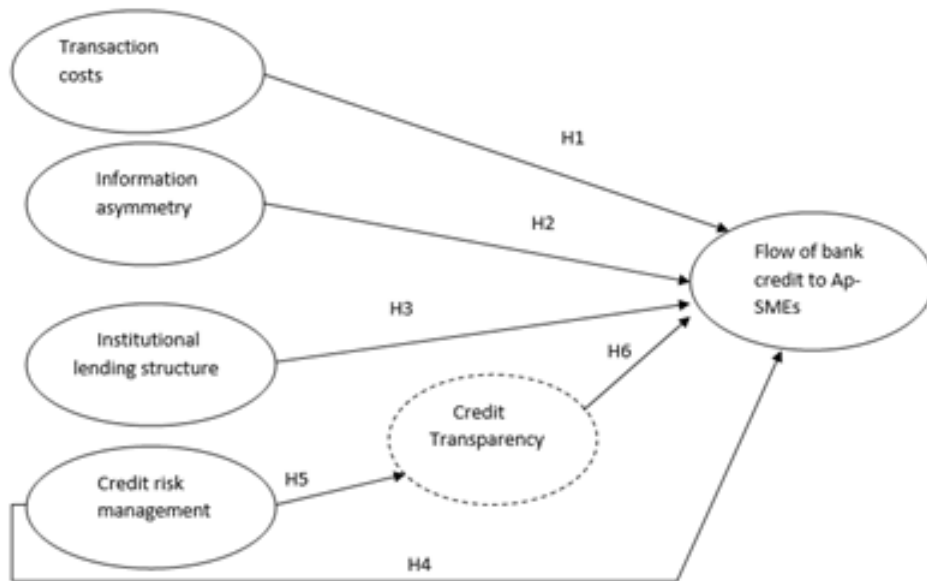
and banks' values and aims (Bulyga et al., 2020; Romero-Martínez et al., 2010). It is expected that banks should handle loan proposals in a manner that is transparent to the borrower, specifically for SMEs, which banks usually marginalize without revealing their rating techniques. Based on the above analysis, this study forms three hypotheses:

Hypothesis 5 (H5). *Credit risk management has a positive and direct effect on credit transparency*

Hypothesis 6 (H6). *Credit transparency has a direct and positive effect on the flow of bank credit to Ap-SMEs.*

Hypothesis 7 (H7). *Credit transparency mediates the relationship between CRM and CF to Ap-SMEs*

Figure 1 The proposed research model



METHODOLOGY

Sampling method

A cross-sectional survey with a questionnaire was used to gather the data from a sample of Tanzanian bank lending officers. The lending officers involved were from bank branches and headquarters who are involved in processing SME loan applications, disbursing, recovering, or assessing bank loans given to agro-processing SMEs. The projected minimum sample size, with a 95 per cent confidence range, was 397 bank branches and their head offices from the five Tanzanian zones using Yamane's formula (Yamane, 1967). A multistage cluster sampling technique was used to ensure that banks were represented across the country. The data was collected from the Central, Coast, Lake, Northern, and Southern Highlands zones (clusters) of Tanzania. In these five zones, there are several banks and

agro-processing activities (United Republic of Tanzania, 2013).

Additionally, the purposive sample technique was used to pick the participant based on experience and seniority on credit-related factors since one responder from each branch was required to complete the questionnaire. The chosen respondent was given a questionnaire to complete on their own because it was during business hours, and they could not fill one out there. As Jackson-Smith et al. (2016) proposed, an arrangement was made to pick up a completed questionnaire at a particular time. Before completing the questionnaire, the respondents were informed of the purpose and importance of this research study. Out of the 484 questionnaires distributed, only 401 were returned. Due to missing data on at least 10 per cent of their missing variable data, two (2) surveys were discarded (Asiamah et al., 2021; Roda et al., 2014). 399 valid sets were produced, which represents an overall response rate of 82.4 per cent.

Instrument Development

The research questionnaire was prepared based on the proposed research model (Figure 1). The questionnaire items were mainly modified from previous empirical research, which was then validated through a detailed analysis. The self-administered questionnaire was divided into sections A and B: In Section A, there were six questions about the banks' and loan officers' information. Section B contained 28 questions: five for each CF (dependent variable) and credit transparency, four for each TC, IA, and CRM, and six for ILS. The questions to measure CF were taken from Gill et al. (2018) and Khan et al. (2020), TC from Ekpu (2015) and Dahlstrom & Nygaard (2005), IA from Mutezo (2015) especially in the developing countries, has been identified as the major bottleneck in realising socio-economic potentials of SMEs

in those countries. However, one of the major ways of addressing the challenge of inadequate funding that exists within the SME sector is the use of bank credit. This study was therefore undertaken to explore the role of commercial banks in the provision of credit to the SMEs in South Africa. This study focuses on the issue of the relationship between the banking industry and SMEs. In particular, the problem of credit rationing of, and discrimination against SMEs by commercial banks was investigated. Because credit rationing and finance gaps can stem from imperfections on either supply-side (banks and Kakuru (2008), institutional structure from Kakuru (2008) and credit transparency items from Park and Blenkinsopp (2011) and Liu et al. (2015). The items in Section B were graded on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Characteristics of Respondents

Table 1 summarizes the respondents' profiles, including the position of lending officers, experience, bank age in Tanzania, bank branch number, banks with SME units, and agro-processing SME units. About 79.5 per cent of lending officers have four years of bank credit experience. This reflects the respondents' lending experience and expertise. Statistics showed that 90.5 per cent of banks had established SME units, and only 72.2 per cent have established Ap- SME units. This may reflect that SME financing is paramount in the Tanzanian banking business. Most of the banks, about 64.4 per cent, have been operating in Tanzania for more than 15 years. This probably shows how familiar they are with the Tanzanian SMEs credit market. In addition, the experience of these banks could explain why most of them, about 61.7 per cent, have more than 20 branches distributed throughout the country.

Table 1 Demographic Statistics

Demographic	Category	Frequency	Percentage (%)
Position of respondent	Branch Manager	63	15.8
	Credit Manager	63	15.8
	Credit Officer/Analyst	174	43.6
	Relationship Manager	99	24.8
Experience of respondent	0 years – 3 years	82	20.6
	4 years – 6 years	132	33.1
	7 years – 10 years	128	32.1
	11 years and above	57	14.3
Bank's age in Tanzania	0 – 5 years	16	4
	6 -10 years	51	12.8
	11 – 15 years	75	18.8
	Above 15 years	257	64.4
Bank's branch number	0 – 10 branches	58	14.5
	11 – 20 branches	95	23.8
	21 – 30 branches	37	9.3
	31 – 40 branches	35	8.8
	41 – 50 branches	36	9.0
Banks with SME unit	Above 51 branches	138	34.6
	Yes	361	90.5
Banks with agro-processing SMEs unit	No	38	9.5
	Yes	287	72.2
	No	111	27.8

ANALYSIS OF DATA

Analysis of measurement model

To investigate the proposed research hypotheses and model, Smart PLS software Version 3 was used. This second-generation PLS-SEM technique was used for prediction and confirmatory and exploratory factor analysis (Lau et al., 2020). Five constructs of transaction cost, IA, CRM, institutional lending structure, and credit transparency were all included in the measuring model. Convergent validity, discriminant validity, and reliability of each construct were confirmed in the measurement model (Hair et al., 2021). Furthermore, five items (CF4, IA4, CT5, ILS4, and ILS5) out of 28 included in the investigation were removed from the measurement model to improve model fitness because of low loadings. Table 2 shows the 23 item loadings kept because they exceeded the 0.70 threshold value (Hair et al., 2017). However, CRM4, CT1, and CT4, with loadings of 0.683, 0.605, and 0.698, respectively, were retained as per Gefen and Straub (2005). This follows the rule of thumb of allowing the per cent of the total removed elements for model specification (Hair et al., 2017).

Table 2 Reliability and Validity of Measurement Model

Construct	Items	Loadings	CR	AVE	VIF
Credit Flow	CF1	0.753	0.819	0.532	1.329
	CF2	0.726			1.314
	CF3	0.726			1.384
	CF5	0.710			1.346
Credit risk management	CRM1	0.721	0.817	0.528	1.292
	CRM2	0.739			1.511
	CRM3	0.760			1.539
	CRM4	0.683			1.185
Credit Transparency	CT1	0.605	0.850	0.509	1.477
	CT2	0.709			1.277
	CT3	0.820			1.890
	CT4	0.698			1.166
Information Asymmetry	IA1	0.938	0.872	0.719	2.727
	IA2	0.738			1.450
	IA3	0.857			2.286
Institutional Lending Structure	ILS1	0.796	0.836	0.560	1.487
	ILS2	0.707			1.569
	ILS3	0.755			1.605
	ILS6	0.727			1.289
Transaction Cost	TC1	0.877	0.891	0.724	2.315
	TC2	0.939			2.860
	TC3	0.793			2.020
	TC4	0.786			2.100

The AVEs of the constructs ranged from 0.509(credittransparency)to0.724(transaction cost). Furthermore, the composite reliability for each construct was higher than the 0.70 threshold value (Hair, 2014). As a result, it can be concluded that the measurement model was convergently valid. The cross-loadings, Fornell and Larker criterion, and Heterotrait-Monotrait (HTMT) criterion were also utilized to examine discriminant validity. The factor loading for each item was at least 0.100 times the cross-loading value. Moreover, the square root of each construct’s AVE had the highest correlation compared to other correlation values (Fornell & Larcker, 1981). The HTMT for each construct was less than the applied threshold value of HTMT 0.85, as indicated in Table 3 (Kline, 2011). As a result, discriminant validity was established.

Table 3 The HTMT Criterion Results

Construct	CF	CRM	CT	IA	ILS	TC
CF						
CRM	0.274					
CT	0.327	0.438				
IA	0.259	0.264	0.301			
ILS	0.429	0.057	0.152	0.100		
TC	0.164	0.298	0.249	0.253	0.067	

Analysis of Structural Model

The structural equation model is calculated when the PLS analysis measurement model is completed. In Table 2, all internal variance inflator factor (VIF) values for the variables are less than the cutoff value of 5, ranging from 1.166 to 2.860. This indicates that the study has no lateral collinearity issues (Hair et al., 2021; Wong, 2013). A 5000-sample complete bootstrapping with Bias-Corrected and accelerated (BCa) at a significance threshold of 0.05 was used to obtain t-statistics

for all path coefficients. A one-tailed test was chosen since each hypothesis is directed (Ramayah et al., 2018). Both the direct and indirect effects were investigated because the mediator was involved. Table 4 shows the outcomes in the order in which the hypotheses were tested.

Table 4 Structural Model Assessment (direct and indirect effects results)

H	Path	β -Path coefficient	Standard Deviation	t-Statistics	p-Value	Decision			Q ²
H1	TC -> CF	-0.041	0.045	0.901	0.184	Not accepted	0.002	0.179	0.084
H2	IA -> CF	-0.117	0.048	2.458	0.007**	Accepted	0.015	0.102	0.043
H3	ILS -> CF	0.296	0.055	5.392	0.000**	Accepted	0.105		
H4	CRM -> CF	-0.130	0.055	2.373	0.009**	Accepted	0.018		
H5	CRM -> CT	-0.320	0.050	6.457	0.000**	Accepted	0.114		
H6	CT -> CF	0.127	0.054	2.372	0.009**	Accepted	0.017		
H7	CRM -> CT -> CF	-0.041	0.019	2.176	0.015*	Mediation	N/A		

Note: ** p < 0.01, t value > 2.327; *p < 0.05, t value > 1.645 (based on one tailed test)

The path coefficient (β) and “t” values were used to confirm the hypothesis. The f-squared (f^2), R-Squared (R^2) and predictive relevance (Q²) were also investigated (Shmueli et al., 2019). As indicated in Table 4, the current study comprises five (05) direct hypotheses. According to the analysis, except for H1, whose t-value was less than 1.645, all direct hypotheses (H2, H3, H4, H5, H6) were accepted. The predictors of IA ($\beta = -0.117$, t = 2.458, p 0.01) and CRM ($\beta = -0.130$, t = 2.373, p 0.01) were related negatively to CF. CT ($\beta = 0.127$, t = 2.372, p 0.01) and ILS ($\beta = 0.296$, t = 5.392, p 0.01) were both positively associated with CF.

To observe the mediation effect, (PLS-SEM) bootstrapping was chosen. The findings of the mediation analysis are shown in Table 4. The t-value of the mediation is more significant than 1.645 at a p-value of 0.015. As a result, the mediation effect of CT is significant. In Table 4, CRM -> CF has a path coefficient of -0.130, and CRM -> CT -> CF has a path coefficient of -0.041. This implies that introducing credit transparency as a mediator lowers the negative relationship between CRM and CF from -0.130

to -0.041. Furthermore, the mediation effect between CRM and CF was investigated to determine its nature. Two approaches were considered: (1) we calculated the variance accounted for (VAF) using (Esposito Vinzi et al., 2010) formula, which assesses the intensity of mediation in the two relationships. The partial mediation requirement was achieved with the obtained VAF of 20.6 per cent (Hair 2014). Similarly, if the indirect impact ($\beta = -0.041$, $\rho = 0.015$) is significant but has a smaller effect than the direct effect ($\beta = -0.130$, $\rho = 0.009$), the effect is considered partial mediation (Haider & Kayani, 2020; Kale et al., 2019); and (2), We also explored more to know the category of this partial mediation. We found that the current study’s model resulted in a complementary (partial) mediation (Hair et al., 2021; Nitzl et al., 2016). As indicated in Table 4, it is a complimentary mediation because the direct and indirect effects are significant and point in the same (negative) direction (Baron & Kenny, 1986; Zhao et al., 2010).

The study’s findings also demonstrate that the explanatory power for all endogenous constructs is 0.179, lower than the threshold

value of 0.25 (Hair et al., 2019). Nevertheless, the same authors caution that the acceptable R^2 levels vary depending on the context, with some R^2 values as low as 0.10 can be accepted. The predictive relevance (Q^2) for CF (CF) is 0.084, and for-credit transparency is 0.043, indicating that (Q^2) is more significant than zero and, hence valid (Chin, 1998). Table 4 indicates the magnitude of the effect (f^2). According to Cohen (1988), the f^2 for all variables range between small and medium.

DISCUSSION OF RESEARCH RESULTS

The findings demonstrate that commercial banks' clear standards, procedures, and lending policies (institutional structures) boost loan flow to Ap-SMEs. When making loan choices for Ap-SMEs, commercial banks should design lending policies and proper loan administration structures that require and provide convenience to lending officers. This study coincides with previous works which identified a link between ILS and CF (Cantú et al., 2020; Kakuru, 2008). It could be confirmed that if banks implement practical credit lending guidelines, the supply of loans to the agro-processing sector will improve. Moreover, this study found that, contrary to earlier research (Ekpu, 2015; Nguvava & Ngaruko, 2016), TC does not significantly impact CF to agro-processing SMEs. The plausible reasons for the study's findings could be: First, commercial banks in Tanzania pass on the lending expenses to the borrower. The cost is paid upfront by deducting from the extended amount. This means that even if the TC of processing and servicing a loan is considerable, bankers will continue to issue credits (Berger & Udell, 2006). Second, as Scholtens and Van Wensveen (2003) postulated, developments in financial technology (FinTech) in the credit market have lowered banks' TC.

From the current study's analysis, IA has a negative impact on loan flow to agro-processing SMEs. If commercial banks do not have adequate information to aid them in making credit decisions, they will be hesitant

to lend to SMEs. This study's conclusions are consistent with previous research (Bonini et al., 2016; Distinguin et al., 2016). Therefore, banks have a little lending appetite in SMEs due to their information opaqueness, and they do so to avoid the hurdles of moral hazard and adverse selection. CRM was also discovered to have a negative impact on the flow of bank loans to agro-processing SMEs. Commercial banks' tools for reducing credit losses, such as covenants, strict collateral requirements, credit rationing, loan securitization, lending rates, and loan syndication, have rejected or accepted SMEs' lending requests. Previous studies revealed that CRM significantly impacts CF in SMEs (Aysan & Disli, 2019; Beyhaghi et al., 2020). Our study found that banks are concerned about the long-term survival of agro-processing SMEs, and as a result, they have little faith in the industry and are hesitant to lend to them. As represented by hypotheses H5 and H6, the direct effect of credit transparency was assessed first to determine the boundary on how credit transparency mediates the relationship between CRM and CF. CRM (H5) and credit transparency (H6) both have statistically significant effects (see Table 4). The results for H5 are consistent with those of (Losada-Otálora & Alkire, 2019; Rutledge, 2010), whereas the results for H6 are consistent with those of (Bulyga et al., 2020; Kon & Storey, 2003). In other words, when banks practice credit transparency, borrowers can have access to the credit information that helps them improve their credit scores.

Similarly, the negative relationship between CRM and credit flow to Ap-SMEs is mitigated by CT. Thus, sharing relevant credit information with borrowers could increase the supply of loans. The study's participants believe that Ap-SMEs do not know the formalities their request for a loan must go through once banks receive them. Likewise, they agree that SMEs cannot quickly obtain sufficient information about their bank's credit service offerings. In other words, providing agro-processing SMEs with accurate, clear, and accessible information is critical in influencing

financing decisions. The findings of this study are supported by (Glavanits, 2007), who exposed that if SMEs had relevant information from all lenders, they might have picked a bank that would be more likely to accept their loan offers.

Furthermore, this research demonstrates that CT partially and sequentially lessens CRM's negative impact on CF. In other words, if there is a high level of CT, the muscles employed by banks to control credit risks may loosen. This aligns with Schnackenberg & Tomlinson (2016), who claim that the organization gains a competitive edge when information openness is supported by access. It should be noted that while banks face information opacity from SMEs, SMEs also complain about a lack of proper credit information from banks. Actions taken by banks to increase credit transparency could reduce credit risk by reducing IA between them and SMEs (Liu et al., 2015). As revealed from the given clarification from some lending officers, some commercial banks in Tanzania hide credit information to stay ahead of competitors, and others hide credit information to avoid allowing borrowers to manipulate the credit systems. However, the truth is that banks must communicate their credit actions to build a reputation and attract more borrowers, and they must do so correctly and transparently.

CONCLUSION

This research aimed to investigate the mediating role of bank credit transparency (CT) in Tanzania's commercial bank lending business and its impact on the supply side of credit delivery to Ap-SMEs. As a result, the study attempted to close the bank credit gap in Tanzania's agro-processing sector and offer ways to boost credit availability for the same sector and other SMEs. Along with CT, various financial intermediation theory relationships were investigated to see how they affected loan delivery to Ap-SMEs in Tanzania's commercial bank lending business. Theoretically, the

results have demonstrated that CT lessens the negative relationship between credit risk management (CRM) and CF. Nevertheless, the lending costs incurred by bankers were found to have no significant effects on the flow of credit compared to information asymmetry (IA), CRM, and institutional lending structures (ILS). This study broadens researchers' knowledge of CT on credit flow to Ap-SMEs. No study has been conducted to examine such relationships. Thus, future researchers could use the study results to recommend solutions to address the problem of credit unavailability to Ap-SMEs.

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