Transaction Costs of Group Microfinancing Models and their Effects on Family-Owned Business Performance in Tanzania

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Abstract

This paper explores the effect of transaction costs in group-based microfinancing on family-owned businesses in Kagera region in Tanzania. The paper employs cross-sectional survey data collected from a systematically selected sample of 279 owners of family businesses in four rural Districts in Kagera region. The selected sample is based on the consolidated list of microcredit borrowers in each district from four microfinance institutions operating in the districts. The questionnaire contains three determinants of transaction costs with a total of eighteen items and three determinants of family-owned business performance with a total of twelve items. Multivariate linear regression is employed to estimate the relationship between transaction costs and business performance. Results show that majority of transaction cost variables related to searching for information on potential borrowers and also those related to bargaining and decision making exert a negative influence on business performance. The transaction cost related to policing and enforcement of the group loans seem to have positive influence on the performance of the family-owned businesses. Implicitly, in rural settings where group lending models dominate, the transaction cost related to policing and enforcement are inevitable in ensuring that family-owned businesses have a significant impact on socioeconomic benefits to the entire family.

Key words: Transaction cost; Group Microfinancing; family-owned business performance; Tanzania

JEL Classification Codes: C12, D23, G21

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1. Introduction

Group Financing model is identified and differentiated from other models operated by commercial banks and other financial institutions from its major features, namely: group-based lending, collateral free loans and joint-liability. Other important features besides group lending are the use of dynamic incentives, regular repayment schedules, targeting women and social programs which, according to some literature (Rahman & Khan, 2019; Nkwocha *et al*., 2019) play a significant role in contributing to high loans repayment rates. Under Group based micro-financing model borrowers in each group enforce contact between each other and jointly decide which type of activity to undertake (Berentsen & Markheim, 2020). By introducing social enforcement, banks and Microfinance Institutions (MFIs) solve the problems related to enforcement (Rahman & Khan, 2019; Sharma, *et al*., 2017). Collateral substitute serves as a means of securing repayment (Rahman & Khan, 2019; Sharma *et al*., 2017). In addition to interest, most MFIs require a borrower to contribute loan fee, registration fee, saving deposit and emergency fund (insurance), etc. (Sharma *et al*., 2017). The emergency fund provides insurance of the loan in case a borrower dies, is disabled, etc., but not in case of borrower's poor business performance, etc. (Sharma *et al*., 2017; Berentsen & Markheim, 2019; Nkwocha, 2019).

Training programmes to borrowers is one of the significant features of group-based microfinancing model and a crucial MFIs' services with a significant influence on borrowers' business performance. Some MFIs make sure loan sanctioning to borrowers goes hand to hand with training on loan management, entrepreneurship and business skills, financial literacy, record keeping, etc. Such training programmes are very important for equipping borrowers with knowledge and skills on how to manage and run prosperous and profit-making businesses/ projects. Furthermore, the social activities, programs or workshops not only strengthen the relationship between lenders and borrowers but also benefit both parties in many ways (Enimola, Orugun & Nafiu, 2019).

Family businesses have significant role in the economy especially in tackling the problem of unemployment facing a big number of youths. Following the importance of the family businesses to the country's economy, the government and other stakeholders have established the favorable environment for their operation. This is due to the fact that family businesses in form of SMEs in Tanzania are easily established for their requirements in terms of capital, technology, management and even utilities are not as demanding as it is for the case of large enterprises (URT, 2003). The operation of the SMEs in both urban and rural settings is considered to have added value to the agriproducts and the same time facilitated the dispersal of enterprises (Kessy and Temu, 2010).

The financial performance of family-controlled businesses is not always easy to study. Yanshuang et al (2017) noted that in many cases, they are not subject to financial reporting requirements, and little information is made public about financial performance. The ownership of family businesses is mainly distributed among family members and, in many occasions, the family members themselves may not be fully informed about the ownership structure of their business. This, in turn makes them and their businesses inseparable, not easily noticeable by suppliers of business capital and hence they end up being subjected to loan conditions that aren't common to formally owned private business. It is therefore high time that scholars and policy

makers looked into crafting pro poor workable solutions to challenges facing access to working capital which is inevitable for increased performance and benefits expected of the family businesses.

To date, there is on-going hot debate on whether loan transaction costs have significant positive or negative influence on business performance of rural based businesses. Maitrot and Nino-Zarazua (2017) and Afroze et al. (2020) argued that transaction costs negatively influenced on business performance of rural based businesses. On the other hand, Kumar, (2016) and Banerjee & Jackson (2017) argued that transaction costs had positive influence on business performance of borrowers, particularly those in rural areas, and also that the costs are normal, bearable and can enable one seriously engage in business with better performance. The lack of consensus has created a room for this study to come up with a more realistic view of the influence of the group-based transaction costs on family-owned business performance of rural based bushiness in Tanzania.

This paper pays more attention on performance indicators of family-owned businesses which may not well be explained in the literature. The argument is that the primary motive for establishing family businesses isn't monetary profit maximization nor optimization as for the other private businesses, but rather for the entire socioeconomic wellbeing of the whole family members and relatives. This paper follows the transaction cost school to explain how various forms of transaction costs affect performance of family owned businesses when they seek for working capital from commercial lenders.

The remainder of this study is organized as follows. Section two presents literature review whereas section three covers the methodology. Results and discusses are presented in section four; and lastly, section five covers conclusion and recommendations.

2. Literature Review

Microfinancing stimulates economic growth by providing small loans to those that cannot obtain conventional lending. Microfinance is used worldwide, with loans smaller than $100 offered in some underdeveloped countries. In the United States, microfinancing refers to loans of $50,000 or less (Thunstrom, 2021). Microfinance institutions are organizations geared specifically toward low-income populations. Group lending model emerged in 1970s as an effective strategy to increase credit access among the poor in developing countries who were routinely ignored by formal lenders and left to borrow from informal money lenders at elevated interest rates (Rahman & Khan, 2019; Cull & Morduch, 2017; Shettima & Dzolkarnaini, 2018; Quagraine, Koomson & Ackah, 2019). For example, in 2014, the Microcredit Summit stated that in 2011 there were 203 million of microfinance borrowers in the developing world, among them being 116 million of the world's poor living on less than $1.25 per day. The poor borrowers were targets of most microfinance institutions through group based micro-financing model (Shettima & Dzolkarnaini, 2018; Quagraine *et al*., 2019).

Nguvava and Ngaruko (2016) argue that transaction cost is an important determinant of the choice of the best credit governance structure of commercial banks in Tanzania, and that in a market where transaction cost is too high, there may not be a transaction at all. Such behavior is portrayed by commercial banks in Tanzania where most provide credit services to urban based

customers and have ignored rural based customers. The authors note that information gap between commercial banks in Tanzania and rural based borrowers is a major setback on commercial banks' behaviour of dealing directly with individual borrowers, resulting in high transaction costs. High transaction costs influence commercial banks' decision not to provide credit services at all to rural based borrowers, which in turn negatively affects both commercial banks and rural based population. Information is a key input that goes into the credit decision of commercial banks. One of the challenges for commercial banks is to acquire information about the credit risk of the borrower, as borrowers have more information than the lender about the projects. Ngaruko and Lyanga (2021) note that under asymmetric information conditions commercial banks are uncertain about the future behaviour of the borrower in terms of repayments. Banks are not interested in offering credit to farmers and poor households because information asymmetries lead to high screening costs, credit contracts negotiation costs, monitoring, and enforcement costs.

It is implied from the study by Nguvava and Ngaruko (2016) that high transaction costs problems are more likely to occur when commercial banks deal with poor households in rural areas due to difficulty in ascertaining assurance as to whether borrowers have the capacity to pay and/or willingness to pay (due to moral hazard). Information asymmetry between borrowers and the commercial banks is reflected in inability of the majority of rural based borrowers to provide up to date reliable financial information and realistic business plans, which increases credit transaction costs. Therefore, commercial banks opt not to provide credits at all or to ration and tighten requirements in order to protect themselves from likely opportunistic behaviour of small borrowers. The agrocredit transactions that take place involve high and too many transaction costs associated with requirement to attend regular (mostly) weekly meetings prior to signing the contract as barriers to their business' performance. Banerjee & Jackson (2017) generally argued that with transaction costs, group based micro-financing model was there to make profits from the poor instead of helping them; and that it basically intended to transfer the responsibilities of the banks to members of groups.

In general, transaction costs entail search and information costs, bargaining and decision-making costs and policing and enforcement costs (Ngaruko, 2017). They also include costs of loan administration, formation and running of "groups" or "centres", training of borrowers, loan follow up visits, etc. In addition, costs related to set-up of branches and allocated costs of regional and head offices need to be considered as they indirectly contribute to the costs of administration of the loan. Recent studies (Refera, 2020; Sharma *et al*., 2017; Donou-Adonsou & Sylwester, 2016; Rahman & Khan, 2019; Cull & Morduch, 2017) shows that there is high need of microfinance services all over the world, both in developed and developing countries as a result of tremendous increase and growth of microfinance sector.

According to Microcredit Summit Campaign (MSC, 2015) the number of microfinance institutions all over the world rose from 618 in 1997 to 3,725 in 2015. The World Bank estimates that there are over 7,000 microfinance institutions, serving some 16 million poor people in developing countries (Srinivas, 2022). Fit for Small Business estimates that by 2021 there were approximately 10,000 microfinance institutions throughout the world (Thunstrom, 2021). The total cash turnover of MFIs world-wide is estimated at US$2.5 billion and the potential for new growth is outstanding. Meanwhile, the number of poor people who were able to access

microcredit from the same microfinance institutions rose from 13.5 million to 211.1 million (157.6 million of them being women) in the same period. Nonetheless, through continuous provision of microfinance services the world has witnessed significant changes in the living condition among the impoverished in developed and developing countries across the world (Sharma et al., 2017). Because of the changes in the lives of poor people microfinance services are believed to play an important role in financial sectors and economic development, particularly t in rural areas (Sfhea *et al.*, 2017).

Various initiatives to improve access to credit in rural areas are undertaken by national governments, private sectors, non-governmental organizations, and development partners (Asante-Addo *et al.*, 2017). In Ghana, for example, according to Sekyi (2017) the "microfinance revolution" of the 2000s led to the establishment of several microfinance institutions which aimed to enhance credit access in rural areas. However, despite the efforts made by policy and law makers to facilitate access to adequate and affordable credit in rural areas a large number of the rural poor, particularly smallholder farmers, were neglected, credit rationed, or failed to participate in credit programs, and that the problem was partly attributed to the notion that small-scale agriculture is a risky sub-sector (Ali et al., 2016). Additionally, loan transaction costs were cited among the many obstacles faced by rural borrowers when accessing microcredit from commercial banks for farming purposes (Asante-Addo *et al.*, 2017).

Yanshuang *et al* (2017) provide an outline of the nature and importance of family businesses in Tanzania in the way the businesses can be a significant tool in poverty alleviation. They contend that the phenomenon of long-standing family businesses gaining substantial holds on the Tanzanian economy can be traced back to the 1970s-1980's economic reforms, which saw loosening of the centralized state-run economy. These reforms were intended to encourage private business activity. As a result, several family-run businesses, which had previously managed to establish solid, if unspectacular, places in the limited private sector, were able to seize control of market voids left by previously state-run entities. These family businesses then went on in many cases to develop into multimillion-dollar conglomerates, which today dominate the consumer goods industry.

Paying interest in microfinance has gained more attention by world organisations including World Bank. Based on reports from the Global development research Centre Srinivas (2022) narrates that in Africa, women account for more than 60 per cent of the rural labour force and contribute up to 80 per cent of food production, yet receive less than 10 per cent of credit provided to farmers. Though women appear to benefit most, studies indicate that many loans awarded to and paid back by women are in fact used by men. It is estimated that worldwide, there are 13 million microcredit borrowers, with USD 7 billion in outstanding loans, and generating repayment rates of 97 percent. It has been growing at a rate of 30 percent annual growth. Fewer than 2 per cent of poor people have access to financial services (credit or savings) from sources other than money lenders. Under 10 million of the 500 million people who run micro and small enterprises have access to financial support for their businesses. There is a potential demand for micro*credit* services from seven million borrowers and a potential demand for micro*savings* services from 19 million savers (Srinivas, 2022). These facts call for the need for more studies that may hasten microcredit transactions in marginalized areas which face massive transaction costs.

3. Methodology

3.1 Data collection and processing

This paper is based on a cross-sectional survey data collected from a systematically selected sample of 279 owners of family businesses in two rural districts of Kagera region. The selected sample was based on the consolidated list of microcredit borrowers in each district from four microfinance institutions operating in the districts. Applying a systematic random sampling method each of the 10^{th} borrower listed in the population was selected to be part of the sample for the respective district. Self-administered 5-point Likert Scale structured questionnaire was used through the drop-and-pick method. Based on the scale, respondents were asked to rate items on the level of agreement, from 1 = Strongly Disagree to 5 = Strongly Agree. The questionnaire has three determinants of transaction costs (with a total of eighteen items) and three determinants of dependent family business performance (with a total of 12 items).

Transaction costs had 18 variable items, with total scores ranging from 17–85 whereas family business benefits had 12 variables with total scores ranging from 12-60. The qualitative interpretation of total scores around the mean for each variable and each item is also provided in Table 1. Table 2 provides a list of items used in the 5 scaled structured questionnaire from which total and mean scores were computed for variables used in the study is presented. The items were constructed by the researcher based on the theoretical foundations for both Transaction Cost theory and nature of socioeconomic benefits that were considered more realistic performance indicators of family-owned businesses specifically in rural areas of Tanzania.

Table 1: Data processing and mean scores interpretation matrix

Variables	Variable items	Scale Measurement	Interpretation of Mean Scores
Transaction costs Determinants (TCD)	**17 items**	**Scale 17–85**	**If M=17-45; Moderate; 45-73; Excellent = 73-85**
Search and information	6 items	Scale 6–30	If M=6-16; Moderate = 16-26; Excellent = 26-30
Bargaining & decision making	6 items	Scale 6–30	If M=6-16; Moderate = 16-26; Excellent = 26-30
Policing and enforcement	6 items	Scale 6–30	If M=6-16; Moderate = 16-26; Excellent = 26-30
Family Business Performance (FBP)	**12 items**	**Scale 12–60**	**If M=12-32; Moderate= 32-52; Excellent= 52-60**
Increased knowledge	4 items	Scale 4–20	If M=4-11; Moderate = 11-18; Excellent = 18-20
Increased income	4 items	Scale 4–20	If M=4-11; Moderate = 11-18; Excellent = 18-20
Household performance	4 items	Scale 4–20	If M=4-11; Moderate = 11-18; Excellent = 18-20

Table 2: Items used to assess total scores for determinants Transaction Cost and Family Business Performance

Transaction Costs Determinants(TCD)	
Search and information Cost (SIC)	
SI1	I frequently visit the lender for me to be qualify for the loans
SI2	It takes own costly efforts to know the available group based loans
SI3	I spent my savings to pay for group membership priro to receving the loan
SI4	The meetings I attended were too long, some up to 6 hours a day
SI5	I contributed money to meet running costs of the loan processing centre
SI6	Meetings for following-up businesses owned by potential borrowers were costly
Bargaining and Decision-making Cost (BDC)	
BD1	I was required to sign the loan contract the way it was drafted by the lender
BD2	Long discussions with the lender prior to tofinally agreed on terms were frustrating
BD3	I had to spent lots of time to study the loan contract and seek consultation before signing it
BD4	I had no clue on the total cost of my loan contract before signing it
BD5	My guarantor also studied and knew my loan contract terms before signing it
BD6	I was given a legal document whose terms and conditions I could not comprehend well
Policing and Enforcement Cost (PEC)	
PE1	Extra personal time is spent in regular checks when monitoring members' businesses
PE2	Our group was held liable by the lender because one of our members failed to repay
PE3	We were forced to confiscate our group member's properties for failure to repay
PE4	We are forced to sue or payback the loan if any group member defaults
PE5	Once our fellow member quitted a group due to poor business performance
PE6	Social supervision and enforcement is inevitable for us to avoid legal actions taking in our group
Family owned Business Performance (FBP)	
Increased knowledge (IK)	
IK1	I shared knowledge with fellow group members to run my business
IK2	I had little knowlege on my business while using individual based loans
IK3	I had huge knowledge on my business three years after using group based loans
IK4	I had little knowledge because of running group based business
Increased Income (IN)	
IN1	I volume of sales of my business has increased after joining the loan group
IN2	My monthly income became more reliable and regular after joining microcredit group loans
IN3	My monthly income shot up to at least TZS 150,000 after using group loans
IN4	I increased my family expenditure on necessities with group based business
Improved Household Welfare (HW)	
HW1	I had few household assets while running individual based business
HW2	I bought home assets from business gains after using group loans
HW3	I build/refurbished my house(s) within 3 years after investing group-based loans
HW4	I can now support my dependants with education facilitiues after running group based business

3.2 Econometric Models

The analytical framework was based on stochastic structural-production frontier (SSPF) model which is modified from the conversional frontier production function (Aigner *et al*., 1977; Meeusen & van den Broeck, 1977) as presented in equation (1).

$$y_i = f(x_i;\beta) + \varepsilon_i,\ i = 1,\ldots,N, \quad (1)$$

Where y_i is the economic output (business performance), x_i is a vector of transaction cost determinants for i borrowers, β is the unknown parameter vectors to be estimated, and ε_i error term that composes two errors ($\varepsilon_i = v_i - u_i$). The u_i represents a randomly deviation in the economic output for i individual due to factors under the control of an individual, and v_i represents a randomly variation in the economic output due to the factors outside the control of i individual. The u_i and v_i are distributed as $N(0,\sigma_u^2)$, and $N(0,\sigma_v^2)$ respectively, $u_i \geq 0$ (one-sided error) and $v_i \geq 0$ or $v_i \leq 0$ (stochastic errors). The variation parameters of the model are parameterized as presented in equation (2).

$$\sigma_s^2 = \sigma_v^2 + \sigma_u^2;\quad \gamma = \frac{\sigma_u^2}{\sigma_s^2}\ ;\ for\ 0 \leq \gamma \leq 1 \quad (2)$$

The parameter γ represents the total variation in economic output from the frontier level of economic output attributed to technical inefficiency and must lie between 0 and 1 (one sided error).

Economic output in this study which was measured as a score on series of business performance (BP) indicators is a function (f) of transaction cost (TC). Mathematically this relationship is represented in equation (3)

$$BP = f(TC) \quad (3)$$

As shown in table 1 TC in this study was determined by three composites namely Search and information Cost (SI), Bargaining and Decision-making Cost (BD) and Policing and Enforcement Cost (PE). Thus equation (iii) is rewritten as presented in equation (4) which incorporates the determinants of TC.

$$BP = f(SI, BD, PE) \quad (4)$$

The structural form of equation of equation (iv) of the transaction cost determinants is therefore presented in equation (5) as follows:

$$BP = \beta_0 + \beta_1 SI + \beta_2 BD + \beta_3 PE + \varepsilon \quad (5)$$

Equation (5) was estimated as a general multivariate linear regression model where the variables were measured as total scores from the mean scores from various items as listed in Table 2. The disaggregated forms of SI, BD and PE are presented in equations 6-8) as follows:

$$SI = f(SI_1, SI_2, SI_3, SI_4, SI_5, SI_6) \quad (6)$$

$$BD = f(BD_1, BD_2, BD_3, BD_4, BD_5, BD_6) \quad (7)$$

$$PE = f(PE_1, PE_2, PE_3, PE_4, PE_5, PE_6 \quad (8)$$

Where $S1_{1\text{-}6}$, $BD_{1\text{-}6}$ and $PE_{1\text{-}6}$ are total scores on 1-5 scaled statements as presented in Table 2. In order to measure the disaggregated transaction cost items, a long form of equation (5) which was also be estimated is presented in equation (9) as follows:

$$\begin{aligned} BP = \; & \beta_0 + \beta_1 SI_1, \beta_2 SI_2, \beta_3 SI_3, \beta_4 SI_4, \beta_5 SI_5, \beta_6 SI_6 + \\ & \beta_7 BD_1, \beta_8 BD_2, \beta_9 BD_3, \beta_{10} BD_4, \beta_{11} BD_5, \beta_{12} BD_6 + \\ & \beta_{13} PE_1, \beta_{14} PE_2, \beta_{15} PE_3, \beta_{16} PE_4, \beta_{17} PE_5, \beta_{18} PE_6 + \varepsilon \end{aligned} \quad (9)$$

Where family business performance (BP) is measured as a total score on three core aggregates ie increased knowledge (4 items), increased income (4 items) and improved household welfare (4 items). The Ordinary Least Squares multiple linear regression was used to examine linear relationship between determinants of Transaction costs on Business performance.

4. Results and Discussion

4.1 Sample Distribution by levels of agreement on TCD and FBP indicators

Table 3 shows that among the three determinants of transaction costs the policing and enforcement recorded the highest rank, while bargaining and decision making recorded the lowest. Opinions on perceived performance of family owned businesses in Table 3 imply that majority of respondents agreed to have attained increase in knowledge, family income and household performance.

Table 3: Percentage distribution of respondents on levels agreement on TCD and FBP indicators

Variables	Percentages (N=279)					
	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree	Total
Transaction Cost Determinants (TCD)						
Search and information	9.7	18.9	3.7	40.6	27.1	100
Bargaining and decision	22.6	27.7	2.6	29.7	17.4	100
Policing and enforcement	9.3	16.4	2.7	43.3	28.3	100
Family Business Performance (FBP)						
Increased knowledge	3.6	12.5	2.6	47.2	34.1	100
Increased family income	1.0	2.9	1.6	59.0	35.5	100
Household performance	9.5	20.6	2.9	37.4	29.6	100

The findings from this study indicate that among the three determinants of business performance variable family income ranked high followed by increased knowledge and household performance respectively. This is because the majority of borrowers measure their business performance by looking at general improvement in income and profit made from the businesses directly rather than the spillover benefits of engaging in the family businesses. A significant proportion of sampled business owners however, indicated to have disagreed (either strongly disagreed or disagreed) with indicators of increased household welfare performance (30.1%) and indicators of increased knowledge (16.1%).

4.2 Mean Scores on TCD and FBP indicators

Table 4 presents measures of central tendency for all variables, whereby score indices for mean, median and mode were equally distributed for all variables. For all variables the means suggest that business performance (measured as the benefits accrued from the family owned business) was generally assessed as moderate for increased knowledge and increased family income, and excellent for household performance.

Table 4: Descriptive Statistics

Variable	Measures of central tendency				
	Mean	Median	Mode	Min.	Max.
Transaction Costs Determinants (TCD)					
Search and information	21.4	21	21	13	28
Bargaining and decision	17.5	18	18	9	28
Policing and enforcement	23.8	24	24.1	10	38
Total TCD	**62.7**	**63**	**63.1**	**43**	**81**
Family Business Performance (FBP)					
Increased knowledge	15.84	16	16	10	20
Increased family income	17.01	17	16	8	20
Household performance	21.42	22	22	14	27
Total FBP	**54.26**	**54**	**55**	**40**	**64**

The existence of the transaction costs of accessing microcredit for the family businesses was also assessed as moderate for all the three variables. These results imply that irrespective of the existence of huddles to access microcredit to boost family businesses, there are still significant benefits accrued from businesses on which the microcredit is spent.

4.3 Regression results

Table 5 presents analysis findings of equation (4). The findings indicate that the aggregated search and information cost (SI) and bargaining and decision-making cost (BD) had negative effects on family owned business performance, Further, results show that the transaction cost related to policing and enforcement (PE) of the microcredits seem to have positive effect on business performance, which implies that lenders need to incur more cost in policing the microcredit extended to family businesses to enable borrowers gain more intended benefits from the businesses. These findings further suggest that for borrowers to benefit from the microcredit, lenders should reduce as much as possible transaction costs incurred when searching for the borrowers and also when deciding whether they should lend them or not. Whereas Search and

Information cost (SI) and Policing had significant effect, bargaining and enforcement of microcredit costs wasn't statistically significant (p>0.05).

Table 5: Multiple Linear Regressions Results for aggregated exogeneous TC determinants

Model	Standardized Coefficients		
	Beta	t	Sig.
(Constant)	17.071	5.305	.000
SI	-.140	-2.401	.017
BD	-.063	-1.124	.262
PE	.236	4.335	.000

a. Dependent Variable: Family Business Performance
b. R^2=0.59 F=14.992 Sig = 0.000

The regression results of the effect of the disaggregated items of transaction cost determinants on performance of family owned businesses are presented in Table 6. Two items of Search and Information transaction costs though had expected negative effect, they were not statistically significant. The two items are SI_2 (It takes own costly efforts to know the available group-based loans) and SI_6 (Meetings for following-up businesses owned by potential borrowers were costly).

Table 6: Multiple Linear Regressions Results for disaggregated exogeneous Transaction cost determinants

Model		Standardized Coefficients		
Variable	Item	Beta	t	Sig.
	(Constant)	21.037	5.305	.000
Search and	SI_1	-.152	2.729	.017
Information Cost	SI_2	-.049	.884	.378
(SI)	SI_3	-.105	1.972	.047
	SI_4	-.116	-2.184	.030
	SI_5	-.189	-3.225	.001
	SI_6	-.077	-1.278	.202
Bargaining and	BD_1	-.053	1.919	.359
Decision-making	BD_2	008	1.143	.087
Cost (BD)	BD_3	-.056	.938	.059
	BD_4	-.140	-2.401	.017
	BD_5	-.093	-1.124	.042
	BD_6	-.236	4.335	.000
Policing and	PE_1	.015	270	.787
enforcement Cost	PE_2	.103	1.949	.042
(PE)	PE_3	.145	2.770	.006
	PE_4	-.171	0.668	.021
	PE_5	.394	1.092	.000
	PE_6	.245	.984	.000

a. Dependent Variable: Family Business Performance
R^2=0.62 F=18.173 Sig = 0.000

Only one bargaining and decision-making item (BD2- Long discussions with the lender prior to finally agreed on terms were frustrating) had positive effect on business performance, however it was statistically insignificant at precision level of 5 percent. With an exception of one item (PE1- *Extra personal time is spent in regular checks when monitoring members' businesses*) which wasn't significant, the other items of the Policing and Enforcement Cost (PE) were statistically significant at 5 percent level of significance. Only item (PE4-*We are forced to sue or payback the loan if any group member defaults*) was negatively influencing the performance of family businesses, the rest of the items were positively influencing business performance. In general terms results suggest that increase in policing and enforcement cost is inevitable if the borrowers from the group-based loans are to enjoy benefits from well performing family-owned businesses.

The current study findings concur with those of Sharma *et al*. (2017); Asante-Addo *et al*. (2017) and Danga & Yusuph (2019) who argued that transaction costs negatively impact on business performance of rural based businesses because most clients of MFIs complained about transaction costs and weekly meetings as barriers to their business's performance. Some previous researchers such as Banerjee & Jackson (2017) reported that transaction cost had negative influence on business performance of rural based businesses. The current study has ascertained that in general transaction costs have negative influence on business performance of rural based Businesses. Contrary, to past researchers' findings and theoretical expectation, the current study found that policing and enforcement, being one of the three studied determinants of transaction costs, positively influenced business performance of rural based family-owned businesses.

5. Conclusion and recommendations

In general terms, findings from this study have confirmed that group-based transaction costs have significant impact on family-owned business performance in rural Tanzania. Majority of transaction costs variables related to searching for information of potential borrowers and also those related to bargaining and decision making exhibited negative influence on business performance, which is in line with the theoretical expectation. Transaction cost related to policing and enforcement costs of the group loans seemed to have positive influence on performance of the family-owned businesses. Implicitly, for rural based family-owned businesses to prosper and put to better use of the borrowed funds, the lenders must increase policing and enforcement of loan re/payment or else repayment of the borrowed funds might not be obtained from the loans invested in the business.

Conclusively, this study has indicated that not all forms of transaction costs equally and negatively affect business performance. In rural setting and where group lending models dominate, the transaction costs related to policing and enforcement are inevitable if the borrowers are to gain more from well performing businesses. However, increase in stringent conditions of qualifying borrowers which seem to increase transaction costs could be reduced to boost businesses. Borrowers spend significant time and money resources in addition to frustrations of long waiting and lengthy meetings prior to their qualification for participating in the loan schemes. Group visitations of the peers' businesses though costly in terms of time but seem to increase the likelihood of members to commit their labour and related resources on the business. During visitations, there is likelihood of gaining more knowledge on how to run businesses with significant impact on socioeconomic benefits to the entire family.

Acknowledgement
I thank Mr. Gosbert Bigirwa Kaserwa, the CEO of Matumaini Mapya Microfinance, an NGO based in Kagera region for providing field data that were used in this paper. I also thank anonymous reviewers, seminar participants at the Open University of Tanzania and editors of this Journal for their helpful comments that enriched the original version of this manuscript. Nonetheless, the views expressed herein are those of the author and do not necessarily reflect the views of those acknowledged above.

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