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Transaction Costs of Micro Financing and Interest Rates: A Case of Uganda

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Abstract:

There are limited studies on lending costs by financial institutions in Uganda, with the majority of studies focusing on interest margins as opposed to the transaction costs of micro financing. Besides, the majority of studies conducted focus on the developed world with limited information on Sub-Saharan Africa. This paper generates a list of transaction costs of micro financing and examines their impact on interest rates. Understanding transaction costs of micro financing, is vital for policy makers in determining the transaction costs that financial institutions must consider in determining the interest rate to minimize the cost of borrowing.

Findings revealed that highly perceived transaction costs of micro financing include: Staff salaries and wage costs, Printing costs and Rent costs. Opportunity costs of time taken negotiating with the potential borrower and costs incurred in reading an agreement with the other party in a transaction are not perceived as transaction costs of micro financing. Costs of collecting repayments, the costs of following up on non-payment, monitoring costs, costs of borrowing on the side of the financial institution, exposure to interest rate risk costs and volatility of interest rates in the market costs, were indicated to greatly affect the interest rate charged by the financial institutions.

Keywords: Transaction costs, micro financing, interest rates, Uganda

1. Introduction

Financial institutions are widely believed to enhance individual livelihoods through lending. They play a critical role in the economic growth of the nation, by mediating between depositors and borrowers (Tarus *et al.*, 2012; Andrieş and Cuza, 2009). They foster development (Schumpeter, 1911), through resource mobilization and allocation and liquidity management (Klein, 1971; Chakraborty, 2002; Kasman et al 2010) as such they act as financial intermediaries. Financial intermediaries could be viewed as profit making organizations which receive deposits and lend them to borrowers through loans and the difference between the interest charged against borrowers (debtors) and that paid to depositors (creditors) would become their profits. On the other hand, they could be viewed as simply commercial intermediaries performing the role of transferring funds from depositors to borrowers hence acting as brokers by mediating between the depositor and borrower (Andrieş & Cuza 2009). The financial intermediation theory presupposes that the existence of intermediaries fosters reduction of transaction costs and information asymmetry (Scholtens and Wensveen, 2003), hence financial institutions should perform this function with minimum costs so as to foster economic growth (Tarus *et al.*, 2012).

After liberalization of the economy of Uganda, the Central Bank put in place reforms aimed at improving the financial sector. One of the aims was to strengthen the sector by fostering efficient mobilization of savings and channelling these to the private sector investment aiming at enhancing economic development (Kasekende, 2007). Despite the various reforms instituted by the Central Bank of Uganda like the licensing of new commercial banks and the abolition of its control over interest rates and credit, the financial industry has continued to have high lending interest rates. Uganda still stands alone in the East African region with the highest lending interest rates ranging between 21% and 25% (Laddu, 2008; Osere, 2008). The Global Competitiveness Report (2012-2013) indicates that financial services are less affordable in Uganda than in Rwanda and Kenya. On the availability of the financial services, Uganda also lags behind Kenya and Rwanda (Nyanzi, 2012). The savings to GDP ratio is still low at 16%. In addition, financial intermediation is poor as indicated by the stock of private sector credit of 11.8% of GDP.

In confirmation of the above, there has been increased public outcry from the business community in Uganda, with regard to the high interest rates on loans offered by financial institutions in the recent past (Sekanjako, 2011). In 2012, business men through their body Kampala City Traders Association (KACITA), had to interface with the President of Uganda and petitioned the speaker of parliament to stop commercial banks from increasing interest rates (Sekanjako, 2011). On the contrary, commercial banks have registered record profits in the past years (Busharizi, 2012). Despite the increase in lending rates by the Central Bank from 13% in July 2011 to 23% in January 2012, resulting in increasing prime lending rates by commercial banks from approximately 19% to 27% in June 2012,

exorbitant profits were made by the commercial banks (Muhumuza, 2013). It is postulated that efforts made by government to promote growth of the private sector could be undermined by such high lending rates as they impair the borrowers' capacities to save and service the loans as accumulated interest often becomes unbearable, deters individuals from borrowing and slows down the growth (Kanyegirire, 2003; Biryabarema, 2007; Zakumumpa, 2008). Indeed Kasekende (2013)¹ notes that in the last two years, bank profits increased more than their costs. Operating costs reduced from 5% to approximately 4.4% in 2012. With an average nominal banking, lending rate of 25%, the borrowers' real lending rate is roughly approximated at 20% which is considered quite high to sustain. Besides, borrowing conditions for financial institutions in Uganda differ and financial institutions charge different interest rates. This state of affairs raises concerns, hence the need to investigate the high lending costs of micro financing in Uganda and to whether these are due to high transaction costs involved in processing credit facilities to the borrowers, specifically individual loans.

Besides, there are limited studies on lending costs by financial institutions in Uganda, with the majority of studies focusing on interest margins as opposed to the transaction costs of lending in micro financing. Kasman *et al.*, (2010), established that market power, operating costs, capital adequacy, default risk, credit risk, implicit interest payments and inflation positively and significantly related to net interest margins, while examining the effects of financial reforms on the determinants of commercial bank net interest margin in the banking systems of the new European Union (EU) member countries. Tarus et al (2012), investigated determinants of net interest margins of commercial banks in Kenya and they established that operating expenses have a positive and significantly related to the net interest margin, a high credit risk positively affects the net interest margin, inflation was positively and significantly related to the net interest margin and economic growth. Thorsten and Heiko (2009), focused on the high interest spreads and margins over a period ranging from 1999-2005 in the Ugandan banking system. They established that the size of the bank has a positive relationship with margins.

To the best of our knowledge, no study has been conducted in Uganda specifically focusing on the transaction costs of micro financing and interest rates charged on individuals. Besides, the majority of studies conducted focused on the developed world (Kasman *et al.*, 2010) with limited information on Sub-Saharan Africa. Those that have been conducted in the developing world, have majority of studies undertaken in mainly Asia and other African countries (Saito, 1981; Zia, 1989; Shankar, 2007; Tarus *et al.*, 2012), with those studies conducted in Uganda majorly focusing on interest margins and using majorly secondary data (Thorsten and Heiko, 2009; Nampewo, 2013) thereby justifying the need for this study.

This study therefore sought to analyse the transaction costs of micro financing to individuals between a selected commercial bank and a Micro Deposit Taking Institution (MDIs), to determine the extent to which these affect interest rates with an aim of generating a list of transaction costs of micro financing for recommendation to policy makers. For purposes of this study therefore, the unit of analysis was the transaction. This study considered transaction costs of lending to include all costs incurred by the institution from identification of a potential borrower to repayment of the loan by that borrower. It is presumed that an understanding of the lending costs affecting interest rates would facilitate the policy makers in proposing transaction costs that must be considered by financial institutions in determining the interest rates.

2. Theoretical Framework

Neoclassical theory of perfect markets assumes that: no participant in the market can influence the prices; the conditions of borrowing are the same for all participants, the fees are the same for all participants, no participant has a competitive advantage;; no costs are incurred for obtaining information, and relevant information in respect of factors and elements that can affect the current or future value of the financial instruments is readily available (Andrieş and Cuza, 2009). The assumption is that all the above are in existence in Uganda following the liberalization of the economy. On the contrary, the financial market in Uganda has a number of imperfections generated by informational asymmetry thereby compromising the perfect financial markets' model of neo-classical theory (Teo and YuanyouYu, 2005). Financial liberalization of the economy, led to a monopoly of financial institutions in the industry operating in a highly volatile macroeconomic and financial environment, characterized by high levels of information asymmetry, an underdeveloped financial market, which makes Uganda unique from other parts of the world (Thorsten and Heiko, 2009). As a result, participants in the market will not be in a position to influence prices, borrowing conditions will differ, the fees charged will differ, the transaction costs of obtaining information will exist and there will be limited access to the relevant information (Scholtens and Wensveen, 2003). All these will eventually result in some kind of transaction costs (Andrieş and Cuza, 2009; Teo and YuanyouYu, 2005) as transactions take place. Dating back to the works of Gurley and Shaw (1960), historically, the theory of financial intermediation advanced the role of financial intermediaries to be that of reducing transaction costs and information asymmetry. On the contrary, the existence of financial intermediaries in Uganda has not resulted in the above.

2.1. Transaction Costs

The origins of "Transaction Costs" date as far back as the 1950s, however the concept became widely known through Oliver E. Williamson's works of *Transaction Cost Economics* (Kissell and Glants, 2003). In his article *The Nature of the Firm* Coase (1937) noted that the cost of acquiring a product through the market includes not only the price of the product but all other costs incurred in acquiring that product. Various authors have explained, transaction costs in different ways. Dahlman (1979) describes it as the cost incurred during participation in the market. He provides three categories of transaction costs namely:

¹ Louis Kasekende is the Deputy Governor of the Bank of Uganda.

- 1. Search and information costs- costs incurred in ascertaining the availability of a required good on the market at the cheapest price,
- 2. Bargaining costs costs incurred in reaching an agreement with the other party in a transaction and policing and
- 3. Enforcement costs costs incurred in ensuring that the other party does not bleach the terms of the contract and if she/he does, the cost of taking legal action against him/her.

In his presentation, Dale (1995) defines transaction costs as implicit and explicit expenses incurred by participants in financial markets to effect financial transactions. According to him, total transaction costs comprise of two categories, namely the opportunity cost of time taken negotiating financial contracts and the costs incurred during formation, fulfillment and enforcement of obligations. He further classified these into transaction costs of borrowers, depositors, lenders, deposit mobilisers and regulators. Contrary to the above, Saito (1981) categorizes transaction costs into administrative and default risk costs of the loan. He subdivides administrative costs to include operating costs like salary and wage costs, printing, stationery, rent and travel to mention but a few while default costs are those related to failure by borrowers to pay and hence the risk incurred by banks when such happens.

In his study of transaction costs in group microcredit in India, Shankar (2007) explains that a transaction cost includes those incurred during the search for customers, for information, bargaining, decision-making, policy and enforcement. He advances two categories of transaction costs, namely direct costs – those directly attributed to the transaction and indirect costs – those that indirectly contribute to the processing of the loan. He enumerates transaction costs to include: the costs of identifying and screening the client, processing the loan application, completing the documentation, disbursing the loan, collecting repayments and following up on non payment. In line with the above, Dale (1995) explained, transaction costs of lending to originate from gathering and processing all necessary information to screening the potential borrower, processing loans and the relevant collateral, monitoring costs, loan collection or loan seizure expenses plus regulatory costs.

Of all costs incurred, Rosenberg (2013) posits operating expenses as the greatest determinant of interest rates charged against borrowers in micro credit financing. Saito (1981) explains that the cost of credit is the sum of the interest rate paid by the financial institution on their debts, the return on equity and the transaction costs of managing their assets and liabilities, of the three categories transaction costs are considered key in impacting lending costs (Goodwin-Groen, 2003; Shankar 2007). In a study by Zia (1989) on effective costs of rural loans in Bangladesh, transaction costs consist of expenses of servicing the loan and default risks. In his study of group micro credit in India, Shankar (2007) reports a number of factors leading to high transaction costs, collection costs, the layers of fixed costs and frequency of loan repayments. All the above costs were compiled into a questionnaire that was distributed to credit officers of the selected financial institutions to confirm whether the listed costs are considered in determining the interest rates charged.

3. Methodology

The study adopted a descriptive study approach with a cross sectional survey design. Primary data were collected with a questionnaire as the data collection tool. A descriptive study approach was adopted to enable the researchers to describe and document the occurring phenomenon (Polit, Beck, & Hungler, 2001). The questionnaire consisted of three sections;

- 1. Section A requested respondents to indicate their demographic data.
- 2. Section B of the questionnaire contained a list of transaction costs derived from the literature reviewed. Respondents were required to indicate the extent to which they agreed that the listed were the transaction costs of lending to individual borrowers on a four-point scale ranging from strongly agree (4) to strongly disagree (1).
- 3. Section C of the questionnaire required respondents to indicate the extent to which they agreed that the listed transaction costs of lending affected the interest rate charged by their financial institutions on individual loans by their institution.

3.1. Target Population

The target populations for the survey were credit officers from the selected financial institutions in Kampala District, who are responsible for effecting loans to individual borrowers and as such have knowledge of the required information.

3.2. Sampling Strategy

Using a disproportionate stratified sampling technique, credit officers were selected from the selected financial institutions to which the questionnaires were distributed. The branches of the selected financial institutions formed the strata namely the micro financing, commercial bank and the MDI.

3.3. Data Collection Instruments

A four-point scale was used to collect data from credit officers in the selected institutions. The scale ranged from 1- Strongly disagree with 4 – Strongly agree. The questionnaire consisted of items adopted from the literature review of the works of Ronald Coase (1937), Dahlman (1979), Dale (1995), Saito (1981) Shankar (2007) Williamson (1981) and Zia (1989). It focused on the transaction costs of lending and how they impact on interest rates charged. Respondents consent was sought. Privacy and confidentiality, honesty and respect towards the respondents were ensured (Sekaran, 2003).

3.4. Pilot Test

A pre-test was conducted at a selected commercial bank to ensure reliability and validity of the data collection instrument by testing its practicability to ascertain whether the instructions and statements are clear. This helped in clearing any ambiguities in the questions (Sekaran, 2003; Yin, 2003). The findings and proposals from the pilot study were considered, the final questionnaire was developed and the empirical study conducted.

3.5. Data Analysis

Data were first sorted, coded and then entered in the SPSS version 19 for analysis. Statistical tests were used to measure the internal consistency and reliability of the variables in the questionnaire. The Cronbach's alpha was used to measure the internal consistency of the research variables. A Cronbach's value ranging from 0.70 was considered appropriate for measuring internal consistency (Sekaran, 2003). Mean scores were used as the measures of central tendency and standard deviations were calculated to obtain the measure of deviation (Chava & Nachmias, 2003). Comparisons of the responses obtained from the selected financial institutions in respect of selected variables were made by means of a T-test.

4. Results and Discussion

The study sought to investigate the transaction costs of micro financing and their effect on interest rates charged by comparing a selected MDI and Commercial Bank in Uganda. The first part of the questionnaire required respondents to provide the demographic information on various issues including; period of existence of institution, number of borrowers and customers, gender, number of years worked at the institution and position of responsibility.

4.1. Findings from Demographic Data

Findings reveal that both case studies have been in existence for a period of more than 15 years, have more than 5,000 customers and more than 5,000 borrowers. Hence, the institutions under study have a reasonable clientele and have stood the test of time. Of the 33 respondents involved in the study, 24.2% were from the MDI and 75.8% were from the commercial bank. Of these 11(33.3%) were female while 22(66.7%) were male. The study focused on majorly staff involved with the credit/loan department as these were presumed to be key informants regarding the study in question. Results therefore revealed that of the 33 respondents, 6 (18.2%) were credit managers, 10(30.3%) credit officers, 5(15.2%) credit/loan administrators, 10(30.3%) branch managers and 1 (3%) relationship manager and 1(3%) relationship officer. It was postulated therefore that the respondents were individuals who had some knowledge of the phenomenon under study. Out of the 33 respondents, only 12.1% had been employed in the organization for less than 3 years, 21.2% had been employed for 3-5 years, 51.5% had been employed for 6-10 years while only 15.2% had been employed for 11-15 years. Over all more than 85% of the respondents had been employed in their respective organizations for more than 3 years hence it is postulated that majority of the respondents were familiar with the transaction costs of micro financing given the number of years they have been employed at their respective institutions.

4.2. Findings from Quantitative Data

After a review of literature, transaction costs of lending were listed and a questionnaire was formulated to test whether the institutions under study incur the same transaction costs or otherwise. Section B of the questionnaire required respondents to indicate the extent to which they agreed that the listed were transaction costs of micro financing by their respective institutions. A Cronbach's alpha test conducted revealed an alpha of .931 implying that there was a high consistence among the items of section B of the questionnaire. The Items revealed an aggregate mean of 3.84, implying that majority of respondents strongly agreed to the listed costs as transaction costs of micro financing in their respective institution. Means and standard deviations were run to determine the measures of central tendency and dispersion respectively. The following items had their means above 3.00, indicating a strong agreement by respondents that they are transaction costs of micro financing to individual borrowers, by their respective institutions.

No.	Item factor	Mean score	Std. deviation
B8	costs of collecting repayments	3.30	0.778
B9	Staff salaries and wages costs	3.16	0.678
B10	Stationary costs	3.25	0.672
B11	Printing costs	3.13	0.806
B12	Rent costs	3.00	0.866
B13	travel costs of the sales executives while searching for potential borrowers	3.30	0.809
B17	costs of following up on non-payment	3.42	0.792
B18	monitoring costs	3.27	0.839
B21	costs of borrowing on the side of the financial institution (cost of credit)	3.18	0.808

Table 1: Showing Mean Scores and Standard Deviations of Transaction Costs of Micro Financing Greatly Scored by Respondents

As indicated in Table above, the respondents' mean scores ranged from 3.00 to 3.42 for the listed items with a standard deviation ranging from 0.672 to 0.839. This indicates that there was consistency in responses with responses closely distributed around the mean. The above findings are consistent with the transaction costs as indicated in literature. These include; Staff salaries and wages

costs, Printing costs and Rent costs, costs of collecting repayments, Stationary costs (Saito, 1981), travel costs of the sales executives while searching for potential borrowers(Dahlman, 1979), costs of following up on non-payment (Saito, 1981), monitoring costs and costs of borrowing on the side of the financial institution (cost of credit) (Dale, 1995).

The standard deviation for items B9 (staff salaries and wage costs) and B10 (stationary costs) were 0.678 and 0.672 respectively indicating a slightly higher consistency in these responses.

No.	Item	Mean	Std. Deviation
B1	search costs for borrower/identifying a borrower	2.76	0.751
B2	search costs for the information on potential borrowers	2.59	0.756
B3	search costs for information on collateral from borrowers	2.76	0.902
B4	costs of screening a potential borrower	2.97	0.847
B5	costs of processing the loan application	2.88	0.820
B6	costs of completing the documentation of the borrower	2.55	0.869
B7	costs of disbursing the loan to the borrower	2.67	0.957
B14	costs incurred in ensuring that the borrower does not bleach the terms of contract	2.91	0.641
B19	regulatory costs	2.73	0.801
B20	costs of uncertainty of the loan transaction (credit risk)	2.75	0.847

The other transaction costs of lending indicated by respondents are shown in the table below:

Table 2: Showing Mean Scores and Standard Deviations of Other Transaction Costs of Micro Financing as Indicated by Respondents

From the Table above, other transaction costs of lending to individual borrowers as indicated by respondents of the MDI and the commercial bank include: search costs for identifying a borrower, search costs for the information on potential borrowers, search costs for information on collateral from borrowers, costs of screening a potential borrower. These costs were also advanced by Dale, (1995) as transaction costs of lending. Other costs presented by respondents included; costs of processing the loan application, costs of completing the documentation of the borrower (Shankar, 2007), costs of disbursing the loan to the borrower, costs incurred in ensuring that the borrower does not bleach the terms of contract (Zia, 1989), regulatory costs and costs of uncertainty of the loan transaction (credit risk).

Items B15 (opportunity costs of time taken negotiating with the potential borrower -2.44) and B16 (costs incurred in reading an agreement with the other party in a transaction -2.32) had the lowest mean scores with standard deviations 0.801 and 0.723 respectively. Hence, respondents generally disagreed that the two costs are transaction costs of micro financing. This is contrary to what Dale (1995) advanced as transaction costs.

We needed to establish if there were differences in perceived transaction costs of micro financing to individual borrowers between staff from the selected MDI and micro financing commercial bank. The following hypotheses were hence formulated:

- H1_o. There is no significant difference in perceptions of staff from the selected MDI and the micro financing commercial bank in Uganda regarding transaction costs of micro financing.
- H1a. There is a significant difference in perceptions of staff from the selected MDI and the micro financing commercial bank in Uganda regarding transaction costs of micro financing.

4.3. T-Test Results

Since the group standard deviations were not equal, we used Levene's test to correct for that. All variables had their significance level less than 0.05 (see table 3 below), hence we assumed that the group variances were not equal. The significance levels and t-values for each of the variables are indicated below:

No.	Transaction costs of micro financing	Sig.	t-values	df	Sig. (2-tailed)	Mean diff.
B8	costs of collecting repayments	0.013	6.058	24	0.000	0.92000
B9	Staff salaries and wages costs	0.004	-1.415	23	0.170	20833
B10	Stationary costs	0.000	-2.145	23	0.043	33333
B11	Printing costs	0.002	-0.890	22	0.383	17391
B12	Rent costs	0.006	0.000	24	1.000	0.00000
B13	travel costs of the sales executives while searching	0.005	5.662	24	0.000	0.92000
	for potential borrowers					
B17	costs of following up on non-payment	0.000	4.575	24	0.000	0.76000
B18	monitoring costs	0.004	5.710	24	0.000	0.96000
B21	costs of borrowing on the side of the financial	0.011	7.111	24	0.000	1.08000
	institution (cost of credit)					

Table 3: Showing the Differences in Perception of Staff from the Selected MDI and the Micro Financing Commercial Bank

From the table above, results reveal that the *t* values of items B9 (Staff salaries and wages costs), B11 (Printing costs) and B12 (Rent costs), are -1.415, -0.890 and 0.000 with *df* of 23, 22 and 24 respectively. The *p*-values (two-tailed) for items B9, B11 and B12 are above 0.05 i.e. 0.170, 0.383 and 1.000 respectively, at 95% confidence level. It can therefore be concluded that there is no significant difference in the mean responses of staff from the MDI and the commercial bank regarding the three highly perceived transaction costs of financing to individual borrowers in respect of items B9, B11 and B12. Therefore, the hypothesis *H1o* was not rejected as it was concluded that there was no significant difference in the mean responses. For items B8(costs of collecting repayments), B10 (Stationary costs),B13 (travel costs of the sales executives while searching for potential borrower),B17(costs of following up on non-payment),B18(monitoring costs) and B21(costs of borrowing on the side of the financial institution (cost of credit), the *p*-values were below the α (0.05), implying that there were significant differences in the mean responses of staff from the MDI and the commercial bank regarding the transaction costs of micro financing to individual borrowers. Hence hypothesis *H1a* was not rejected and it was concluded that there are significant differences in the mean responses of staff from the MDI and the commercial bank regarding the transaction costs of micro financing to individual borrowers. Hence hypothesis *H1a* was not rejected and it was concluded that there are significant differences in the mean responses of staff from the MDI and the commercial bank regarding to costs of collecting repayments, Stationary costs, travel costs of the sales executives while searching for potential borrower, costs of following up on non-payment, monitoring costs and cost of credit as transaction costs of lending to individual borrowers.

Section C of questionnaire required respondents to indicate the extent to which they agreed that the listed transaction costs affected the interest rate charged on borrowers by their institution. A Cronbach's alpha revealed an alpha of 0.931 indicating a high consistence among the items of Section C of the questionnaire. The aggregate mean of the items was 2.643 indicating a tendency towards agreement that the indicated transaction costs affect the interest rate charged by their organisations.

Means and standard deviations run revealed that the following items had their means above 3.00, indicating a strong agreement by respondents that these costs affect the interest rate charged by their institution; C8 (costs of collecting repayments – 3.00), C17(costs of following up on non-payment – 3.094), C18 (monitoring costs – 3.375), C21(costs of borrowing on the side of the financial institution (cost of credit) – 3.242), C22(exposure to interest rate risk costs – 3.03) and C23 (volatility of interest rates in the market costs – 3.03). The standard deviation ranged from 0.585 to 0.950 which was relatively narrow.

No.	Transaction cost of micro financing	Ν	Mean	Std. Deviation
C1	search costs for borrower/identifying a borrower	33	2.6061	0.55562
C3	search costs for information on collateral from borrowers	33	2.6970	0.52944
C4	costs of screening a potential borrower		2.5758	0.61392
C8	costs of collecting repayments	32	3.0000	0.95038
C9	staff salary and wages costs	32	2.9687	0.64680
C10	stationary costs	33	2.7576	0.75126
C11	printing costs	32	2.6875	0.73780
C12	rent costs	33	2.8182	0.76871
C13	travel costs of the sales executives while searching for potential		2.9091	0.87905
	borrowers			
C19	regulatory costs	33	2.6970	0.76994
C20	costs of uncertainty of the loan transaction (credit risk)	32	2.8438	0.72332

Other costs indicated by respondents as affecting the interest rate charged by institutions are presented in Table 4 below:

Table 4: Showing Other Transaction Costs That Affect the Interest Rate Charged by the Financial Institutions

The mean scores of the following items were below 2.5 indicating a disagreement that the following transaction costs affect the interest rate charged by their institutions; items C2 (search costs for the information on potential borrowers – 2.333), C5 (costs of processing the loan application – 2.379), C6 (costs of completing the documentation of the borrower – 2.212), C7 (costs of disbursing the loan to the borrower – 2.272), C14 (costs incurred in ensuring that the borrower does not bleach the terms of contract – 2.333), C15 (opportunity costs of time taken negotiating with the potential borrower – 2.272), C16(costs incurred in reading an agreement with the other party in a transaction – 2.060), C24 (insurance costs – 2.272), C25(renewal of facility costs – 2.272) and C27 (restructuring of facility costs – 2.363).

Respondents were required to indicate the extent to which they agreed that:

(i) The largest item considered while determining interest rate charged on individual micro financing is transaction costs.

(ii) Transaction costs greatly affect the interest rate charged by their financial institution on individual micro financing.

No.	Item	Financial institution	N	Mean	Std. Deviation	Std. Error Mean
C28	The largest item considered while determining	MDI	8	3.0000	0.00000	0.00000
	interest rate charged on individual micro financing are transaction costs	commercial bank	25	2.3600	0.75719	0.15144
C29	Transaction costs greatly affect the interest rate	MDI	8	3.0000	0.00000	0.00000
	charged by our financial institution on individual micro financing	commercial bank	25	2.6400	0.63770	0.12754

Table 5: Showing the Group Statistics from the Independent – Sample T Test

From the Table above, the mean scores for the MDI was 3.00 indicating agreement that the largest item considered while determining interest rate charged on individual micro financing are transaction costs while that for the Commercial bank was 2.36, indicating a disagreement. The standard deviations were 0.000 and 0.75719 respectively. Results reveal that there was no variability in responses from the MDI while that from the commercial bank was narrow.

Respondents were further asked to indicate the extent to which they agreed that transaction costs greatly affect the interest rate charged by their financial institution on individual micro financing. The mean scores for the MDI was 3.00 with a standard deviation of 0.000 indicating agreement that transaction costs greatly affect the interest rate charged by their financial institution on individual micro financing. The mean scores for the MDI was 3.00 with a standard deviation of 0.000 indicating agreement that transaction costs greatly affect the interest rate charged by their financial institution on individual micro financing while that for the commercial bank was 2.64 with a standard deviation of .63770 indicating disagreement. Results reveal that there was no variability in responses from the MDI while that from the commercial bank existed.

In order to establish if there were significant differences in responses between staff from the MDI and the Commercial Bank, the following hypotheses were formulated:

- H2_o. There is no significant difference in perceptions of staff from the selected MDI and commercial bank in Uganda regarding the extent to which they agreed that transaction costs greatly affect the interest rate charged by their financial institution on individual micro financing.
- H2a. There is a significant difference in perceptions of staff from the selected MDI and commercial bank in Uganda regarding the extent to which they agreed that transaction costs greatly affect the interest rate charged by their financial institution on individual micro financing.
- H3_o. There is no significant difference in perceptions of staff from the selected MDI and commercial bank in Uganda regarding the extent to which they agreed that the largest item considered while determining interest rate charged on individual micro financing are transaction costs.
- H3a. There is a significant difference in perceptions of staff from the selected MDI and commercial bank in Uganda regarding the extent to which they agreed that the largest item considered while determining interest rate charged on individual micro financing are transaction costs.

4.4. T-Test Results

After running the Levene's test for equality of variances, results revealed a p-value of 0.000 for both items C28 (The largest item considered while determining interest rate charged on individual loans are transaction costs) and C29 (Transaction costs greatly affect the interest rate charged by our financial institution on individual loans), hence we considered a two sample independent's *t*-test equal variances not assumed since the *p* value was less than the α . The *t* values were 4.23 and 2.82 respectively, with degrees of freedom of 24. The sig. (2 tailed) *p* values were 0.000 (C28) and 0.009 (C29), i.e. less than α (0.05). Therefore, $H2_o$ and $H3_o$ were rejected. The *t* test revealed a statistically significant difference, implying that we are 95% confident that there is a significant difference in perceptions of staff from the selected MDI and commercial bank in Uganda regarding the extent to which they agreed that:

(i) Transaction costs greatly affect the interest rate charged by their financial institutions for individual micro financing.

(ii) The largest item considered while determining interest rate charged for individual micro financing is transaction costs. It can therefore be concluded that the respondents from the MDI perceive transaction costs as the largest item considered while determining interest rate charged on individual loans while those from the commercial bank do not have a similar perception. In the same way, MDI perceives the largest item considered while determining interest rate charged on individual loans to be transaction costs while those from the commercial bank do not have a similar perception. The findings confirm that in Uganda the Neoclassical theory of perfect markets (Andrieş, & Cuza, 2009) is not in operation because different financial institutions differ in borrowing conditions and transaction costs charged. Besides, transaction costs for obtaining information exist (Scholtens & Wensveen 2003).

4.5. Implications

Understanding transaction costs of micro financing to individual borrowers of the commercial bank and MDI is vital for policy formulation, but most importantly to assist managers in identifying strategies on how to minimize the costs. Financial institutions in Uganda must be seen to play a vital role in the country's economic growth by getting funds from depositors and passing these over to borrowers at a fair interest rate (Tarus, Chekol & Mutwol 2012; Andrieş & Cuza 2009). In so doing, they would avoid undermining the borrowers' capacity to save and service loans which could eventually enhance economic growth (Kanyegirire, 2003; Biryabarema, 2007; Zakumumpa, 2008). As the regulator of financial institutions, the central bank can fulfill this objective by coming up with a

policy that limits the transaction costs that must be considered while determining the interest rates charged on individual micro borrowers.

Policy makers need to regulate the transaction costs of lending that must be considered in determining the interest rate to minimize the cost of borrowing to facilitate individual saving. Financial institutions should be tasked by government to educate and create awareness to individual borrowers before lending in an effort to facilitate borrowers' decision making. In addition policy makers through the central bank can use the media in creating awareness to potential borrowers about transaction costs and what is considered in determining them to minimize on information asymmetry in the financial Market.

5. Conclusion

The purpose of the study was to examine the transaction costs of micro financing to individuals between a selected commercial bank and MDI to determine the extent to which these impact interest rates with an aim of generating a list of transaction costs of lending for micro financing that could be recommended for informing policy. Financial intermediation theory presupposes that intermediaries play a vital role in reducing transaction costs and information asymmetry (Gurley & Shaw (1960; Scholtens & Wensveen 2003). On the contrary, results from the study reveal several transaction costs incurred by both the MDI and the commercial bank.

The results suggest that the following are greatly perceived as transaction costs of micro financing to individual borrowers specifically; Staff salaries and wages costs, Printing costs and Rent costs. Other transaction costs included; costs of collecting repayments, Stationary costs, travel costs of the sales executives while searching for potential borrower, costs of following up on non-payment, monitoring costs and cost of credit. Policy makers therefore need to focus on the above costs during regulation of the transaction costs of micro financing that must be considered in determining the interest rates to facilitate saving by borrowers.

On the contrary, the following were not perceived as transaction costs of lending; opportunity costs of time taken negotiating with the potential borrower and costs incurred in reading an agreement with the other party in a transaction.

There were differences in transaction costs highly perceived by the MDI and the commercial bank. The MDI regarded highly; costs of collecting repayments, travel costs of the sales executives while searching for potential borrowers, costs of following up on non-payment, monitoring costs and costs of borrowing on the side of the financial institution as transaction costs of micro financing. On the contrary, the commercial bank staff highly regarded costs of following up on non-payment, staff salary and wages costs and stationary costs as transaction costs of micro financing.

The following costs were indicated to greatly affect the interest rate charged by the financial institutions; costs of collecting repayments, costs of following up on non-payment, monitoring costs, cost of credit, exposure to interest rate risk costs and volatility of interest rates in the market costs.

Respondents disagreed that the following transaction costs affect the interest rate charged by their institutions; search costs for the information on potential borrowers, costs of processing the loan application, costs of completing the documentation of the borrower, costs of disbursing the loan to the borrower, costs incurred in ensuring that the borrower does not bleach the terms of contract, opportunity costs of time taken negotiating with the potential borrower, costs incurred in reading an agreement with the other party in a transaction, insurance costs, renewal of facility costs and restructuring of facility costs.

Respondents from the MDI perceived transaction costs of lending as the largest item considered while determining interest rate charged on individual micro financing while those from the commercial bank do not have a similar perception.

This study focused on only two institutions from each category. The results of this study may therefore not be generalized to the entire financial sector in Uganda. There is need for a further study to be conducted involving more institutions and respondents from each category to allow for generalisation. A further study could be conducted to compare transaction costs of lending between foreign and local banks in Uganda.

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