



**MAKERERE**

**UNIVERSITY**

**MAKERERE UNIVERSITY BUSINESS SCHOOL**

**AGENT BANKING ADOPTION, FINANCIAL LITERACY, TRANSACTION COSTS  
AND FINANCIAL INCLUSION IN SELECTED DISTRICTS OF EASTERN UGANDA**

**NATUKUNDA JUDITH**

**REG NO: 2018/HD10/2306U**

**A DISSERTATION SUBMITTED TO MAKERERE UNIVERSITY BUSINESS SCHOOL  
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MASTER OF BUSINESS ADMINISTRATION OF MAKERERE UNIVERSITY**

**NOVEMBER 2023**

**PLAN A**

## DECLARATION

I declare this report as my original work and has never been presented anywhere for academic purposes.

Signature.....



Date: .....

20/11/2023

**Natukunda Judith**

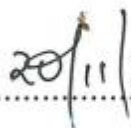
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## APPROVAL

This research report has been submitted for examination with the approval of my supervisors whose signatures are appended against their respective names below.

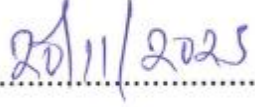
Signed.....

**Dr. RACHEL MINDRA KATOROOGO**

Date.....

Signed.....

**Mr. OULA DENIS IGNATIUS**

Date.....

## **DEDICATION**

This report is dedicated to my parents, sisters and brother for the endurance and courage you have given to me during this master's research. May God bless you abundantly.

## **ACKNOWLEDGEMENT**

I thank and glorify God Almighty for the gift of life and all the blessings, protection and success in my academics. I extend my sincere thanks to my supervisors, Dr. Rachel Mindra Katoroogo and Mr. Oula Denis Ignatius without whose guidance and encouragement, this report would not have been submitted. I want to extend my sincere appreciation to all the agents from Mayuge, Butaleja and Iganga who endeavored to provide responses voluntarily at a short notice. May the Lord reward you abundantly.

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## ABSTRACT

This study investigates the relationship between agent banking adoption, financial literacy, transaction costs and financial inclusion in Eastern Uganda. It was guided by objectives including; to examine the relationship between financial literacy and financial inclusion; to examine the relationship between agent banking adoption and financial inclusion; to examine the effect of financial literacy, agent banking adoption on financial; and to examine the mediating effect of transaction costs in the relationship between financial literacy, agent banking adoption and financial inclusion in Eastern Uganda. Financial literacy, agency bank adoption was the independent variable, transaction costs mediated the relationship while financial inclusion was the dependent variable. The guiding theories were; unified theory of acceptance and use of technology model; social learning theory and transaction cost theory.

This study used a cross-sectional research design, with a study population of 564; (Mayuge (80), Butaleja (104) and Iganga (380) users of agency banking services and a sample of 234 selected randomly. A self-administered questionnaire was used for data collection. Cronbach's test and content validity Index (CVI) confirmed reliability and validity above 0.7 for all variables. The Statistical Package for Social Sciences (SPSS version 28) was used for data processing to compute frequency, percentages, mean, standard deviations, correlation, and regressions.

Results revealed a positive but insignificant relationship between financial literacy and financial inclusion in Eastern Uganda ( $r=.071$ ); a positive and significant relationship between agent banking adoption and financial inclusion in Eastern Uganda ( $r=.154^*$ ); a positive but insignificant relationship between transaction costs and financial inclusion ( $r=.120$ ). Transaction cost is an insignificant mediator in the relationship between agency banking adoption and financial (the indirect effect  $-0.01$  at a significance level of  $0.175$ ); the mediation effect is given by the transaction cost is an insignificant mediator in the relationship between financial literacy and financial inclusion (indirect effect  $-0.01$  at a significance level of  $0.283$ ). Financial literacy, agent banking adoption (and transaction costs) predict 3.7% of the variance in financial inclusion in Eastern Uganda (Adjusted R Square=.037). Agency Banking Adoption (Beta=.176,  $P=.015$ ) and Transaction Costs (Beta=.152,  $P=.036$ ) significant predictors of financial inclusion in Eastern Uganda; while financial Literacy (Beta=.089,  $p=.212$ ) was an insignificant predictor of financial inclusion.

The study concludes that in a literate society, it becomes easier, although not a guarantee to have financial inclusion rooted. Improving on agent banking adoption is likely to enhance financial inclusion. A combination of financial literacy and agent banking adoption makes a good strategy bundle to accomplish the financial inclusion mission in society. Efforts to improve financial inclusion through agency banking should never interfere with the costs to let them increase per unit per user, directly or indirectly.

The study recommends that banks should empower agents and end users with capabilities online or on mobile to accomplish banking activities faster. Banks should ensure that their agent banking platforms are compatible with other banking systems both today and in future. More general sensitization should be done to all people to ensure mass adoption of agent banking and improve on the positive perception in the society. The banks and agents should ensure that the indirect benefits like convenience, security resulting from use of agent banking are maintained and upheld; MoUs can be signed between telecom operators and banks to ensure realization cheap services. Banking agents should be encouraged to help clients beyond the usual routines.

## **CHAPTER ONE**

### **1.0 Background**

This study explores how agent banking adoption, financial literacy, and transaction cost influence financial inclusion in selected districts in eastern Uganda. Financial inclusion is a development strategy to increase access and usage of financial services to channel available resources into formal platforms and priority actions (Mungai, 2017). Financial inclusion opens doors for the poor by ensuring access to different types of financial services suitable for them (Uganda National Financial Inclusion Strategy 2017- 2022). Financial inclusion refers to a setting where individuals and businesses have access convenient, affordable and useful financial products and services that meet their needs (CFI, 2020).

Globally, 1.4 billion adults remain unbanked (CFI, 2020). The majority include vulnerable groups specifically women, youth, less educated and those living in rural areas (World Bank, 2022). In 2018, 1.7 billion adults worldwide remained unbanked, including an estimated 400 million in Africa (Mazamesso, 2022). The share of adults who own a bank account rose globally from 51 percent in 2011 to 69 percent in 2017—an additional 515 million people (World Bank Group, 2021). However, 31% that remains unbanked is a huge concern for policy makers and those in the banking business.

According to Uganda Bankers Association (2020), there were 13 million bank accounts across different banks and 11,000 banking agents countrywide. However, there are people who hold more than one bank account, thus the figure does not reflect that that 13 million Ugandans have bank accounts. Furthermore, only about two percent have deposits totaling more than ten million, while, of the rest, about ninety percent have less than one million (Kagoro, 2020). However, it is challenging to explain why mobile money is more popular than agent banking, yet it is taxed while the latter is not (Tamale, 2020). From a supply-side perspective the most significant challenge is that 76% of Ugandan adults are rural- based. The high cost of providing financial services in rural areas often means that formal financial institutions lack the incentive to penetrate these areas as well as the ability to mitigate perceived operational risks (Finscope, 2018).

In addition, Lotto (2016) and Antonia, Theres and Lukas (2018) agree that financial inclusion is improved through addressing the financial infrastructure and financial literacy. In support of this, Bachas, Gertler et al. (2018) indicate that financial literacy and transaction costs (labor, transport, broker fees, bank charges, commissions) impact on financial inclusion.

It was argued that introduction of agent banking in Iganga, Butaleja and Mayuge would improve on financial inclusion in terms of usage, access and quality (Rashim, 2021). Other efforts have included allowing Microfinance Deposit-taking Institutions (MDIs) to engage in agent banking, the rolling out of the Uganda Microfinance Regulatory Authority (UMRA) and improving the competitive framework for mobile money via interoperable clearing and settlement mechanisms (The Financial Institutions Amendment Act, 2016). The second edition of the financial sector deepening strategy (2018-2021), Uganda aimed at broadening its scope to build a competitive, robust and inclusive financial sector that served the vulnerable. Despite this, Eastern Uganda has an agent spread of between 6 to 8% which is far less compared to central Uganda with 50% agent spread according to Uganda Bankers' Association (2021). Hamdan, Lehmann-Uchner and Menkhoff (2022) indicate that in Uganda, financial literacy leads to stronger sensitivity regarding increasing fees. AMFIU revealed that financial literacy was 60% yet confidence in handling money matters was 45%, thus a gap in financial literacy (AMFIU, 2021).

Studies like Lyons and Kass-Hanna (2019), Clark, Lusardi and Mitchell (2017) indicate that financial literacy impacts on financial inclusion. In the same way, agents reduce the cost of transaction as they reduce the distance to the bank and minimize travel (Marumbwa, 2014; Ndlovu & Ndlovu, 2013). However, these studies do not bring out the Ugandan context and are neither up to date thus a knowledge gap. Therefore, this study sought to investigate the relationship between agent banking adoption, financial literacy, transaction costs and financial inclusion in Eastern Uganda.

## **1.1 Problem statement**

There have been efforts to improve financial inclusion including allowing Microfinance Deposit-taking Institutions (MDIs) to engage in agent banking, the rolling out of the Uganda Microfinance Regulatory Authority (UMRA) and improving the competitive framework for mobile money via interoperable clearing and settlement mechanisms (The Financial Institutions (Amendment) Act, 2016). Despite the efforts to improve financial inclusion by various stakeholders, development partners, Government, financial institutions (Tier 1 to 4) telecoms, there is still gaps in financial inclusion with 15% of Ugandans being financially excluded (National Financial Inclusion Strategy 2017-2022). Notwithstanding the initiatives of Microfinance Deposit-taking Institutions (MDIs) to engage in agent banking improving the competitive framework, a report from FSDU found that only 10% of adults in Uganda do financial business with banks (FSDU, 2020). Majority of the adults irrespective of wealth category still access financial services through informal savings groups (Uganda, Financial Sector Deepening, Annual Report 2019/2020). In Eastern Uganda, specifically, Iganga, Mayuge and Butaleja the financial exclusion levels ranging between 15-22% (UBA, 2020; Hamdanet al., 2022). Looking at the theoretical perspective, whereas some authors have suggested links between agency banking adoption, financial literacy, transaction costs and financial inclusion , there is need for current research to inform this view as such documented evidence in the context of Uganda is very scanty. There is need for more clarity on how transaction costs could be impacting on financial inclusion in the Ugandan context (Ntalaka, 2021). This study seeks to establish relationship between agent banking adoption, financial literacy, transaction costs and financial inclusion in Eastern Uganda.

## **1.2 Purpose of the study**

To investigate the relationship between agent banking adoption, financial literacy, transaction costs and financial inclusion in Eastern Uganda.

## **1.3 Objectives of the study**

- i. To examine the relationship between agency banking adoption and financial inclusion in Eastern Uganda.
- ii. To examine the relationship between financial literacy and financial inclusion in Eastern Uganda.

- iii. To examine the relationship between transaction costs and financial inclusion in Eastern Uganda.
- iv. To establish the mediating effect of transaction costs in the relationship between agency banking adoption and financial inclusion in Eastern Uganda.
- v. To establish the mediating effect of transaction costs in the relationship between financial literacy and financial inclusion in Eastern Uganda.

#### **1.4 Research Questions**

- i. What is the relationship between agency banking adoption and financial inclusion in Eastern Uganda?
- ii. What is the relationship between financial literacy and financial inclusion in Eastern Uganda?
- iii. What is the relationship between transaction costs and financial inclusion in Eastern Uganda?
- iv. What is the mediating effect of transaction costs in the relationship between agency banking adoption and financial inclusion in Eastern Uganda?
- v. What is the mediating effect of transaction costs in the relationship between financial literacy and financial inclusion in Eastern Uganda?

#### **1.5 Scope of the study**

##### **(i) Subject Scope**

The subject scope of this study was financial literacy (Attitude, Knowledge and Skills), agent banking adoption (Performance expectancy, Effort expectancy, Facilitating conditions and social influence) transaction costs (Bargaining costs, opportunity costs, search costs and policing/enforcement costs) and financial inclusion (Welfare, Usage and Access).

##### **(ii) Geographical scope**

The study was conducted in Eastern Uganda in districts of Iganga, Mayuge and Butaleja because these are among the poorest communities in Uganda.

##### **(iii) Time scope**

The study considered review of literature between 2010 and 2023 and was completed between March 2022 and October 2023.

## **1. 6 Significance of the study**

With the recommendations put into practice, citizens of Uganda are likely to get better informed product development, informed policy decisions guided by evidence and research.

In addition, and in relation to policy, this study can be used as a basis for review and improvement.

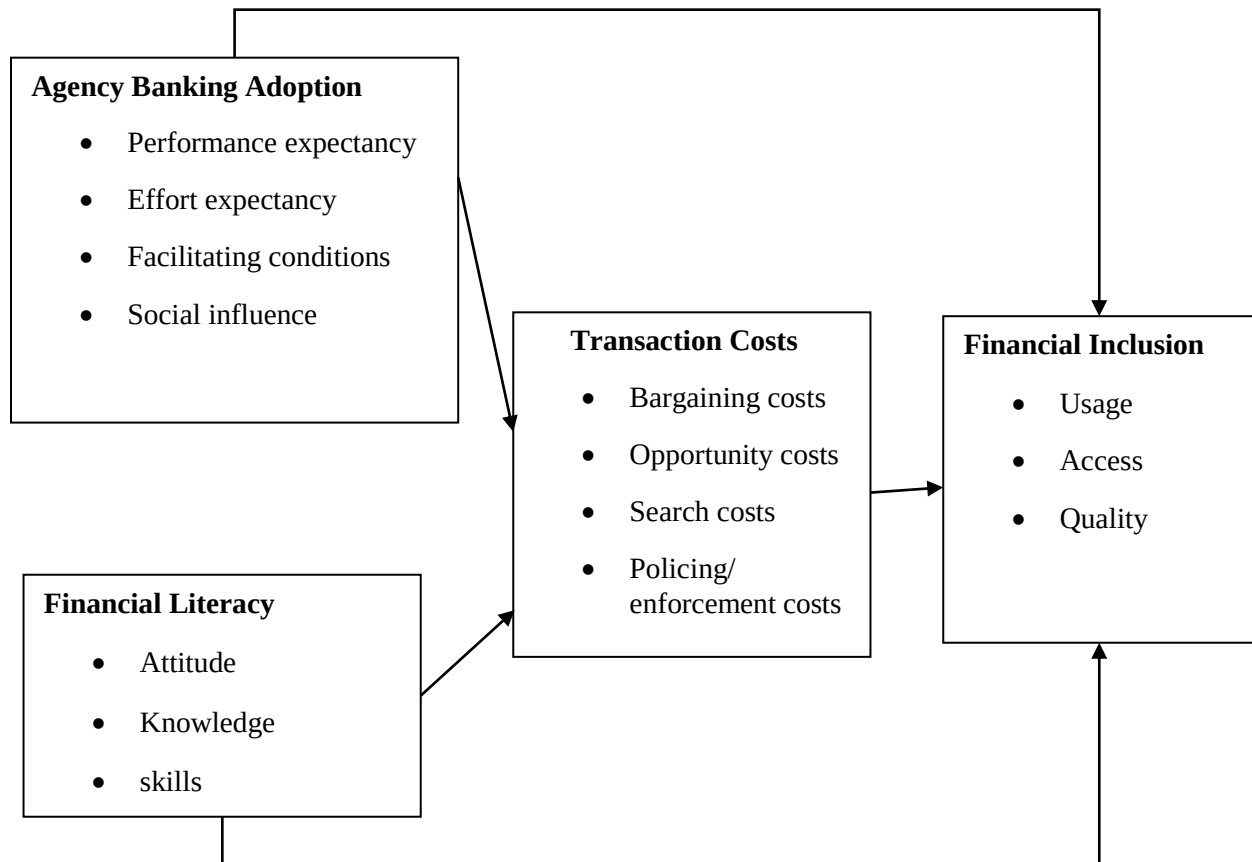
Furthermore, this study will act as a source of reference to future researchers who are interested in one or a combination of variables in this study.

Development partners are likely to get an insight into what needs to be improved in the current efforts to improve financial inclusion.

## **1.7 Conceptual framework**

The framework which has been developed from literature describes this study. The framework demonstrates that, financial literacy, agent banking adoption and transaction costs influence financial inclusion.

**Conceptual framework on financial literacy, agent banking adoption and transaction costs and financial inclusion.**



**Source:** Adopted from literature review by Venkatesh et al. (2003); Nisha & Rifat, (2017); Zigale, (2018); Dewi et al. (2020); Van et al. (2021); Demirgüç-Kunt et al., (2020); Hamdan et al. (2022), Williamson (1991); Ilya et al. (2021) and modified by the researcher (2022).

*Figure 1.1: Conceptual Framework*

The above framework illustrates the relationship between the independent and dependent variables of the study. It is assumed that financial literacy and agent banking adoption affect the transaction costs as well as financial inclusion. Still, the transaction costs influence financial literacy. As per the study, agent banking adoption is the independent variable, studied in terms of performance expectancy, effort expectancy, facilitating conditions and social influence (Venkatesh, Morris, Davis & Davis, 2003). Also, financial literacy is the second independent variable studied in terms of attitude, knowledge, and skills (Xiao, 2016). Transaction costs mediate the relationship between financial literacy, agent banking adoption and financial inclusion and include bargaining costs, opportunity costs, search costs and policing/enforcement costs (Ilya et al., 2021). This relates to the transaction cost theory. Financial inclusion is the dependent variable. It is studied in terms of Usage, Access and Quality (Van et al. (2021); Demirgüç-Kunt et al., 2020). The costs involved in execution of agent banking adoption and provision of financial literacy will influence how agent banking and financial literacy will finally lead to financial inclusion (Hamdan et al.,2022).

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Literature Review**

#### **2.1 Theoretical Underpinning**

##### **2.1.1 Unified Theory of Acceptance and Use of Technology model**

According to Venkatesh, Morris, Davis and Davis (2003), UTAUT proposed four main factors that influence intention and usage of information technology. First is performance expectancy (It is the degree to which an individual believes that using the system will help him or her to attain gains in job performance). Second is effort expectancy (It is the degree of ease associated with the use of the system). Third is facilitating conditions (It is the degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system). Fourth is social influence (It is the degree to which an individual perceives that other believe that he or she should use the new system). The theory assumes that behavioural, cognitive and environmental factors (that is outcome expectations-performance, outcome expectations-personal, self-efficacy, affect and anxiety) have an interactive effect on individuals' behaviour (Bandura, 2001). The theory has been used to investigate human-computer interaction (Campeau, Higgins & Huff, 1999) cited in Marikyan and Papagiannidis (2021).

Financial inclusion reflects behavioral, cognitive and environmental factors interacting to affect how individuals respond to the call to take on banking products, whether directly or indirectly through such behaviors like use ATMs, mobile money, opening bank accounts and using agents to do transactions.

##### **2.1.2 Social learning theory**

Every human being is always in search of validation especially when it comes to internalizing or accepting something new. They need to feel that what they are doing is acceptable among their networks (Rogers, 2003). As far as validation is concerned, it pours down to affect ones' image (Skog, 2012). With a positive image, one can be confident in using new technology for the long term. Four elements believed to influence adoption, the social system being one of them were examined by Mazman, Usluel and Çevik (2009). They looked at factors linked the social system that one considers before using something new.

The conclusion was that compliance influenced by approval of the social system as well as identification measured by self-fulfillment and internalization when influence positively informs adoption can be used to analyze intent of use of new technology (Mazman, Usluel & Çevik, 2009). Moreover, a study conducted equally described three facts that form the basis of social system effect on adoption. These elements include macro-domain; associated with the industry/market: Meso-domain related to existing relationships in the social system and micro domain (MacVaugh & Schiavone, 2010). Therefore, social influence falls under meso-domain, illustrating that communities and networks influence decisions.

In relation to the current study, how people embrace agency banking and consider the transaction costs as well as the levels of literacy combine to influence the financial inclusion levels attained. This makes the theory relevant to the current study.

### **2.1.3 Transaction Cost Theory**

Focusing on firm boundaries, transaction cost theory aims to answer the question of when activities would occur within the market and when they would occur within the firm (Williamson, 1991). More specifically, transaction cost theory predicts when the governance forms of hierarchies, markets, or hybrids (alliances) will be used. Williamson, who was recognized with a Nobel Prize for his work on transaction costs, theorized that whether activities would be internalized within a firm depended on their transaction costs. He saw transactions broadly as transfers of goods or services across interfaces and argued that when transaction costs were high; internalizing the transaction within a hierarchy was the appropriate decision. Conversely, when transaction costs were low, buying the good or service on the market was the preferred option. Three dimensions were developed for characterizing transactions: uncertainty, frequency, and asset specificity, or the degree to which transaction-specific expenses were incurred (Ilya et al., 2021). They thus specify bargaining costs, opportunity costs, search costs, and policing/enforcement costs.

The transaction tries to explain how the banks and agents try to minimize costs to ensure that clients do not get scared away to embrace agency banking and improve their levels of financial inclusion. This makes costs play a central role of push and pull in the banking business.

## **2.2 Literature review**

### **2.2.1 Financial inclusion**

Although there is no consensus on a FI definition, it is generally understood that FI is the process of ensuring that people have easy access to and use of financial services from the formal financial institutions in a timely, adequate, affordable manner, especially for the financial disadvantaged group (Van et al., 2021). Financial inclusion is measured in three dimensions: (i) access to financial services; (ii) usage of financial services; and (iii) the quality of the products and the service delivery (Van et al., 2021).

Financial inclusion can be defined in simple terms as the access and use of formal financial services by households and businesses, such as opening a bank account with a registered financial institution (Sahay, Čihák, N'Diaye, Barajas et al., 2015). In broader terms, financial inclusion refers to a situation in which most of the financial services reach a sufficiently large proportion of individuals and families, granting them timely and adequate access to credit and other financial products at affordable prices (Olaniyi & Adeoye, 2016). In this regard, three identified levels of financial inclusion are formal inclusion via commercial banks (CBs), semi-formal inclusion (incl. SACCOs, ROSCAs, ASCAs and microfinance institutions), and inclusion via active mobile money use (Demirgüç-Kunt et al., 2020).

A financial system capable of serving all members of a community, especially women and the poor, can provide educational and investment opportunities for every individual; it can help people receive bank loans, have insurance coverage for various types of risks and facilitate and secure payments (Mader, 2018). Ghosh (2013) show that economic growth and development can be achieved by increasing access to financial services for all individuals. Today, all the countries work on financial inclusion and setting it as a priority goal. Given the increased awareness of the contribution of financial sector development to poverty reduction and economic growth, financial inclusion has been placed high on the national agendas of many developing countries (Park & Mercado, 2015).

### **2.2.2 Agency banking**

Agency Banking (AB) is a concept that is used worldwide especially with focus on financial inclusion. It largely depends on information technology as the service is mobile in nature away

from the bank branch. This facility supports the function of commercial banks and allows the banks to reach the unbanked masses at their doorstep. The concept of agent banking was expected to extend financial services to the customer especially the unbanked through use of technology that was common as well as familiar across the borders. Indeed, it is an important element to consider in emerging economies (Mungai, 2017).

According to Section 3(a) of the Financial Institutions Act as amended in 2016, agent banking means the conduct by a person of financial institution business on behalf of a financial institution as may be approved by the Central Bank. Based on early experiences in other jurisdictions, agent banking has a large contribution to make towards financial inclusiveness in developing countries because it provides convenience, greater accessibility, it is time saving, it is compatible with past technology experience, easy to use, relatively cheap, has improved service quality and satisfactory personal experience with other banking technologies (Muhairwe, 2020). Mobile money which has been in existence since 2009 still overshadows agent banking whose inception was in 2018.

### **2.2.3 Financial literacy**

Financial literacy includes financial awareness, experience, skills, subjective knowledge, capability, goals, decisions and financial behavior (Dewi et al., 2020). However, the current study looks at financial Behavior, Attitude, Knowledge and Skills (Xiao, 2016). Financial literacy has been repeatedly found to be associated with better planning for retirement, higher net returns earned on savings and holding of lower-interest debt (Clark, Lusardi & Mitchell, 2017).

Financial literacy is the cognitive understanding of financial components and skills such as budgeting, investing, borrowing, taxation, and personal financial management. The absence of such skills is referred to as being financially illiterate. Benefits of being financially literate include ability to make better financial decisions, effective management of money and debt, equipped to reach financial goals, reduction of expenses through better regulation, less financial stress and anxiety, increase in ethical decision-making when selecting insurance, loans, investments, and using a credit card and effective creation of a structured budget (Dewi et al., 2020).

### 2.2.3 Transaction Cost

Transaction costs are expenses incurred when buying or selling a good or service. In agent banking adoption costs include bargaining costs, opportunity costs, search costs and enforcement costs (Ilya et al., 2021). These costs are also reflected in the transaction cost theory advanced by Williamson (1991) as adopted in the current study. Agency banking like any other service has costs to the client and to the service providers. Cash Withdrawal at Agent Location attract charges between 1,000 (for a withdrawal in the range 5,000 - 20,000) to 10,000 (for withdrawal in the range 3,000,001 - 5,000,000)

| Agent Banking Customer Tariff Guide effective 16 <sup>th</sup> April 2021 |               |                  |                          |
|---------------------------------------------------------------------------|---------------|------------------|--------------------------|
| Transaction Band (UGX)                                                    | Deposit (UGX) | Withdrawal (UGX) | Bills/ School Fees (UGX) |
| <10,000                                                                   | 1000          | 1,000            | 950                      |
| 10,001 - 60,000                                                           | 1000          | 1,200            | 950                      |
| 60,001 - 150,000                                                          | 1000          | 1,500            | 1,700                    |
| 150,001 - 250,000                                                         | 1000          | 2,000            | 2,050                    |
| 250,001 - 350,000                                                         | 1000          | 3,500            | 2,950                    |
| 350,001 - 500,000                                                         | 1000          | 4,000            | 3,450                    |
| 500,001 - 1,000,000                                                       | 1000          | 5,000            | 4,000                    |
| 1,000,001 - 2,500,000                                                     | 1000          | 8,500            | 7,950                    |
| Above 2,500,001                                                           | 1000          | 10,000           | 7,950                    |
| Other Services                                                            |               | Charge (UGX)     |                          |
| Account Opening                                                           |               | Free             |                          |
| Balance Inquiry                                                           |               | 500              |                          |
| Ministatement (last 5 Transactions)                                       |               | 500              |                          |
| Internal Transfers                                                        |               | 500              |                          |
| Inter Bank Transfers                                                      |               | 3,500            |                          |

Source: Dfcu (2021)

**Figure 2.1: Dfcu Agent**

From the above extract, there are charges involved in transacting with agents. However, it is not clear if such charges have impacted agent banking adoption which needs to be studied. It is not clear how much it would cost potential clients to get the desired financial literacy that would eventually possibly motivate them to become financially included. All these issues are pending investigation in the current study in the context of Uganda.

## **2.4 Agency banking adoption and financial inclusion**

Agency banking is a type of branchless banking where third parties are involved in performing some of the activities that are traditionally performed in banking halls by bank personnel. These retail agents manage transactions (deposits, payments, and cash withdrawals) on behalf of the financial institution which are in turn remunerated on commission basis (Kariuki & Namusonge, 2016). With the introduction of agent banking, banks can meet the diverse financial needs of their customers in different parts of the country hence improving their market share, profitability as well as competitiveness. Banks can expand access to financial services especially to the unbanked population in the rural areas where it has been costly to open a branch in those areas (Kariuki & Namusonge, 2016).

Different studies have examined the relationship between agent banking and financial inclusion for example Munoru (2015) found out that agent banking had a positive and insignificant relationship with the financial inclusion and that there was no causality between the variables. This agrees with Kariuki and Namusonge (2016). Lotto (2016) posits that greater geographical coverage brought about by agent banking is a stronger promoter of financial inclusion because services follow people closer to where they live and hence reduce the travelling costs and other hassles involved like time wasted in long queues at bank branches. Indeed, agent banking adoption leads to financial inclusion. This finding also relates to Kariuki and Namusonge (2016). Based on early experiences in other jurisdictions, agent banking has a large contribution to make towards financial inclusiveness in developing countries because it provides convenience, greater accessibility, time saving and is compatible with past technology experience, easy to use, relatively cheap this has improved service quality and satisfactory personal experience with other banking technologies (Muhairwe, 2020).

In agreement with Muhairwe (2020), Masukujjaman (2022) set out to determine the factors influencing agent banking adoption in Bangladesh. The study discovered five factors; awareness, relative advantages, perceived risk, perceived ease of use, and perceived trust grouped from a pool of items analyzed. These results compare favourably with Muhairwe (2020). The reviewed studies paint a picture that there is a relationship between agent banking adoption and financial inclusion. However, the statistical significance and the elements of agent banking adoption that

contribute most to financial inclusion are not stipulated which creates need for further investigation.

## **2.5 Financial literacy and financial inclusion**

Building financially inclusive societies requires enhancing financial literacy in terms of providing financial skills and knowledge as well as their application while making financial decisions (Atkinson & Messy, 2011). Lyons and Kass-Hanna (2019) found that higher levels of financially literate people are more likely to be engaged in positive savings behaviors and less likely to borrow from different informal sources and so financial literacy helps educate and empower people to evaluate various financial products and services.

Okello et al. (2017) examine the impact of individual components of financial literacy in promoting financial inclusion of poor households in rural Uganda. The study revealed that only attitude as a component of financial literacy significantly and positively predicts financial inclusion of poor households in rural Uganda. Contrary to previous thinking and empirical studies, behavior, knowledge, and skills are not significant predictors of financial inclusion of poor households in rural Uganda. This study contradicts other authors like Clark, Lusardi and Mitchell (2017) who note that all the elements of financial literacy are important in shaping financial inclusion. It also contradicts Lyons and Kass-Hanna (2019).

Organization for Economic Co-operation and Development (OECD 2009) concludes that financial literacy that enhances ability to make well-informed financial decisions helps the poor to manage their financial affairs. Thus, the outcome of the financial decisions has significant implications on financial security and standard of living of poor households. Therefore, poor households with good level of financial literacy are likely to be better placed than those without skills and knowledge to manage their financial affairs prudently. Demirgüç-Kunt (2020) contradicts with Clark et al. (2017). These contradictions further raise the need for a fresh investigation.

Financial access facilitates day-to-day living and helps families and businesses plan for everything from long-term goals to unexpected emergencies (Antonia, Theres & Lukas, 2018). As accountholders, people are more likely to use other financial services, such as credit and insurance, to start and expand businesses, invest in education or health, manage risk and weather financial shocks, which can improve the overall quality of their lives (Mindra & Moya, 2017;

Muasya & Kerongo, 2015). Indeed, financial literacy can facilitate effective financial services use, which is critical for financial inclusion. Mungai (2017) while analysing possible hindrances to agent banking adoption which would later affect performance of commercial banks gave a recommendation on the importance of awareness. He advised policy makers to consider regular open day forums, exhibitions and advertisements that would emphasis on the need and use of agent banking, after which strategies needed to be developed as a measure to attract potential customers. Mungai (2017) essentially agrees with Clark et al. (2017) although not with some other authors like Okello et al. (2017). To resolve these gaps, a new study which is the investigation becomes useful.

## **2.6 Transaction costs and financial inclusion**

Afande and Mbugua (2015) explore the extent to which banks have been able to partner with agents, commercial entities whose primary objective and business is other than the provision of financial services. The findings of the study indicated that customers were willing to forego the extra charge to procure banking services through agent banking outlets. Regression analysis indicated that availability of liquidity, geographical coverage, costs and security of agent banking services) have a positive relationship with financial inclusion.

Agents reduce the cost of transaction as they reduce the distance to the bank and minimize travel (Marumbwa, 2014). Ndlovu and Ndlovu (2013) observed that agents were impactful as most rural residents have reduced their travel to urban areas for the sole purpose of accessing banking services. The technology used delivers quickly. The poor live at the margin, hence, the speed and costs of transactions become beneficial for them (Eijkman et al., 2010) as cited in Mazambani, Rushwaya and Mutambara (2018).

The high cost of providing financial services in Mukono Municipality often means that formal financial institutions lack the incentive to penetrate these areas as well as the ability to mitigate perceived operational risks (Nabatanzi, 2021). In the same way, Aduda and Kalunda (2018) opine that banking Agents should be the lowest cost channel for cash transactions, and the charges for using them should reflect that. Transaction charges should be lower on deposit than on withdrawal, reflecting the additional revenue deposits. This essentially means that cost affected agent banking adoption and financial inclusion as well.

## **2.7 Mediating effect of transaction costs in the relationship between agency banking adoption and financial inclusion**

High Transactional operational costs of financial services like branch opening, employee training, technological costs, etc. are other reasons for financial exclusion in the developing nation of Bangladesh (Nisha & Rifat, 2017). It has also been seen that the poor living in urban areas do not utilize financial services as they find banking transactions costly and thus it becomes unaffordable for them. Hence, even if financial services are available, the costs of travelling to branches and performing transactions prevent the poor from accessing them.

Wairimu (2020) citing Mwando (2013) note that the cost of transactions is closely related to the number of transactions and the advancement that has been made in making agent banking efficient. As technology advances and more people continue to use agent banking model, the total costs of transacting through agents are expected to increase while that cost per transaction is expected to reduce (Wairimu, 2020).

In Uganda, Banks have branches, however, it is very expensive to reach potential but poor clients as they cannot break even (Muasya & Kerongo 2015; Mwenda & Ngahu 2016). Additionally, costs to banks involved in extending physical infrastructure to remote rural areas are major barriers to achieve financial inclusion. Moreover, several potential financial consumers lack the relevant knowledge of financial concepts and the skills required to facilitate their choices and decisions (Lusardi & Mitchell, 2013).

## **2.8 Mediating effect of transaction costs in the relationship between financial literacy and financial inclusion**

Behavioral aspects inhibit financial inclusion to some extent. Many people may not be comfortable in using formal financial services in Bangladesh due to illiteracy, difficulty in understanding language, various documents and conditions that come with financial services, and such others (Triki & Faye, 2013) cited in Nisha, Nawrin & Bushra, 2020). As such, emergence of new financial service delivery models is necessary to drastically change the economics of banking the poor in Bangladesh. With financial literacy, the use of banking agents may increase and thus lead to better financial inclusion as suggested by Muhairwe (2020).

Agents for banks at times train clients in financial skills and knowledge much as it is beyond their designated mandate (Wairimu, 2020).

Muoria and Moronge (2018) examine the factors affecting the adoption of agent banking by bank customers in KCB bank in Kiambu County. The study used 120 agents of KCB. The study found and concluded that cost of agency services, security of agency service, customer awareness and capital availability significantly influenced the adoption of agent banking by bank customers at KCB in Kiambu County. A negative and significant association was noted between agency cost and agent banking adoption. A positive and significant association was noted between customer awareness and agent banking adoption.

A literature assessment on financial inclusion, adoption, and blockchain technology in India was carried out by Schuetz and Venkatesh (2020). Based on their research, they make the following four predictions about how to deal with the problem of financial exclusion: geographic access, high cost, inadequate banking products, and financial illiteracy. Moreover, according to Schuetz and Venkatesh (2020), blockchain technology has the power to get beyond the majority of these barriers. This study is of the view that costs affect how financial literacy can be a propeller of financial inclusion; however, the evidence may not be adapted to Uganda.

## **2.9 Conclusion and gaps**

In assessing the agency banking adoption and financial inclusion relationship, different authors have suggested contrasting positions. In some cases, with no clear pointer on the statistical significance of the relationships regarding financial literacy and financial inclusion. These contradictions need to be resolved in the current study. On the mediating effect of costs in the relationships, there are both agreements and disagreements with no statistical evidence and with some studies being dated to inform current policy and practices. There are variations in the strength and direction of the associations. The Ugandan context is missing on several occasions. All these gaps present a case for carrying on the current study.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 Introduction**

This chapter is the methodology. It comprises study setting, research design, the study population, sample size and selection procedure, data source, data collection procedures, data collection instrument, measurement of variables, reliability and validity, data processing and analysis, limitations of the study.

#### **3.1 Research Design**

This study used a cross-sectional survey design. A Cross-sectional survey design is applied because it suits studies with a short time frame as the case with this one (Sedgwick, 2014).

#### **3.2 The study population**

The study population was 564 (Mayuge (80), Butaleja (104) and Iganga (380) customers using banking agent points in Mayuge, Butaleja and Iganga (Stanbic bank Uganda agent banking locations, 2022) (See appendix.4) for Centenary, dfcu, Equity, KCB, Stanbic bank, Tropical, ABSA and Diamond Trust Bank. These were identified in Iganga (town), Mayuge (town) and Butaleja (town). The unit of analysis and unit of inquiry were the clients using agency banking services in the three districts.

#### **3.4 Sample size and selection procedure**

The study recruited clients from the three districts. The study targeted randomly clients for district. From Krejcie and Morgan, from the population of 564, the sample respondents were 234. These were selected randomly. The study selected a respondent and skipped 2 elements to select the next until the desired sample for each district was obtained.

**Table 3.1: Population and sample size**

|              | <b>Population</b> | <b>Sample</b> | <b>Scale and method</b>                         |
|--------------|-------------------|---------------|-------------------------------------------------|
| Mayuge       | 80                | 33            | Likert scale, simple propionate random sampling |
| Butaleja     | 104               | 43            | Likert scale, simple propionate random sampling |
| Iganga       | 380               | 158           | Likert scale, simple propionate random sampling |
| <b>Total</b> | <b>564</b>        | <b>234</b>    |                                                 |

**Source: (Uganda Bankers Association, 2022)**

### 3.5 Data source

The study used both primary data and secondary data sources. This form of data was obtained from the selected unit of inquiry during data collection. Primary data was justified because it guaranteed that the data collected was tailored to the variables being investigated. Moreover, primary sources avail recent data which increases data relevance. The unit of inquiry were the respondents. The unit of analysis was the districts that is Mayuge, Butleja and Iganga.

### 3.6 Data collection instrument

A self-administered questionnaire with closed ended questions relating agent banking, financial literacy, costs and financial inclusion is to be used in data collection. The questionnaire was designed according to the objectives of the study on a five-point scale ranging from strongly disagree to strongly agree for the closed ended questions. Cooper and Schindler (2003) indicate that, the most widely used scales range from 3 to 7 points. Brown (2010) however, supports a five-point Likert scale.

### 3.7 Measurement of variables

The study variables were measured as summarized in the table below.

**Table 3.2: Measurement of variables**

| Variable                   | Definition                                                                                                                                                                     |                                                                                                                                                   | Authors                                                                             |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Adoption of Agency banking | The use of agents to carry out banking services on behalf of the bank or banks.                                                                                                | Performance expectancy, Effort expectancy, Facilitating conditions and social influence. These were derived from the TAM.                         | Venkatesh et al. (2003)                                                             |
| Financial literacy         | Financial literacy is the possession of the set of skills and knowledge that allows an individual to make informed and effective decisions with all their financial resources. | Attitude, knowledge, and skills. All the financial literacy activities like investing, budgeting, saving, financial planning are governed by KAS. | Dewi et al. (2020).                                                                 |
| Financial inclusion        | A term describing individuals who have access to the full suite of basic services (that generally include a savings, credit, insurance, and payments service).                 | Usage, Access and Quality. These are the most documented and widely adopted measures.                                                             | Nguyen (2021); Demirgüç-Kunt et al. (2020).; Center for Financial Inclusion (2021). |
| Transaction Cost           | Transaction costs are expenses incurred when buying or selling a good or service                                                                                               | Bargaining costs, opportunity, search costs policing/enforcement costs                                                                            | Ilya et al. (2021)                                                                  |

### 3.9 Reliability and validity

#### 3.9.1 Reliability

Reliability refers to how consistently a method measures something. Therefore, it is desirable to use tests with good measures of reliability, to ensure the test scores reflect more than just random error. The Reliability of the questionnaire was tested using Cronbach's alpha test as recommended by Haradhan (2017). Item-total reliability (a measure of internal consistency) and Cronbach alpha coefficients of study variables were computed. The computed Cronbach alpha coefficient results above 0.7 were acceptable (Haradhan, 2017). The results obtained are presented in the table below.

**Table 3.3: Reliability Statistics**

| Reliability Statistics | Items | Cronbach's alpha |
|------------------------|-------|------------------|
| Agency Bank Adoption   | 16    | 0.712            |
| Financial Literacy     | 18    | 0.763            |
| Financial Inclusion    | 18    | 0.708            |
| Transaction Costs      | 17    | 0.727            |

**Source: primary data**

In the above table, all items scored above 0.7, hence indicating that there was reliability.

#### 3.9.2 Validity

The validity of a research study refers to how well the results among the study participants represent true findings among similar individuals outside the study. Validity tells you how accurately a method measures something. If a method measures what it claims to measure, and the results closely correspond to real-world values, then it can be considered valid (Korb, 2012). Validity of the questionnaire was established using content validity Index (CVI) to determine the relevance of the questions in measuring the variables (Korb, 2012) where questionnaires were distributed to the experts, fellow researchers, and academics. The validity of the instrument was tested, and the internal consistency of the instrument was tested to find out whether it consistently measures the study variables on the scales used (Haradhan, 2017).

**Table 3.4: Reliability Statistics**

| <b>Reliability Statistics</b> | <b>Items</b> | <b>Cronbach's alpha</b> |
|-------------------------------|--------------|-------------------------|
| Agency Bank Adoption          | 16           | 0.80                    |
| Financial Literacy            | 18           | 0.85                    |
| Financial Inclusion           | 18           | 0.85                    |
| Transaction Costs             | 17           | 0.75                    |

**Source: primary data**

In the above table, the scores for reliability prove that there was reliability as the results for all were above 0.70.

### **3.10 Data processing and analysis**

Quantitative data collected was edited, coded and checked for accuracy and relevancy. Then data was analyzed using Statistical Package for Social Sciences (SPSS version 28) program, to identify the relationship between agent banking adoption, financial literacy and financial inclusion. This provided descriptive outputs and cross tabulation by performing correlation analysis and Pearson's Correlation coefficient were used to establish the strength of the relationship between the variables. Regression analysis was used to establish the extent to which agent banking adoption; financial literacy affects financial inclusion in Eastern Uganda.

### **3.11 Ethical considerations**

**Permission:** The researcher obtained permission from the University and get consent from the respondents to carry out the study.

**Voluntary participation:** Participants were given some time to reflect if they would wish to participate in the study. Upon voluntary acceptance to participate in the study, the participants were asked to sign the consent form. Participation in the study was entirely voluntary. Study objectives were explained well before conducting the actual data collection, with an aid of the information sheet.

**Information:** An information sheet was used to inform about components of the study. The research and the research assistants also provided more information on explanations verbally.

**Withdrawal:** The participants were allowed to withdraw from the study at any stage of the study. Already collected data was used in study.

**Anonymity:** Anonymity of participants was always ensured. Data was not shared with others except the student and the supervisors. Also, confidentiality of the data was maintained by

keeping the data in password protected computers and questionnaires did not indicate the name of the respondent for anonymity.

## **CHAPTER FOUR**

### **ANALYSIS, PRESENTATION, AND INTERPRETATION OF FINDINGS**

#### **4.1 Introduction**

This chapter contains the presentation, analysis and interpretation of findings. The presentation follows the order of the objectives, namely, to examine the relationship between financial literacy and financial inclusion; to examine the relationship between agent banking adoption and financial inclusion; to examine the effect of financial literacy, agent banking adoption on financial inclusion; and to examine the mediating effect of transaction costs in the relationship between financial literacy, agent banking adoption and financial inclusion.

#### **4.2 Response Rate**

The responses obtained were 192 out of 234 (82%). This was quite a good response and representative enough. The rest of the findings are based on these responses.

#### **4.3 Demographic Characteristics**

The study explored the characteristics of the respondents to tell their general and nature. These included; gender, age group, number of people in your household, number of years lived in this community, primary source of water, type of toilet facility, type of lighting, type of cooking fuel and ability to read and write. The responses obtained on this are presented in the table below.

**Table 4.1: Demographic Characteristics**

| <b>Gender</b>                                  | <b>Frequency</b> | <b>Percent</b> |
|------------------------------------------------|------------------|----------------|
| Male                                           | 109              | 56.8           |
| Female                                         | 83               | 43.2           |
| <b>Age group</b>                               | <b>Frequency</b> | <b>Percent</b> |
| 18-25                                          | 35               | 18.2           |
| 26-33                                          | 65               | 33.9           |
| 34-41                                          | 50               | 26.0           |
| 42-49                                          | 30               | 15.6           |
| 50+                                            | 12               | 6.3            |
| <b>Number of people in your household</b>      | <b>Frequency</b> | <b>Percent</b> |
| 5 Or Less                                      | 50               | 26.0           |
| 6-10                                           | 129              | 67.2           |
| More Than 10                                   | 13               | 6.8            |
| <b>Number of years lived in this community</b> | <b>Frequency</b> | <b>Percent</b> |
| 5 Years Or Less                                | 61               | 31.8           |
| 6-10 Years                                     | 110              | 57.3           |
| 11-15 Years                                    | 19               | 9.9            |
| More Than 15 Years                             | 2                | 1.0            |
| <b>Primary source of water</b>                 | <b>Frequency</b> | <b>Percent</b> |
| Piped Water System                             | 17               | 8.9            |
| Private Well                                   | 24               | 12.5           |
| Public Well                                    | 64               | 33.3           |
| Borehole                                       | 75               | 39.1           |
| River Or Stream                                | 12               | 6.3            |
| <b>Type of toilet facility</b>                 | <b>Frequency</b> | <b>Percent</b> |
| Individual Pit Latrine                         | 185              | 96.4           |
| Bush                                           | 7                | 3.6            |
| <b>Type of lighting</b>                        | <b>Frequency</b> | <b>Percent</b> |
| Paraffin Lantern                               | 30               | 15.6           |
| Small Kerosene Lamp                            | 107              | 55.7           |
| Firewood                                       | 31               | 16.1           |
| Other (Specify)                                | 5                | 2.6            |
| Electricity                                    | 19               | 9.9            |
| <b>Type of cooking fuel</b>                    | <b>Frequency</b> | <b>Percent</b> |
| Firewood                                       | 151              | 78.6           |
| Charcoal                                       | 24               | 12.5           |
| Paraffin                                       | 17               | 8.9            |
| <b>Are you able to read and write</b>          | <b>Frequency</b> | <b>Percent</b> |
| Yes                                            | 150              | 78.1           |
| No                                             | 42               | 21.9           |
| <b>Total</b>                                   | <b>192</b>       | <b>100.0</b>   |

**Source: Primary Data**

**Gender**

More males (57%) than females (43%) participated in the study. This is indicative of the fact that men were more inclined to embrace the issues to do with financial inclusion compared to females. This also means that females need to be looked at more keenly to improve financial inclusion levels.

**Age group**

All age groups participated into the study. This means that issues to do with financial inclusion attract people of all age groups. However, the most dominant age groups were 26-33 (33.9%) and 34-41 (26.0%). This shows that all age groups embrace financial inclusion and related issues. As such, financial inclusion related programmes continue to attract people regardless of their age.

**Number of people in your household**

Results revealed that most families were big with 6 to 10 people (67%) but a few had more than 10 people (7%). This means that with such a big family size, there was a possibility of straining the resources and need for financial aid where financial inclusion would be so relevant. Big families constrain savings and as such smaller families may allow for savings as a means of increasing financial inclusion.

**Number of years lived in this community.**

Most respondents had been in the community for quite a long time, with those who had spent 6 to 10 years being the majority (57%), followed those who had spent only 5 or less years (32%). This confirms that the respondents were residents of the targeted areas and could give the right account on the subject matter in the context of their residences.

**Primary source of water**

Water was drawn from various sources, with the most dominant being the borehole (39%) , followed by public wells (33%). This shows that the community had water sources to serve them and largely freely.

**Type of toilet facility**

The most common toilet facility in use was the Individual Pit Latrine (96%) while some sections (4%) still depended on the bush as a latrine. Since this was self-reporting, the percentage could have been even higher, but the 4% is enough to suggest that there is still a problem in this regard.

**Type of lighting**

The lighting was still traditional with Small Kerosene Lamp (56%), Firewood (16%) being dominant and with electricity at only 10%. This shows that the community was still backward in terms of sources of lighting.

**Type of cooking fuel**

Related to the above, cooking fuel was mostly firewood (79%), followed by charcoal (13%) and paraffin (9%). It was noted that even those who had electricity were hesitant to use it for cooking as this was perceived as being comparatively expensive given the alternatives in place of charcoal and firewood.

**Ability to read and write**

The results revealed that majority (78%) were able to read and write while 22% struggled to read and write. This according to evidence obtained verbally was a significant improvement as the situation was worse some 20 years back.

**4.4 Summary descriptive**

In this section, a summary of the descriptive results on the variables and their constructs are presented as mean and standard deviation.

**4.4.1 Agency Banking Adoption**

Agency banking adoption is explored in the section below to tell how it was in the context of the study area of Eastern Uganda. The mean is interpreted where; 1=strongly disagree, 2=disagree, 3=not sure, 4=agree, and 5= strongly agree. The standard deviation on the other hand is used to

tell the level of convergence or divergence with the mean, where the higher the standard deviation, the higher the divergence in the opinions.

**Table 4.2: Agency Banking Adoption**

| <b>Descriptive Statistics</b>                                                   | <b>Mean</b> | <b>Std. Deviation</b> |
|---------------------------------------------------------------------------------|-------------|-----------------------|
| <b>Agency Banking Adoption</b>                                                  |             |                       |
| <b>Performance Expectancy</b>                                                   |             |                       |
| I find agent banking useful in my banking activities.                           | 4.2031      | .57468                |
| Using agent banking enables me to accomplish banking activities more quickly    | 4.0990      | .42880                |
| Using agent banking increases my banking speeds                                 | 4.2552      | .48266                |
| If I use agent banking, I will increase my chances of getting a better service. | 4.3490      | .48872                |
| <b>Global Mean</b>                                                              | 4.227       | 0.494                 |
| <b>Effort Expectancy</b>                                                        |             |                       |
| My interaction with agent banking is clear and understandable                   | 3.3958      | .73048                |
| I am skillful at using agent banking                                            | 3.3333      | .98328                |
| Learning to use agent banking is easy for me                                    | 3.7292      | .93203                |
| I find it easy to get agent banking to do what I want it to do                  | 4.1458      | .56936                |
| <b>Global Mean</b>                                                              | 3.651       | 0.804                 |
| <b>Facilitating Conditions</b>                                                  |             |                       |
| I have the resources necessary to use agent banking                             | 4.0313      | .56888                |
| I have the knowledge necessary to use agent banking                             | 3.6146      | .62863                |
| Agent banking is compatible with other banking systems I use                    | 4.2760      | .44821                |
| Agents are available for assistance with agent banking difficulties             | 4.3438      | .61104                |
| <b>Global Mean</b>                                                              | 4.066       | 0.564                 |
| <b>Social Influence</b>                                                         |             |                       |
| People who are important to me think that I should use agent banking            | 4.4479      | .49858                |
| People who influence my behaviour think I should use agent banking              | 4.3542      | .47951                |
| The older people in my society are helpful in the use of agent banking.         | 3.7031      | .76603                |
| In general, the banks have supported the use of agent banking.                  | 4.1302      | .67002                |
| <b>Global Mean</b>                                                              | 4.159       | 0.604                 |

**Source: Primary Data**

### **Agency Banking Adoption**

Agency banking adoption was researched in terms of performance expectancy, effort expectancy, facilitating conditions and social influence. Agency Banking Adoption results (mean=4.026, SD=0.617) show that there was agency banking adoption, and the moderate standard deviation confirms the convergence of opinions on the same. This means there was a

good state of agency banking to support financial inclusion in the districts studied. Performance expectancy results (mean=4.227, SD=0.494) indicate that there was high performance expectancy and this is further confirmed by the low standard deviation, thus converge of opinions on the same. Therefore, there was a good level of performance expectancy to support financial inclusion. Effort Expectancy results (mean=3.651, SD=0.804) show that there was a high degree of effort expectance. As such the effort expectancy that existed was good enough to support financial inclusion. However, the large standard deviation indicates large divergence in the opinions hence gaps in effort expectancy. Effort expectancy was thus good enough to support financial inclusion. Facilitating Conditions results (mean=4.066, SD=0.564) indicate that the facilitating conditions existed and in a good state. This was further confirmed by the moderate standard deviation, indicating some divergence in opinions but not being outstanding. This means there were satisfactory facilitating conditions. Social influence results (mean=4.159, SD=0.604) indicated that there was social influence, but with a high standard deviation, hence society may influence but not so significantly the adoption of agency banking. The society was thus influencing individuals take one services promoting financial inclusion.

#### **4.4.2 Financial Literacy**

Financial literacy is explored in the section below to tell how it was in the context of the study area of Eastern Uganda. The mean is interpreted where; 1=strongly disagree, 2=disagree, 3=not sure, 4=agree, and 5= strongly agree. The standard deviation on the other hand is used to tell the level of convergence or divergence with the mean, where the higher the standard deviation, the higher the divergence in the opinions.

**Table 4.3: Financial Literacy**

| <b>Descriptive Statistics</b>                                                                            | <b>Mean</b> | <b>Std.<br/>Deviation</b> |
|----------------------------------------------------------------------------------------------------------|-------------|---------------------------|
| <b>Financial Literacy</b>                                                                                |             |                           |
| <b>Attitude</b>                                                                                          |             |                           |
| I am always interested in financial issues.                                                              | 4.4635      | .49997                    |
| I feel my money is safer when I keep it in the bank.                                                     | 3.9583      | .62104                    |
| I compare prices before making choices on financial products/services.                                   | 4.4219      | .49515                    |
| I feel very interested in dealing with formal financial institutions.                                    | 4.3698      | .48401                    |
| I find it more satisfying to save money for long term than to spend it.                                  | 4.2188      | .41448                    |
| <b>Global Mean</b>                                                                                       | 4.286       | 0.503                     |
| <b>Knowledge</b>                                                                                         |             |                           |
| I am financially capable of making good use of financial products/services.                              | 4.2552      | .63285                    |
| I have the ability to plan for savings well because I ably estimate my monthly incomes and expenditures. | 4.2187      | .53570                    |
| I have the ability to prepare my personal budgets.                                                       | 3.3906      | .80477                    |
| I know what is required of me to live a financially healthy life.                                        | 4.3177      | .46680                    |
| I have read several materials to sharpen my understanding of financial basics.                           | 2.7344      | 1.18333                   |
| I have a savings plan.                                                                                   | 4.1094      | .57296                    |
| I know where to invest my money profitably.                                                              | 3.9635      | .61714                    |
| <b>Global Mean</b>                                                                                       | 3.856       | 0.688                     |
| <b>Skills</b>                                                                                            |             |                           |
| I have the ability to accurately determine benefits from financial dealings.                             | 4.2135      | .55222                    |
| I have the ability to accurately determine costs from financial dealings.                                | 4.1615      | .65520                    |
| I have the ability to compute interest rates.                                                            | 4.1719      | .66051                    |
| I have ability to analyze my personal finances.                                                          | 4.1250      | .53662                    |
| I am able to solve my financial problems within my financial constraints.                                | 3.9427      | .56220                    |
| I plan for my finances always.                                                                           | 4.3854      | .48797                    |
| <b>Global Mean</b>                                                                                       | 4.167       | 0.576                     |

**Source: Primary Data****Financial Literacy**

Financial Literacy was explored in terms of attitude, knowledge, skills and financial literacy. Financial literacy results (mean=4.103, SD=0.589) indicated that there was financial literacy generally and with a moderate standard deviation. This means that some sections of the respondents had divergent opinions on the same. Generally, there was a good state of financial literacy to propel financial inclusion.

Results on attitude (mean=4.286, SD=0.503) show that there was a positive attitude generally, but with a moderate divergence in opinions given the standard deviation score. This means the available attitudes were good enough to support financial inclusion.

It is also noted that the results on knowledge (mean=3.856, SD=0.688) indicate a fairly good level of knowledge, much as the high standard deviation seems to lower this position. Therefore, this means there was a fairly good level of knowledge thus good enough to support financial inclusion. The results on skills (mean=4.167, SD=0.576) indicate that people were skilled enough notwithstanding the moderate standard deviation, suggesting otherwise. The skills possessed were adequate to help financial inclusion to be realized.

#### **4.4.3 Financial Inclusion**

Financial inclusion is explored in the section below to tell how it was in the context of the study area of Eastern Uganda. The mean is interpreted where; 1=strongly disagree, 2=disagree, 3=not sure, 4=agree, and 5= strongly agree. The standard deviation on the other hand is used to tell the level of convergence or divergence with the mean, where the higher the standard deviation, the higher the divergence in the opinions.

**Table 4.4: Financial Inclusion**

| <b>Descriptive Statistics</b>                                                                               | <b>Mean</b> | <b>Std. Deviation</b> |
|-------------------------------------------------------------------------------------------------------------|-------------|-----------------------|
| <b>Financial Inclusion</b>                                                                                  |             |                       |
| <b>Welfare</b>                                                                                              |             |                       |
| The financial services offered by the bank has led to improvement in our nutrition.                         | 2.6979      | .77419                |
| The financial services offered by the bank has led to improved access to health services in this household. | 3.5833      | .64988                |
| The financial services offered by the bank has me to pay school fees.                                       | 3.5573      | .62818                |
| I feel my overall life has improved with more access to financial services.                                 | 3.6667      | .61681                |
| I am in a better position to meet basic needs after being part of the money economy.                        | 4.0104      | .62235                |
| I am better off financially compared to my colleagues who have not been part of the money economy.          | 3.8229      | .70145                |
| <b>Global Mean</b>                                                                                          | 3.556       | 0.665                 |
| <b>Usage</b>                                                                                                |             |                       |
| I normally keep my savings with the bank.                                                                   | 4.2135      | .63181                |
| I can access loan facilities provided by the bank with ease.                                                | 4.1875      | .54748                |
| The loan product provided by the bank suits my needs.                                                       | 4.1875      | .41723                |
| The terms and conditions on use of loans provided by the bank is favorable to me.                           | 3.1198      | .69495                |
| There is a high variety of products and services offered by the bank that our household can use             | 4.1042      | .53131                |
| I use the bank for advice on my financial plans.                                                            | 4.1667      | .54469                |
| <b>Global Mean</b>                                                                                          | 3.997       | 0.561                 |
| <b>Access</b>                                                                                               |             |                       |
| The financial services provided by the bank is safe.                                                        | 4.3073      | .46258                |
| The initial account opening fees charged by the bank is affordable.                                         | 4.3750      | .48539                |
| The cost of making a trip to the bank is affordable.                                                        | 4.9844      | 5.16885               |
| The bank system always functions without fail.                                                              | 3.9844      | .68244                |
| There is a usable access road leading to the nearest financial institution/bank Agent.                      | 4.6510      | .47789                |
| I live within less than 1km of an ATM/Bank Agent that I can easily visit to access my account.              | 3.8594      | .68340                |
| <b>Global Mean</b>                                                                                          | 4.360       | 1.327                 |

**Source: Primary Data**

### **‘Financial Inclusion**

Financial inclusion was explored in terms of welfare, usage and access. Financial Inclusion results (mean=3.804, SD=0.636) indicate that there a fair position of financial inclusion. The state of financial inclusion was therefore good enough. Welfare results (mean=3.556, SD=0.665) show a faint state of welfare changes coming from agency banking adoption. This position is supported by the large standard deviation, casting doubts on the welfare changes being registered in the community. The presence of financial inclusion was thus not good enough to cause significant changes in the state of welfare.

The results on usage (mean=3.997, SD=0.561) indicate fairly good state of usage and this is confirmed by the moderate standard deviation, thus some contrast in the position on this. It is thus proved that people were increasingly embracing services leading to financial inclusion. Results on access (mean=3.8594, SD=.68340) indicate that the services were accessible, but with gaps given the high standard deviation. This means that there were gaps in access although the overall picture was good.

#### **4.4.4 Transaction Costs**

Transaction costs are explored in the section below to tell how it was in the context of the study area of Eastern Uganda. The mean is interpreted where; 1=strongly disagree, 2=disagree, 3=not sure, 4=agree, and 5= strongly agree. The standard deviation on the other hand is used to tell the level of convergence or divergence with the mean, where the higher the standard deviation, the higher the divergence in the opinions. The responses obtained are presented as mean and standard deviation and interpreted as explained earlier above in 4.1.

**Table 4.5: Transaction Costs**

| <b>Descriptive Statistics</b>                                                                | <b>Mean</b> | <b>Std. Deviation</b> |
|----------------------------------------------------------------------------------------------|-------------|-----------------------|
| <b>Transaction Costs</b>                                                                     |             |                       |
| <b>Bargaining Costs</b>                                                                      |             |                       |
| I take time to agree with the costs levied on agent banking.                                 | 2.8750      | .76233                |
| It is costly to me when there are delays or failures to reach an agreement in agent banking. | 4.2448      | .54865                |
| It is costly for my agent to monitor and enforce our trade agreements.                       | 4.2135      | .54266                |
| The coordination failures among agents is visible.                                           | 2.9219      | .57808                |
| There is a high cost of obtaining information.                                               | 3.1094      | .65002                |
| <b>Global Mean</b>                                                                           | 3.473       | 0.616                 |
| <b>Opportunity Costs</b>                                                                     |             |                       |
| I think it is beneficial to use agent banking as compared to other means.                    | 4.2969      | .48039                |
| Use of agent banking is cheaper than the rest of the avenues.                                | 4.5312      | .51068                |
| I see indirect benefits like convenience, security resulting from use of agent banking.      | 4.5521      | .53895                |
| I think I save on costs when I use agent banking.                                            | 4.2031      | .61855                |
| <b>Global Mean</b>                                                                           | 4.396       | 0.537                 |
| <b>Search Costs</b>                                                                          |             |                       |
| I spend some money to reach an agent of the bank.                                            | 2.2135      | .64817                |
| Reaching to an agent requires some time.                                                     | 3.3594      | .86890                |
| I put some level of energy to reach a banking agent.                                         | 3.4896      | .92090                |
| It is not easy to identify a banking agent.                                                  | 2.2760      | .77382                |
| <b>Global Mean</b>                                                                           | 2.835       | 0.803                 |
| <b>Policing/Enforcement Costs</b>                                                            |             |                       |
| Tax as an enforcement fee is quite inhibitive to my usage of agent banking.                  | 2.8073      | .85575                |
| Agents tend to subject clients to fines in case of mistakes.                                 | 2.3698      | .59114                |
| When agents make mistakes, there is a way of making them pay clients financially.            | 4.2708      | .47951                |
| Banks charge me unreasonable fees through their agents.                                      | 2.3229      | .67093                |
| <b>Global Mean</b>                                                                           | 2.943       | 0.649                 |

**Source: Primary Data****Transaction Costs**

Transaction costs were explored in terms of bargaining costs, opportunity costs, search costs and policing/enforcement costs. Results on transaction costs (mean=3.412, SD=0.651) revealed that these costs were having limited or negligible impact. This was however contrasted by some sections owing to the high standard deviation. The transaction costs were thus not so heavy to interfere with financial inclusion.

Bargaining costs results (mean=3.473, SD=0.616) indicate that these were largely not felt, but this position was contrasted by some elements, hence, the high standard deviation. This means that the bargaining cost did not present a serious hindrance to the financial inclusion.

The results on opportunity costs (mean=4.396, SD=0.537) show that indeed there were opportunity costs. This position was still contrasted given the moderate standard deviation. This means that using agency banking to attain financial inclusion involved visible and significant opportunity costs, that is, what users had to forego to take on the financial inclusion related services.

Search costs results (mean=2.835, SD=0.803) show that the search costs were negligible but this position is contrasted by some elements as seen from the high standard deviation. This means that there were search costs but were not so vital in affecting the final behavior of using the services provided by the agents leading to financial inclusion.

Policing/enforcement costs results (mean=2.943, SD=0.649) reveal that these costs were just negligible and not acknowledged, much as this position was contrasted by some elements, hence the large standard deviation. This means that the clients confirmed that the enforcement costs incurred were not strong enough to deter the processes and activities leading to better financial inclusion.

## **4.5 Inferential Statistics**

### **4.5.1 Correlation**

The spearman rank correlation was used to establish the direction and strength of the association between the study variables. Spearman's rank correlation measures the strength and direction of association between two ranked variables. It basically gives the measure of monotonicity of the relation between two variables i.e. how well the relationship between two variables could be represented using a monotonic function. In the table below, the results of the correlation are presented.

**Table 4.6: Correlation between Agency Banking Adoption, Financial Literacy, Financial Inclusion Transaction Costs**

| Correlations                                                |       |       |      |   |
|-------------------------------------------------------------|-------|-------|------|---|
|                                                             | 1     | 2     | 3    | 4 |
| Agency Banking Adoption (1)                                 | 1     |       |      |   |
| Financial Literacy (2)                                      | -.023 | 1     |      |   |
| Financial Inclusion (3)                                     | .154* | .071  | 1    |   |
| Transaction Costs (4)                                       | -.133 | -.097 | .120 | 1 |
| *. Correlation is significant at the 0.05 level (2-tailed). |       |       |      |   |

Source: primary data

#### **4.5.1 Agency banking adoption and financial inclusion in Eastern Uganda**

In the first objective explored the relationship between agent banking adoption and financial inclusion in Eastern Uganda. The results revealed that there is a positive and significant relationship between agent banking adoption and financial inclusion in Eastern Uganda ( $r=.154^*$ ,  $P<0.05$ ). This means that positive changes in agent banking are likely to be associated with enhanced financial inclusion in Eastern Uganda other factors held constant. Therefore, improvements in performance expectancy, effort expectancy, facilitating conditions and social influence are likely to be associated with improvements in financial inclusion in Eastern Uganda.

#### **4.5.1 Financial literacy and financial inclusion in Eastern Uganda**

The second objective explored relationship between financial literacy and financial inclusion in Eastern Uganda. Results revealed a positive but insignificant relationship between financial literacy and financial inclusion in Eastern Uganda ( $r=.071$ ,  $P>0.05$ ). This implies that improved financial literacy is likely to lead to increased financial inclusion, but these increases would be not significant as the association between financial literacy and financial inclusion is not significant. As such, improvements in attitude, knowledge and skills are important in the effort to improve on financial inclusion, but do not sufficiently explain what needs to be done to improve on financial inclusion in Eastern Uganda.

#### **4.5.1 Transaction costs and financial inclusion in Eastern Uganda**

The third objective explored relationship between transaction costs and financial inclusion in Eastern Uganda. Results revealed a positive but insignificant relationship between transaction

costs and financial inclusion in Eastern Uganda ( $r=.120$ ,  $P>0.05$ ). This implies that increased transaction costs would be associated with better financial inclusion in Eastern Uganda other factors constant. Whereas clients would be scared of the costs initially, if these are followed by improved services, the impact would be that the slight cost increments would not significantly affect financial inclusion as long as they were tallying with the services provided.

#### 4.5.2 Regression

The regression analysis was run to find out the ability of the independent variables to predict the changes or variance in the dependent variable. The results obtained are presented in the table below.

**Table 4.7: Regression between agent banking adoption and financial inclusion in Eastern Uganda**

| Model Summary                                                                             |                         |                |                             |                            |                           |          |       |                   |               |      |
|-------------------------------------------------------------------------------------------|-------------------------|----------------|-----------------------------|----------------------------|---------------------------|----------|-------|-------------------|---------------|------|
| Model                                                                                     | R                       | R Square       | Adjusted R Square           | Std. Error of the Estimate | Change Statistics         |          |       |                   |               |      |
|                                                                                           |                         |                |                             |                            | R Square Change           | F Change | df1   | df2               | Sig. F Change |      |
| 1                                                                                         | .228 <sup>a</sup>       | .052           | .037                        | .32555                     | .052                      | 3.421    | 3     | 188               | .018          |      |
| a. Predictors: (Constant), Transaction Costs, Financial Literacy, Agency Banking Adoption |                         |                |                             |                            |                           |          |       |                   |               |      |
| ANOVA <sup>a</sup>                                                                        |                         |                |                             |                            |                           |          |       |                   |               |      |
| Model                                                                                     |                         | Sum of Squares |                             | df                         | Mean Square               |          | F     | Sig.              |               |      |
| 1                                                                                         | Regression              | 1.088          |                             | 3                          | .363                      |          | 3.421 | .018 <sup>b</sup> |               |      |
|                                                                                           | Residual                | 19.925         |                             | 188                        | .106                      |          |       |                   |               |      |
|                                                                                           | Total                   | 21.012         |                             | 191                        |                           |          |       |                   |               |      |
| a. Dependent Variable: Financial Inclusion                                                |                         |                |                             |                            |                           |          |       |                   |               |      |
| b. Predictors: (Constant), Transaction costs, Financial Literacy, Agency Banking Adoption |                         |                |                             |                            |                           |          |       |                   |               |      |
| Coefficients <sup>a</sup>                                                                 |                         |                |                             |                            |                           |          |       |                   |               |      |
| Model                                                                                     |                         |                | Unstandardized Coefficients |                            | Standardized Coefficients | t        | Sig.  | Correlations      |               |      |
|                                                                                           |                         |                | B                           | Std. Error                 | Beta                      |          |       | Zero-order        | Partial       | Part |
| 1                                                                                         | (Constant)              |                | .784                        | 1.043                      |                           | .751     | .454  |                   |               |      |
|                                                                                           | Agency Banking Adoption |                | .346                        | .141                       | .176                      | 2.456    | .015  | .154              | .176          | .174 |
|                                                                                           | Financial Literacy      |                | .186                        | .149                       | .089                      | 1.252    | .212  | .071              | .091          | .089 |
|                                                                                           | Transaction Costs       |                | .304                        | .143                       | .152                      | 2.117    | .036  | .120              | .153          | .150 |
| a. Dependent Variable: Financial Inclusion                                                |                         |                |                             |                            |                           |          |       |                   |               |      |

Source: primary data

To determine the joint effect of financial literacy, agent banking adoption on financial inclusion in Eastern Uganda, the study run the regression analysis. Results indicated that the model fits the relationship ( $F=3.421$ ,  $Sig.=.018b$ ). It was also established that Financial literacy, agent banking adoption (and transaction costs) predict 3.7% of the variance in financial inclusion in Eastern Uganda (Adjusted R Square  $=.037$ ). As such, 96.3% of the variance is explained by other factors. Agency Banking Adoption ( $Beta=.176$ ,  $P=.015$ ) and Transaction Costs ( $Beta=.152$ ,  $P=.036$ ) were noted to be significant predictors of financial inclusion in Eastern Uganda. Financial Literacy ( $Beta=.089$ ,  $p=.212$ ) is seen to be an insignificant predictor of the variance in financial inclusion in Eastern Uganda.

#### **4.5.3 Mediation Tests**

**The mediation tests were done to answer the fourth and fifth objectives, that is;**

Objective four: The mediating effect of transaction costs in the relationship between agency banking adoption and financial inclusion in Eastern Uganda

Objective five: The mediating effect of transaction costs in the relationship between financial literacy and financial inclusion in Eastern Uganda

#### **Conditions for mediation**

Before I tested for mediation, I first analyzed the data to see whether the four conditions of Baron and Kenny (1986) were met.

**Step 1:** Show that the causal variable is correlated with the outcome.

Financial literacy was noted to influence financial inclusion in Eastern Uganda ( $r=.071$ ,  $P>0.05$ )

Agency banking was noted to influence financial inclusion in Eastern Uganda ( $r=.154^*$ ,  $P<0.05$ )

**Step 2:** Show that the causal variable is correlated with the mediator.

Financial literacy and transaction costs ( $r=-.097$ ,  $P>0.05$ )

Agency banking and transaction costs ( $r=-.133$ ,  $P>0.05$ )

**Step 3:** Show that the mediator affects the outcome variable.

Transaction costs was established to influence financial inclusion in Eastern Uganda ( $r=.120$ ,  $P>0.05$ )

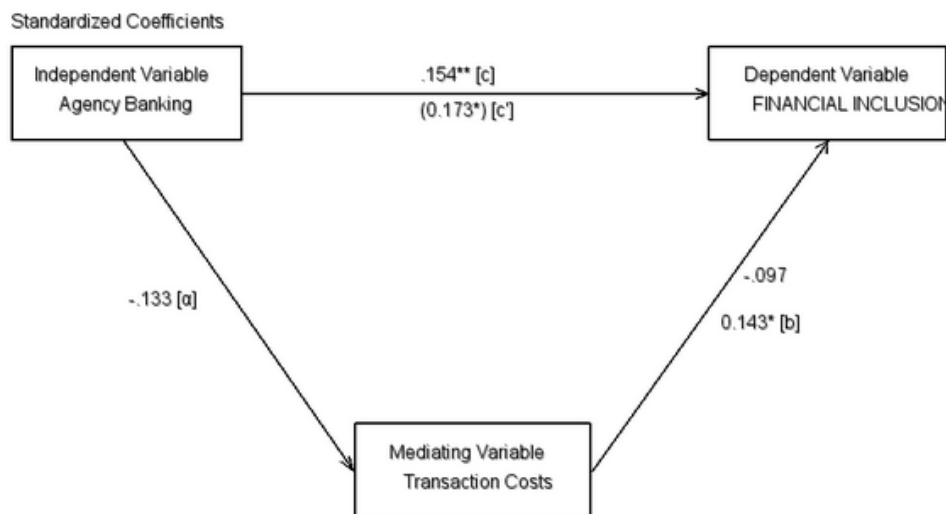
**Step 4:** To establish that M completely mediates the X-Y relationship.

Using mediation test below, transaction costs (M) was tested to determine if it mediates the relationship between financial literacy, Agency banking and financial inclusion in Eastern Uganda.

#### 4.5.3.1 The mediating effect of transaction costs in the relationship between agency banking adoption and financial inclusion in Eastern Uganda

##### Results:

| Significance of Mediation           |          | Null                               |
|-------------------------------------|----------|------------------------------------|
| Sobel z-value                       | -1.35613 | $p = 0.175058$                     |
| 95% Symmetrical Confidence Interval |          |                                    |
| Lower                               | -.09162  |                                    |
| Upper                               | .01668   |                                    |
| Unstandardized indirect effect      |          |                                    |
| a*b                                 | -.03747  |                                    |
| se                                  | .02763   |                                    |
| Effect size Measures                |          |                                    |
| Standardized Coefficients           |          | R <sup>2</sup> Measures (Variance) |
| Total:                              | .154     | .024                               |
| Direct:                             | .173     | .504                               |
| Indirect:                           | -.01     | -.48                               |
| Indirect to Total Ratio:            | -.12     | 0000                               |



**Source:** primary data with adoption of guidelines from <https://psychology.victoria.ac.nz/medgraph/onlinecomp.php>

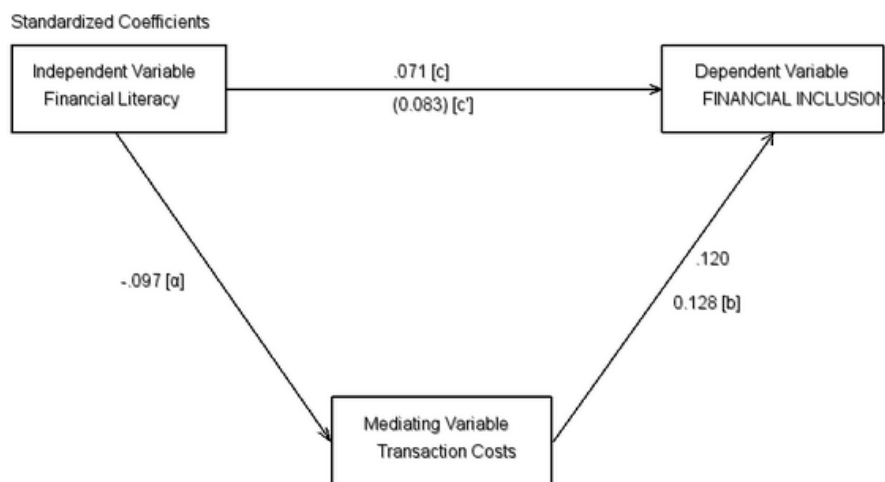
Figure 4.1: medgraph showing mediating effect of transaction costs in the relationship between agency banking adoption and financial inclusion in Eastern Uganda

From the above diagram, the mediation effect is given by the indirect effect (-0.01) at a significance level of 0.175. This presents transaction costs as an insignificant mediator in the relationship between agency banking adoption and financial inclusion in Eastern Uganda. From the above figure, we see that transaction costs is a partial mediator of the relationship between agency banking adoption and financial inclusion in Eastern Uganda. This implies that transaction costs are a conduit through which banks that can be able to achieve financial inclusion. In real terms, banking agents increase financial inclusion, however the financial inclusion attained when there are fair transaction costs increases but insignificantly. This proves that transactions costs are a weak mediator in the relationship between agency banking adoption and financial inclusion in Eastern Uganda. If there are two agents, one using agency banking alone to achieve financial inclusion and another bank using both agency banking and minimising transaction costs to attain financial inclusion, an agent who uses both agency banking and transaction cost minimisation will gain slightly more financial inclusion since transaction costs have been proved to be a weak mediator.

#### 4.5.3.2 The mediating effect of transaction costs in the relationship between financial literacy and financial inclusion in Eastern Uganda

##### Results:

|                                     |                           |                                    |
|-------------------------------------|---------------------------|------------------------------------|
| Significance of Mediation           |                           | Null                               |
| Sobel z-value                       | -1.073457                 | $p = 0.283066$                     |
| 95% Symmetrical Confidence Interval |                           |                                    |
| Lower                               | -.07307                   |                                    |
| Upper                               | .02135                    |                                    |
| Unstandardized indirect effect      |                           |                                    |
| a*b                                 | -.02586                   |                                    |
| se                                  | .02409                    |                                    |
| Effect size Measures                |                           |                                    |
|                                     | Standardized Coefficients | R <sup>2</sup> Measures (Variance) |
| Total:                              | .071                      | .005                               |
| Direct:                             | .083                      | .006                               |
| Indirect:                           | -.01                      | -.00                               |
| Indirect to Total Ratio:            | -.17                      | -.38                               |



**Source;** primary data with adoption of guidelines from <https://psychology.victoria.ac.nz/medgraph/onlinecomp.php>

Figure 3.2: medgraph showing mediating effect of transaction costs in the relationship between financial literacy and financial inclusion in Eastern Uganda

From the above diagram, the mediation effect is given by the indirect effect (-0.01) at a significance level of 0.283. This presents transaction costs as an insignificant mediator in the relationship between financial literacy and financial inclusion in Eastern Uganda. From the above figure, we see that transaction costs is a partial mediator of the relationship between financial literacy and financial inclusion in Eastern Uganda. This implies that transaction costs are a conduit through which banks that can be able to achieve financial inclusion. In real terms,

financial literacy increases financial inclusion, however the financial inclusion attained when there are fair transaction costs increases but insignificantly. This proves that transactions costs are a weak mediator in the relationship between financial literacy and financial inclusion in Eastern Uganda. If there is financial literacy as a means of improving financial inclusion, the gains obtained will be less than the gains in financial inclusion obtained if there was both financial literacy and harmonized transaction costs, although the gains will be insignificant.

## **CHAPTER FIVE**

### **DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter contains the summary and discussion of findings, conclusion and recommendations. The presentation is in accordance with the study objectives namely, to examine the relationship between financial literacy and financial inclusion; to examine the relationship between agent banking adoption and financial inclusion; to examine the effect of financial literacy, agent banking adoption on financial inclusion; and to examine the mediating effect of transaction costs in the relationship between financial literacy, agent banking adoption and financial inclusion

#### **5.2 Discussion of Findings**

##### **5.2.1 Agency banking adoption and financial inclusion in Eastern Uganda**

The results revealed that there is a positive and significant relationship between agent banking adoption and financial inclusion in Eastern Uganda ( $r=.154^*$ ,  $P<0.05$ ). This means that positive changes in agent banking are likely to be associated with enhanced financial inclusion in Eastern Uganda. The results revealed Agency Banking Adoption ( $\text{Beta} = .176$ ,  $P=.015$ ) is a significant predictor of financial inclusion in Eastern Uganda. These results compare well with Kariuki and Namusonge, (2016) who reveal that banks can expand access to financial services especially to the unbanked population in the rural areas where it has been costly to open a branch in those areas. In relation to theory, according to Venkatesh et al. (2003), UTAUT proposed four main factors that influence intention and usage of information technology, that is performance expectancy; effort expectancy; facilitating conditions; social influence. The theory assumes that behavioural, cognitive and environmental factors have an interactive effect on individuals' behaviour (Bandura, 2001). Financial inclusion reflects behavioral, cognitive and environmental factors interacting to affect how individuals respond to financial inclusion initiatives.

Performance expectancy is seen to be improving financial inclusion in Eastern Uganda through agents being useful to the clients; enabling clients to accomplish banking activities more quickly; faster and better services delivery. All these are avenues through which performance expectancy has enhanced financial inclusion in Eastern Uganda. In the same way, Venkatesh et al. (2003) in the UTAUT proposed performance expectancy, that is the degree to which an individual believes that using the system will help him or her to attain gains in job performance.

Effort Expectancy is seen to be improving financial inclusion in Eastern Uganda in such ways as; making banking clearer and more understandable; empowering customers with skills for self-help in banking affairs; learning to use agent banking; making it easy for clients to get agent banking to do what they want it to do. In all these ways, effort expectancy is seen to be improving financial inclusion. In the same way, Venkatesh et al. (2003) in the UTAUT proposed effort expectancy, the degree of ease associated with the use of the system as enabling adoption. In addition, Lotto (2016) posits that greater geographical coverage brought about by agent banking is a stronger promoter of financial inclusion. As such, when agents move closer, they provide enhancements in the effort expectancy to encourage financial inclusion.

Facilitating conditions are seen to be improving financial inclusion in Eastern Uganda. Once clients get the resources necessary to use agent banking, their financial inclusion improves. In addition, possession of knowledge necessary to use agent banking improves financial inclusion of clients. Also, where agent banking is compatible with other banking systems in use, financial inclusion will thrive. Another way is where agents provide customer support where there are banking difficulties. All these improve on financial inclusion through agent banking adoption. This is similar to what Venkatesh et al. (2003) proposes as facilitating conditions; that is the degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system. In the same way, Munoru (2015) found out that agent banking had a positive and insignificant relationship with the financial inclusion and that there was no causality between the variables.

Social Influence is seen to be improving financial inclusion in Eastern Uganda. This has been seen in terms of important people advocating for agent banking and encouraging clients to do the

same. There are also influencers and elders who all have positive word of mouth for agent banking and thus help it get routed and finally enhance financial inclusion. This was the fourth element proposed in Venkatesh et al. (2003) as the degree to which an individual perceives that other believe that he or she should use the new system.

### **5.2.2 Financial literacy and financial inclusion in Eastern Uganda**

Results revealed a positive but insignificant relationship between financial literacy and financial inclusion in Eastern Uganda ( $r=.071$ ,  $P>0.05$ ). This implies that intensification of financial literacy would be associated with better odds for financial inclusion, but these would not be so pronounced given the insignificant association between the two variables. Financial literacy (Beta=.089,  $p=.212$ ) was revealed to be an insignificant predictor of the variance in financial inclusion in Eastern Uganda. These results compare well with Lyons and Kass-Hanna (2019) who found that higher levels of financially literate people are more likely to be engaged in positive savings behaviors.

Attitude positively contributes to financial inclusion in Eastern Uganda as it plays a role in improving interest in financial issues, making customers feel that money is safer when kept in the bank. It also works on the perception that agent banking is cheap, a feeling that one is dealing with a formal entity and providing for long term savings. These results connect well with theory indicating that, every human being is always in search of validation especially when it comes to internalizing or accepting something new. They need to feel that what they are doing is acceptable among their networks (Rogers, 2003; Skog, 2012). With a positive image, one can be confident in using new technology for the long term. Mazman et al. (2009) note that compliance was influenced by approval of the social system as well as identification measured by self-fulfillment and internalization. As such, how people embrace agency banking and consider the transaction costs as well as the levels of literacy combine to influence the financial inclusion levels attained.

Knowledge is powerful as it improves financial inclusion in Eastern Uganda indirectly. This is achieved through ensuring good use of financial products or services. It also ensures that there is an ability to plan for savings well and forecasting monthly incomes and expenditures. Knowledge is also seen as important in preparing my personal budgets. Knowledge also keeps

track of requirements for financially healthy life. Sharpening of an understanding of financial basics and profitable investments, all call for good knowledge thus making it an enabler of financial inclusion in Eastern Uganda. These findings are comparable with Mindra and Moya, (2017) and Muasya and Kerongo (2015) who reiterate that financial literacy can facilitate effective financial services use, which is critical for financial inclusion.

Skills are important in enabling financial inclusion in Eastern Uganda. They are helpful in enhancing the ability to compute interest rates; ability to analyze personal finances; accurately determining costs from financial dealings; benefits from financial dealings; ability to solve financial problems within the financial constraints; planning for finances always. The possession of such skills translates into better abilities to be financially included. These findings rhyme well with Lusardi and Mitchell (2017) who note that all the elements of financial literacy are important in shaping financial inclusion and that poor households with good level of financial literacy are likely to be better placed than those without skills and knowledge to manage their financial affairs prudently.

Also, as banks promote financial literacy in terms of improving client's attitude, knowledge and skills through trainings, online blogs, e-books and the like, this improves the changes of seeing clients getting financial inclusion. These findings can be compared with the issues raised in the social learning theory; humans need to feel that what they are doing is acceptable among their networks (Rogers, 2003). With a positive image, one can be confident in using new technology for the long term.

### **5.2.3 Transaction costs and financial inclusion in Eastern Uganda**

Transaction Costs (Beta=.152, P=.036) were noted to be significant predictors of financial inclusion in Eastern Uganda. In relation with literature, high transactional operational costs of financial services like branch opening, employee training, technological costs, etc. are other reasons for financial exclusion in the developing nation of Bangladesh (Nisha & Rifat, 2017). Wairimu (2020) citing Mwando (2013) note that the cost of transactions is closely related to the number of transactions and the advancement that has been made in making agent banking efficient.

Bargaining costs exhibited positive but insignificant association with financial inclusion in Eastern Uganda (.054). When clients have to spent time looking for where to get the services at the least cost, in the process of bargaining, the net effect is that they end up being constrained from enjoying the services. This in essence undermines their financial inclusion efforts.

Opportunity costs exhibited a negative association with financial inclusion in Eastern Uganda (-.006). As such, when what clients must forego to become financially included increases, then their decision to use the services is negatively affected, thus becoming a negative force.

Search costs exhibited positive and significant association with financial inclusion in Eastern Uganda (.190\*\*). This means that clients were okay with looking for the services and using them, hence becoming a positive thrust in their efforts to become financially included. Enforcement costs exhibited a negative association with financial inclusion in Eastern Uganda (-.054). The above results are linked to theories on transaction cost where Williamson (1991) notes that transaction cost theory predicts when the governance forms of hierarchies, markets, or hybrids (alliances) will be used. When transaction costs were low, buying the good or service on the market was the preferred option. Also, Ilya et al. (2021) further shows that bargaining costs, opportunity costs, search costs and policing enforcement costs are important in product adoption.

#### **5.2.4 The mediating effect of transaction costs in the relationship between agency banking adoption and financial inclusion in Eastern Uganda**

The mediation effect is given by the indirect effect (-0.01) at a significance level of 0.175. This presents transaction costs as an insignificant mediator in the relationship between agency banking adoption and financial inclusion in Eastern Uganda. Costs thus negatively affect the relationship between agency banking and financial inclusion. This implies that companies and agents who take note of the costs and lower them through being cost effective will have more clients joining hence becoming financially included. On the other hand, the failure to work on the costs would mean scaring away some clients who are price sensitive unless this is backed by reasonable quality increases.

The costs are important as they inversely impact on agent banking adoption and financial literacy relationship. In the same way, the transaction cost theory mentions dimensions characterizing transactions: uncertainty, frequency, and asset specificity, or the degree to which transaction-specific expenses were incurred (Ilya et al., 2021). They thus specify bargaining costs, opportunity costs, search costs, and policing/enforcement costs. It is further noted that agents reduce the cost of transaction as they reduce the distance to the bank and minimize travel (Marumbwa, 2014). In support of this, it is noted that the high cost of providing financial services in Mukono Municipality often means that formal financial institutions lack the incentive to penetrate these areas as well as the ability to mitigate perceived operational risks (Nabatanzi, 2021). Current study results suggest that the fact that costs have been controlled, agent banking is affordable but once the reverse occurs, the service can easily be abandoned.

From the above, it follows that; banks need to be careful to maintain the costs at such a point that would not scare away both agents and the clients. At the same time, the bank needs to ensure that the fees charged cover the basic costs and yet retain clients, which is a delicate balance. Still, the competition from other platforms like mobile money, e-wallets, credit cards need to be factored into.

#### **5.2.5 The mediating effect of transaction costs in the relationship between financial literacy and financial inclusion in Eastern Uganda**

The mediation effect is given by the indirect effect (-0.01) at a significance level of 0.283. This presents transaction costs as an insignificant mediator in the relationship between financial literacy and financial inclusion in Eastern Uganda. These results imply that even in the presence of financial literacy, the cost in the process of leading to financial inclusion would be a deterrent factor to the attainment of financial inclusion. It is thus important to ensure literacy but taking note of reducing the costs involved would be an added advantage in the bid to attain financial inclusion in Eastern Uganda.

The existence of cost between financial literacy and financial inclusion lowers the financial inclusion. However, the impact of costs is not so felt given the fact that in their current state, the costs were way below and not seen as significant, hence their failure to generate meaningful mediating effect. There is considerable literature relating to the current study findings, much as the level of emphasis varies. First, Afande and Mbugua (2015) note that availability of liquidity,

geographical coverage, costs and security of agent banking services) have a positive relationship with financial inclusion. This agrees with the findings from Eastern Uganda.

### **5.3 Conclusion**

The study concludes that improving on agent banking adoption is likely to enhance financial inclusion as evidenced from Eastern Uganda. So, as banks get rooted wide and far in promoting agent banking, they indirectly promote financial inclusion.

It is further concluded that the positive links between financial literacy and financial inclusion in Eastern Uganda, lead to the conclusion that, in a literate society, it becomes easier, although not a guarantee to have financial inclusion rooted. This makes literacy a desirable condition but not a must for financial literacy to get entrenched.

In addition, the study asserts that the positive and insignificant link between transaction costs and financial inclusion suggest that costs are important but not significant, thus, banking entities and other bodies in pursuit of financial inclusion need to consider perfecting what they offer as clients may mind less about costs. Essentially, regardless of the costs, clients can take on the services as long as they serve the purpose and when the cost implications are not so divergent from what they think is acceptable.

Moreso, the cost involved in the transactions is not so important in determining whether agency banking will lead to financial inclusion. This leads to the conclusion that it is worthwhile to perfect agency banking to cause better financial inclusion, but, with some moderate consideration of the pricing of the products or cost implications to the clients.

Finally, the study concludes that transactions costs have been noted to be a weak mediator in the relationship between financial literacy and financial inclusion. This leads to the conclusion that financial literacy is important if financial inclusion is to be attained, however, the costs involved in the process need to be controlled for slightly better results.

## **5.4 Recommendations**

The study recommends that banks should empower agents and end users with capabilities online or on mobile to accomplish banking activities faster. All applications and # tags should be made easy to navigate and browse.

There should be clear and understandable means of interacting with agent banking 24/7 and always effectively.

Banks should ensure that their agent banking platforms are compatible with other banking systems both today and in future. This will ensure that clients do not feel the burden of switching from platform to platform and this will encourage usage.

More general sensitization should be done to all people to ensure mass adoption of agent banking and improve on the positive perception in the society.

The banks and agents should ensure that the indirect benefits like convenience, security resulting from use of agent banking are maintained and upheld in all the applications designs and deployments.

All efforts should be done by the operators at a strategic level to ensure that agent banking remains a cheaper option to encourage usage by customers who fear the cost implications. MoUs can be signed between telecom operators and banks to ensure realization of this and its sustenance.

Banking agents should be encouraged to help clients beyond the usual routines of pay and go, deposit and go to ensure a deeper understanding of the need for financial inclusion and use word of mouth to encourage other people to come on board.

## **5.5 Limitations of the study**

The use of cross-sectional research design made it unlikely that this study was able to capture changes overtime in relation to the studied variables. The results presented herein may only be applicable for a short period. Non-response in some cases was not so good. However, the researcher was flexible in appointments and engaged local collaborators for better respondents' identification. The methodology used had limitations like scope and level of analysis as well as respondents' selection. Eastern Uganda may not fully represent Uganda for generalization of findings. Information may not be readily available to inform all the study questions. This necessitates extensive research.

## **5.6 Areas for further study**

From the above, the following areas can be further researched,

There is need for a similar study but following a longitudinal approach to determine how financial inclusion improves over time following the interventions of literacy combined with agency banking.

There is need for a related study but spanning a wider geographical coverage covering a region or districts from various regions to give a more realistic national picture of how the financial inclusion is a result of financial literacy and agency banking intensification.

There is need for another study to examine the frequency and monetary value of the transactions that evidence financial inclusion and come up with the factors influencing them for verified deductions.

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## Appendix 1: Questionnaire

Dear Respondent,

I am Judith Natukunda, Reg. No: **2018/HD10/2306U** a student pursuing a degree of Master of Business Administration (MBA) at Makerere University Business School (MUBS) and undertaking research on “**Agency Banking adoption, financial literacy, transaction cost and financial inclusion in selected districts of Eastern Uganda**”.

This study is purely for academic purposes and your responses shall be treated with anonymity and utmost confidentiality and will not be released in any way that will allow it to be identified with any individual. You are requested to be part of this study by sparing part of your precious time to fill the questions as honestly as possible. Thank you in advance for accepting to participate.

If there are any questions or concerns, please call the researcher directly on 0779230628.

### **SECTION A: BACKGROUND INFORMATION OF THE RESPONDENT**

**Please kindly tick appropriately**

(i) Gender of the respondent (a) Male ..... (b)Female.....

(ii) Age Group.

1) 18-25..... 2) 26-33..... 3) 34-41.....

4) 42-49 ..... 5) 50+ .....

(iii) Number of people in your household

1) 5 or less ..... 2) 6-10 ..... 3. More than 10 .....

(iv) Number of years lived in this community.

1) 5 years or less..... 2) 6-10 years..... 3) 11-15 years.....

4) More than 15 years .....

(v) What is the primary source of water for this household?

1) Piped water system..... 2) Private well ..... 3) Public well .....

4) Borehole ..... 5) River or stream ..... 6) Other (specify) .....

(vi) What type of toilet facility does this household use?

1) Community pit latrine..... 2) Individual pit latrine ..... 3) Bush.....

4) Other (specify) .....

(vii) What type of lighting does this household use?

1) Paraffin lantern ..... 2) Small kerosene lamp..... 3) Firewood .....

4) Other (specify) .....

(viii) What type of cooking fuel does this household use?

1) Firewood..... 2) Charcoal ..... 3) Paraffin..... 4 Other (specify).....

(ix) Are you able to read and write?

1) Yes..... 2) No .....

**Instruction: Please tick in the box as appropriate, your response**

**(1=strongly disagree, 2=disagree, 3= neutral, 4=agree, 5=strongly agree.)**

**A: AGENCY BANKING ADOPTION**

|            |                                                                                 |   |   |   |   |   |
|------------|---------------------------------------------------------------------------------|---|---|---|---|---|
| <b>A1:</b> | <b>PERFORMANCE EXPECTANCY</b>                                                   |   |   |   |   |   |
| AB1        | I find agent banking useful in my banking activities.                           | 1 | 2 | 3 | 4 | 5 |
| AB2        | Using agent banking enables me to accomplish banking activities more quickly    | 1 | 2 | 3 | 4 | 5 |
| AB3        | Using agent banking increases my banking speeds                                 | 1 | 2 | 3 | 4 | 5 |
| AB4        | If I use agent banking, I will increase my chances of getting a better service. | 1 | 2 | 3 | 4 | 5 |
| <b>A2:</b> | <b>EFFORT EXPECTANCY</b>                                                        |   |   |   |   |   |
| AB5        | My interaction with agent banking is clear and understandable                   | 1 | 2 | 3 | 4 | 5 |
| AB6        | I am skillful at using agent banking                                            | 1 | 2 | 3 | 4 | 5 |
| AB7        | Learning to use agent banking is easy for me                                    | 1 | 2 | 3 | 4 | 5 |
| AB8        | I find it easy to get agent banking to do what I want it to do                  | 1 | 2 | 3 | 4 | 5 |
| <b>A3:</b> | <b>FACILITATING CONDITIONS</b>                                                  |   |   |   |   |   |
| AB9        | I have the resources necessary to use agent banking                             | 1 | 2 | 3 | 4 | 5 |
| AB10       | I have the knowledge necessary to use agent banking                             | 1 | 2 | 3 | 4 | 5 |
| AB11       | Agent banking is compatible with other banking systems I use                    | 1 | 2 | 3 | 4 | 5 |
| AB12       | Agents are available for assistance with agent banking difficulties             | 1 | 2 | 3 | 4 | 5 |
| <b>A4:</b> | <b>SOCIAL INFLUENCE</b>                                                         |   |   |   |   |   |
| AB13       | People who are important to me think that I should use agent banking            | 1 | 2 | 3 | 4 | 5 |
| AB14       | People who influence my behaviour think I should use agent banking              | 1 | 2 | 3 | 4 | 5 |
| AB15       | The older people in my society are helpful in the use of agent banking.         | 1 | 2 | 3 | 4 | 5 |
| AB16       | In general, the banks have supported the use of agent banking.                  | 1 | 2 | 3 | 4 | 5 |

**B: FINANCIAL LITERACY**

|      |                                                                                                          |   |   |   |   |   |
|------|----------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| B1:  | <b>ATTITUDE</b>                                                                                          |   |   |   |   |   |
| FL1  | I am always interested in financial issues.                                                              | 1 | 2 | 3 | 4 | 5 |
| FL2  | I feel my money is safer when I keep it in the bank.                                                     | 1 | 2 | 3 | 4 | 5 |
| FL3  | I compare prices before making choices on financial products/services.                                   | 1 | 2 | 3 | 4 | 5 |
| FL4  | I feel very interested in dealing with formal financial institutions.                                    | 1 | 2 | 3 | 4 | 5 |
| FL5  | I find it more satisfying to save money for long term than to spend it.                                  | 1 | 2 | 3 | 4 | 5 |
| B2:  | <b>KNOWLEDGE</b>                                                                                         |   |   |   |   |   |
| FL6  | I am financially capable of making good use of financial products/services.                              | 1 | 2 | 3 | 4 | 5 |
| FL7  | I have the ability to plan for savings well because I ably estimate my monthly incomes and expenditures. | 1 | 2 | 3 | 4 | 5 |
| FL8  | I have the ability to prepare my personal budgets.                                                       | 1 | 2 | 3 | 4 | 5 |
| FL9  | I know what is required of me to live a financially healthy life.                                        | 1 | 2 | 3 | 4 | 5 |
| FL10 | I have read several materials to sharpen my understanding of financial basics.                           | 1 | 2 | 3 | 4 | 5 |
| FL11 | I have a savings plan.                                                                                   | 1 | 2 | 3 | 4 | 5 |
| FL12 | I know where to invest my money profitably.                                                              | 1 | 2 | 3 | 4 | 5 |
| B3:  | <b>SKILLS.</b>                                                                                           |   |   |   |   |   |
| FL13 | I have the ability to accurately determine benefits from financial dealings.                             | 1 | 2 | 3 | 4 | 5 |
| FL14 | I have the ability to accurately determine costs from financial dealings.                                | 1 | 2 | 3 | 4 | 5 |
| FL15 | I have the ability to compute interest rates.                                                            | 1 | 2 | 3 | 4 | 5 |
| FL16 | I have ability to analyse my personal finances.                                                          | 1 | 2 | 3 | 4 | 5 |
| FL17 | I able to solve my financial problems within my financial constraints.                                   | 1 | 2 | 3 | 4 | 5 |
| FL18 | I plan for my finances always.                                                                           | 1 | 2 | 3 | 4 | 5 |

## C: FINANCIAL INCLUSION

|            |                                                                                                             |   |   |   |   |   |
|------------|-------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| <b>C1:</b> | <b>WELFARE</b>                                                                                              |   |   |   |   |   |
| FI1        | The financial services offered by the bank has led to improvement in our nutrition.                         | 1 | 2 | 3 | 4 | 5 |
| FI2        | The financial services offered by the bank has led to improved access to health services in this household. | 1 | 2 | 3 | 4 | 5 |
| FI3        | The financial services offered by the bank has me to pay school fees.                                       | 1 | 2 | 3 | 4 | 5 |
| FI4        | I feel my overall life has improved with more access to financial services.                                 | 1 | 2 | 3 | 4 | 5 |
| FI5        | I am in a better position to meet basic needs after being part of the money economy.                        | 1 | 2 | 3 | 4 | 5 |
| FI6        | I am better off financially compared to my colleagues who have not been part of the money economy.          | 1 | 2 | 3 | 4 | 5 |
| <b>C2:</b> | <b>USAGE</b>                                                                                                |   |   |   |   |   |
| FI7        | I normally keep my savings with the bank.                                                                   | 1 | 2 | 3 | 4 | 5 |
| FI8        | I can access loan facilities provided by the bank with ease.                                                | 1 | 2 | 3 | 4 | 5 |
| FI9        | The loan product provided by the bank suits my needs.                                                       | 1 | 2 | 3 | 4 | 5 |
| FI10       | The terms and conditions on use of loans provided by the bank is favorable to me.                           | 1 | 2 | 3 | 4 | 5 |
| FI11       | There is a high variety of products and services offered by the bank that our household can use             | 1 | 2 | 3 | 4 | 5 |
| FI12       | I use the bank for advice on my financial plans.                                                            | 1 | 2 | 3 | 4 | 5 |
| <b>C3:</b> | <b>ACCESS</b>                                                                                               |   |   |   |   |   |
| FI13       | The financial services provided by the bank is safe.                                                        | 1 | 2 | 3 | 4 | 5 |
| FI14       | The initial account opening fees charged by the bank is affordable.                                         | 1 | 2 | 3 | 4 | 5 |
| FI15       | The cost of making a trip to the bank is affordable.                                                        | 1 | 2 | 3 | 4 | 5 |
| FI16       | The bank system always functions without fail.                                                              | 1 | 2 | 3 | 4 | 5 |
| FI17       | There is a usable access road leading to the nearest financial institution/bank Agent.                      | 1 | 2 | 3 | 4 | 5 |
| FI18       | I live within less than 1km of an ATM/Bank Agent that I can easily visit to access my account.              | 1 | 2 | 3 | 4 | 5 |

#### D. TRANSACTION COSTS

|           |                                                                                              |   |   |   |   |   |
|-----------|----------------------------------------------------------------------------------------------|---|---|---|---|---|
| <b>D1</b> | <b>BARGAINING COSTS</b>                                                                      |   |   |   |   |   |
|           | I take time to agree with the costs levied on agent banking.                                 | 1 | 2 | 3 | 4 | 5 |
|           | It is costly to me when there are delays or failures to reach an agreement in agent banking. | 1 | 2 | 3 | 4 | 5 |
|           | It is costly for my agent to monitor and enforce our trade agreements.                       | 1 | 2 | 3 | 4 | 5 |
|           | The coordination failures among agents is visible.                                           | 1 | 2 | 3 | 4 | 5 |
|           | There is a high cost of obtaining information.                                               | 1 | 2 | 3 | 4 | 5 |
| <b>D2</b> | <b>OPPORTUNITY COSTS</b>                                                                     |   |   |   |   |   |
|           | I think it is beneficial to use agent banking as compared to other means.                    | 1 | 2 | 3 | 4 | 5 |
|           | Use of agent banking is cheaper than the rest of the avenues.                                | 1 | 2 | 3 | 4 | 5 |
|           | I see indirect benefits like convenience, security resulting from use of agent banking.      | 1 | 2 | 3 | 4 | 5 |
|           | I think I save on costs when I use agent banking.                                            | 1 | 2 | 3 | 4 | 5 |
| <b>D3</b> | <b>SEARCH COSTS</b>                                                                          |   |   |   |   |   |
|           | I spend some money to reach an agent of the bank.                                            | 1 | 2 | 3 | 4 | 5 |
|           | Reaching to an agent requires some time.                                                     | 1 | 2 | 3 | 4 | 5 |
|           | I put some level of energy to reach a banking agent.                                         | 1 | 2 | 3 | 4 | 5 |
|           | It is not easy to identify a banking agent.                                                  | 1 | 2 | 3 | 4 | 5 |
| <b>D4</b> | <b>POLICING/ENFORCEMENT COSTS</b>                                                            |   |   |   |   |   |
|           | Tax as an enforcement fee is quite inhibitive to my usage of agent banking.                  | 1 | 2 | 3 | 4 | 5 |
|           | Agents tend to subject clients to fines in case of mistakes.                                 | 1 | 2 | 3 | 4 | 5 |
|           | When agents make mistakes, there is a way of making them pay clients financially.            | 1 | 2 | 3 | 4 | 5 |
|           | Banks charge me unreasonable fees through their agents.                                      | 1 | 2 | 3 | 4 | 5 |

## **Appendix 2: Banking Agents in Mayuge, Iganga and Butaleja**

### **MAYUGE**

1. Macent Investment Ltd
2. MASET (Mayuge Action for Soc.& Economic Transformation)
3. Kafugu Service Station Ltd
4. Kizan 1992 Investment Ltd

### **IGANGA**

- |                                          |                                      |
|------------------------------------------|--------------------------------------|
| 1. Wapeera Investments Limited           | 20. Gweria Services Ltd              |
| 2. Subamu Investment Ltd                 | 21. BigChief Unit Ent Ltd            |
| 3. Limosa International Ltd              | 22. Best Future in our Hands U Ltd   |
| 4. Robuda Luuka Rural Sacco              | 23. Munyali Geoffrey Business Centre |
| 5. Naks Tezikuba Cosmetics               | 24. Nandhala M Kaziba Enterprises    |
| 6. Treasure Dosh Ltd                     | 25. Enjoy Children's Shop            |
| 7. Namwagale Business Enterprises Ltd    | 26. Ebryans Gen.Ent.                 |
| 8. Bamugeki Holdings Co Ltd              | 27. Nansubuga Joan Ent.              |
| 9. WK Impact (U) Ltd                     | 28. HIVAN Gen.Investments Ltd        |
| 10. Navana Uganda Ltd                    | 29. Hassan Phone Centre Ltd          |
| 11. Pato & Sons Limited                  | 30. Total Nakavule Service Station   |
| 12. IT Africa Uganda Training Centre     | 31. MAK 88 Graphics Centre           |
| 13. Muna Wamura Associates               | 32. Roman German Solar               |
| 14. Monivex enterprises                  | 33. Grip Gen.Ent.Ltd                 |
| 15. Tumwekwase Mary and sons Enterprises | 34. Mich & Myra Gen.Ent.Ltd          |
| 16. Kirunda Magoola Mobile Solutions     | 35. Mobipay Agrosys                  |
| 17. Suzie N Business Link                | 36. Bagagga Lydia Business Centre    |
| 18. New Comrade Electrical (U) Ltd       | 37. Nagawa Sophie Mobile Solutions   |
| 19. Denis & Co Ltd                       | 38. Abba -Reignz Ent.Ltd             |

### **BUTALEJA**

1. Margero Trust Focus Finance Services Ltd
2. Sea West Financial Services
3. Power to Power Investments LTd
4. Gessa Stephen & Family Ent