

THE RELATIONSHIP BETWEEN FINANCIAL INTERMEDIATION AND FINANCIAL INCLUSION IN UGANDA

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Abstract

The study analyzed the relationship between financial intermediation and financial inclusion in two Ugandan town councils, namely, Wakiso and Kiboga Town Councils. The study was necessitated by increasing efforts of financial intermediation by various actors although the number of people who are excluded in the usage of financial services has reduced.

*Mixed methods were used in conducting this study that was guided by the theories of financial intermediation. In order to make sense of the expectations and perceptions of the participants, both research questions and hypotheses were used, which provided a platform to understand the meaning that people attach to the experiences gained in relation to the advanced theories of financial inclusion. With a targeted population of 9,880 potential respondents, a sample size of 384 was computed using purposive and simple random sampling. The results from the hypothesis test sought to determine whether there is a relationship between financial intermediation and financial inclusion which showed that, there is a significant and positive relationship between the financial intermediation and the Financial Inclusion ($r = .381^{**}$, $p < .01$). These results show that the greater the capacity of the institution to deliver financial services, the greater the number of persons that will be served by the financial services of the institution and hence, higher levels of inclusion. If a financial institution opens up more branches in an area that was not previously served, the possibility of bank customers that have not prior been served by financial intermediaries to access these financial services will greatly increase. Furthermore, the increase in the volume of the services that are offered in an area would mean that the people who have access to the financial services have a greater level of satisfaction of the financial services, hence supporting hypothesis (H_1) which states that there is a positive significant relationship between financial intermediation and financial inclusion.*

Introduction

This study focused on the relationship between financial intermediation and financial inclusion in Uganda with Kiboga Town Council in Kiboga District, and Wakiso Town Council in Wakiso district as case studies. These

two areas of study were chosen to help cast a picture into how financial intermediation can impact on financial inclusion. Besides, the two areas share a common characteristic namely, the high levels of mobility which greatly affects the confidence that is pivotal in the continued usage of financial services. The two areas have equally a high volume of usage of informal financial services compared to the formal ones. It is for this purpose that the study was limited to formal financial intermediaries that are regulated by the Bank of Uganda. Those financial institutions that fall under Tiers I-III include Commercial Banks, Credit Institutions and Micro-Finance Deposit-Taking Institutions. Non-financial intermediaries are regulated by their Apex Organizations such as Insurance Firms among others.

Uganda has witnessed a rapid and significant growth in financial services development characterized by increased growth in the number of financial intermediaries over time. The services have moved closer to people with more access points available and with the advance of technology, challenges associated with distances to service points have been minimally low. This has been attributed to structural and individual challenges. The World Bank, (2013) notes that some groups are more financially excluded than others: Women, rural poor, and other remote or hard-to-reach populations, as well as informal micro and small firms are most affected. For example, the gender gap in developing countries is estimated at 9 percentage points: 59% of men reported having an account in 2014, compared to 50% of women, World Bank, (2011). Various studies conducted in Uganda point to a fact that there are bottlenecks experienced by people seeking commercial services especially the women's access to loans from financial banks (Karuhanga-Beraho 2002; Namunyoro 2000; Synder 2000). Kakuru (2008), while studying small and micro enterprises in Uganda also found out that there are many systematic cultural, social and legal impediments that give an advantage to men to access higher level credit than women yet Synder (2000) found that women are more faithful in paying back their loans compared to men. This phenomenon may largely be attributed to cultural values inculcated in men and women through socialization.

Lack of self esteem and shyness have been found to be problems women encounter in mixed gender negotiations and have been perceived by both men and women as key stumbling blocks during the negotiation process

(Kibanja and Munene 2009). The money lenders have exploited this scenario by reaching out to the many people that are not able to access financial inclusion services by not only seeking to extend credit to them but also taking advantage of their ignorance with promises of opening accounts for them. In many other instances, the majority of these people are restricted to group lending as it has remained the only alternative to structural challenges to accessing financial services.

Statement of the Problem.

The Financial Intermediation sector in Uganda as a country has been liberalized and is characterized by many financial institutions from the Local to the National levels with an intention of reaching out to so many people so that the socio-economic well being of these targeted people is improved through their inclusion. However, the usage of financial services in the country is still low. While 54% of Ugandans are served, an overwhelming 46% of Ugandans do not have access to either formal bank or non-bank formal services with the majority of these in the upcountry (Finscope, 2013). Financial access is still very low in rural areas at 35% compared to 48% in the urban areas whereby the percentage of the population able to access only 20% of Tier 1 of commercial banks, Tier 2 of credit Institutions and Tier 3 of Microfinance Deposit Taking Institutions (Finscope, 2013). This therefore means that, 28% of the population uses informal means to access finances such as money lenders, Rotating Savings and Credit Associations, Village Savings and Lending Associations, investment clubs, and other welfare funds while 52% is totally excluded. The latter is characterized by saving in secret places, shops, or friends as well as borrowing from family friends. This therefore suggests that more than 12 million adults in rural areas do not have access to financial services, (BOU 2013).

The trend analyses of financial institution size and depth of these financial institutions points to an upward trend meaning that there has been more investment in ensuring that services are moved closer to people in the areas of study. An even more depth in-look into the ease to access financial services similarly shows that over the period of five years, both Wakiso and Kiboga Town Councils experienced a 4 percent reduction in the ease of access to financial services from 44% in 2009 to 40% in 2013 for Wakiso and 34% in 2009 to 33.7% in 2013 for Kiboga town council. This situation is even

worsened by the fact that usage of financial services in Wakiso Town Council equally reduced by 3 percent from 38% in 2009 to 35% in 2013 while Kiboga town council recorded a 4 percent reduction in the same aspect from 29% in 2009 to 25% in 2013.

Table 1: Trend analysis of the problem

Attribute	2009		2010		2011		2012		2013	
Independent variable (Numbers)										
Area of study	WK	KB	WK	KB	WK	KB	WK	KB	WK	KB
Financial Institution size (Nos)	8	2	10	2	14	5	14	5	19	8
Financial depth (Private credit: GDP)	22	5	19	5	25	10	31	12	39	11
Dependent variable (%)										
Area of study	WK	KB	WK	KB	WK	KB	WK	KB	WK	KB
Ease to access financial services	44	34	46.5	35	45	33	42	33	40	33.7
Financial services usage	38	29	44.4	29	37	32	35.8	30	35	25

Key: WK = Wakiso : KB = Kiboga

Source: Kiboga and Wakiso Town councils excerpts, 2012

Given the nature of the communities where the above trend is observed, there is a high level of inter-dependence on each other for information, financial advice and guidance regarding potential investment opportunities meaning that the people in these communities have a significant influence

on each other given the strong social ties. Alarmingly, even with the same social circles where some of these unbanked people live, there are instances of a very sharp rift between those that are financially able to access services and those that do not even know of their existence. This study therefore tried to investigate why financial inclusion levels are still low despite the existence of a number of financial intermediaries in Uganda considering Wakiso and Kiboga as case studies since they offer a representative and very realistic comparison between urban and rural inclusion.

Objective

The objective of the study was to examine the relationship between financial intermediation and financial inclusion and how this relationship promotes access and usage of financial services with a view of achieving an increased financial inclusion portfolio especially among the non-financial services users.

Literature Review and Hypothesis:

Financial Intermediation and Financial Inclusion

Many financial intermediation scholars such as Mishkin (2007) have come to believe and concur that, information asymmetry is the greatest hindrance to a good and proper functional system. Information asymmetry has been defined by Akerlof, (1970) as a moment where one of the parties to a financial contract has a competitive edge in terms of accuracy of information than the other party does. Christozov et al (2009) noted that intermediaries like banks use their edge in terms of information that cannot be accessed by the clients, and frictions such as transaction costs such as borrowing and monitoring performance to overcome the information problem.

Scholars such as Leland & Pyle (1977) have gone ahead to stress the role of information asymmetry. They therefore believe that, one of the basic ways through which an intermediary shows off its status of being informed is by investing its wealth where it has special information and knowledge. It is also a perceived view by some scholars such as Diamond (1984) that banks act as delegated monitors of clients who are not privy to information. In his argument, he said that since monitoring is costly, it is efficient to delegate the task to a specialised agent, the bank.

Diamond (1984), also argues that the intermediary “monitors” borrowers on behalf of investors who lend to the intermediary. This therefore appears to suggest that the intermediary has to equally be monitored by its lenders, which raised the famous “who monitors the monitor?” which he solved by reasoning that the borrowers must be monitored by an intermediary because there is an ex post information asymmetry in that the lenders do not know how much the firm has produced.

Many traditional models such as the Arrow-Debreu model of 1954 of resource allocation stressed the fact that financial intermediaries did not have a role to play simply because firms and households interact through markets. This assertion was based on the assumption that the markets that provide a platform of interaction which is perfect and complete thus if one were to be better, the other would be worse off. In contrast to this, the Modigliani and Miller theorem supposes that regardless of the financial structure, households and firms can construct portfolios which may be taken by an intermediary (Fama, 1980).

There is strong evidence to the effect that intermediaries such as banks amass huge sums of resources and acquire information that enables them to allocate capital to its highest valued use, thereby improving and raising the average return to capital (Arestis et al., 2001; Wachtel, 2001). Marquis (2001) observed that a bank’s effort to pool savings and lend money is largely dependent on its ability, capacity, and coverage in the market in order to attract deposits, which are the liabilities of the bank. This certainly explains why a number of banks in Uganda which have closed shop have become victim of closure because of their inadequacy in market coverage and subsequently failure to attract deposits. The deposits from the clients are used to lend money to borrowers above the cost paid on these deposits, (Wachtel, 2001). In order for this to happen though, the intermediary should be able to break even per transaction through earning a sufficient return above the borrowing cost of such a transaction Siklos (2001).

Intermediaries equally provide market participants with information necessary to enable them make decisions about how much to save or borrow and when. These intermediaries as a trend compete for deposits from the clients by among others increasing rates on deposits, corporate social responsibility, giving incentives to savers, and shouldering the burden of risk

of financial investment on top of competitively high interest rates (Siklos, 2001). This means that the existence of such intermediaries is basically because information asymmetry and transaction costs which are a result of imperfections and incompleteness in the market between the lenders and borrowers, and other players, (Rau, 2004).

One of the ways through which intermediaries curtail transaction costs is through enabling trade by acquiring information from lenders and borrowers. From the lenders, information may be in regard to how much is available and the potential profitable investment ventures (Heffernan, 2005) while from the borrowers, how much is required, at what rate, where, when and how to invest to enable lending in the market and an inter-linkage between lenders and borrowers, (Babbel and Santomero, 1996).

The earlier theories of development concentrated on labour, capital, institutions etc. as the factors for growth and development. The leading works hardly included finance as a factor for growth. Since then there has been ample research analyzing how financial systems help in developing the economies. A broad agreement exists among economists that financial development prompts economic growth. Financial system development indeed has a say to economic growth (Rajan and Zingales, 2000). Time and again empirical evidence has emphasized the relationship between finance and growth. According to the works of King and Levine (1993) and Levine and Zervos (1998), at the cross-country level, evidence suggests that measures of financial development are vigorously and confidently related to economic growth.

Other studies have also established affirmative association between financial development and growth. It is indeed irrefutable that considerable part of the differences in long run economic growth across countries can be elucidated by disparity in their financial development (Rajan and Zingales, 1998). Beck, et al (2006) use Rajan and Zingales (1998) approach, which provides supplementary evidence that financial development increasingly props up the growth of smaller firms which constitute largely the priority sector lending in the case of Indian Financial sector. Recent survey evidence suggests that access to finance has a direct nexus with that of innovation. Cross-country findings evidence points to the fact that finance promotes growth through increase in productivity, (Demirguc-Kunt, 2007). Further, it

has also been revealed that financial development plays a significant role in moderating the impact of external shocks on the domestic economy (Beck, et al, 2006).

Besides the debate concerning the role of finance in economic development, economists such as Demirguc-Kunt & Levine, (2001) have also debated the relative importance of bank-based and market-based financial systems for a long time. Joseph Schumpeter argued that banks assume a crucial role in economic development. According to this perspective, the banking sector causes transformation in the path of economic progress by soothing the allocation of savings and of course not necessarily by altering the saving rate. Largely, the Schumpeterian view of finance and development highlights the impact of banks on productivity and growth (Schumpeter, 1934).

The banking sector can wield a positive influence on the overall economy, and hence is of broad macroeconomic importance Jaffe and Levonian (2001); Rajan and Zingales (1998). It is established that better developed banks and markets are closely associated with faster growth Christopoulos and Tsionas, (2004). Improved functioning of banks can be able to boost resource allocation and hasten growth (Levine & Zervous, 1998). Correspondingly, by aiding risk management, improving the liquidity of assets available to savers, and by lowering trading costs; banks can enliven investment in potential economic activities (Greenwood and Smith, 1997). Banks do exercise significant and causal impact on productivity and growth, which contributes to overall GDP growth. It is also ascertained by some researchers that the size of the banking sector can be safely considered a good predictor for future growth, especially when focusing on long term projects (Vaona, 2005). The research so far has not only looked at how finance facilitates economic activity but also social aspects like poverty, hunger and so on.

Development economists and states have often been for a long time interested in the relationship between financial development and economic growth especially in the period which is known as the era of the Washington Consensus. A growing GDP is an evidence of a society getting its collective act together for progress meaning that every member of that society is involved or included and plays a significant role. As its economy grows, a society becomes more strongly organised, more compactly interwoven

pointing to strength in structures. Growth is good, sustained high growth is better and sustained high growth with inclusiveness is best of all. Inclusive growth in the economy can only be achieved when all the weaker sections of the society including agriculture and small scale industries are nurtured and brought on par with other sections of the society in terms of economic development (Boot and Thakor, 1993).

The major development challenge is to make financial growth inclusive. Policies for inclusive financial growth are vital components of majority of government strategies for sustainable growth. Inclusiveness is an essential ingredient of any successful growth strategy (CGD, 2008). The three pillars of inclusive growth as highlighted by Ifzal (2007) are (i) Maximizing economic opportunities (ii) Ensuring economic well-being and (iii) Ensuring equal and inclusive opportunities to economic opportunities. A financially inclusive growth strategy encompasses the key elements of an effective poverty reduction strategy and, more importantly, expands the development agenda. Developing inclusive financial systems which are financially and socially sustainable, as a poverty reduction strategy should be given priority, (Bhandari, 2009). Beck, Demirguc-Kunt and Levine (2007) have noticed a positive effect of finance on poverty reduction. Economies with higher levels of financial development experience faster reduction of poverty. This has been explained by an extensive body of literature including White and Anderson (2001) and Bourguignon (2003).

In an often cited cross-country study, Kraay (2004) proves that growth in average incomes explains 70 percent of the variation in poverty reduction in the short run, and as much as 97 percent in the long run. Lopez and Servén (2004) suggest that for a given inequality intensity, the poorer the country is, the more vital is the growth component in explaining poverty reduction. Thus, equitable growth is indeed an imperative for inclusive growth.

The importance of financial inclusion arises from the problem of financial exclusion of nearly 3 billion people from the formal financial services across the world (De-Luna, 2017). The review of literature points to the fact that the most functional definitions are context-specific and originate from country-specific problems of financial exclusion and related socio-economic conditions. Thus, over a period, various definitions of financial inclusion/exclusion have developed. However, there is no universally

accepted definition on financial inclusion. Financial inclusion has commonly been well-defined in terms of financial exclusion since measuring it is perceived to be difficult. Financial exclusion is a complex concept and the issues needed to be pondered include; distinction between access and usage, degree of exclusion and whether individual or family is excluded.

According to the World Bank (2005) financial exclusion includes four key areas; Transaction banking, Savings, Credit and Insurance. Broadly, financial exclusion can be broadly defined as the inability to access basic financial services owing to complications accompanying with access, conditions, prices, marketing or self-exclusion in response to unfavorable experiences or perceptions of individuals or entities. The sections that are generally excluded are; marginal farmers, landless labourers, unorganized sectors, urban slum dwellers, migrants, ethnic minorities, women, and rural households with no fixed income.

Efforts that have been put in place as a means of enhancing financial inclusion have been met by various challenges such too detailed documenting procedures that require proof of identity and address, high charges and penalties among defaulters, generic products that do not meet the needs of the majority especially those that are excluded financially. There is no single over-riding factor that could explain financial exclusion. It includes a variety of factors, some of which could equally be context specific (World Bank, 2005). The supply side barriers pose bigger impediments in the process of financial inclusion. Some of the significant causes of comparatively low expansion of institutional credit in the rural areas can be risk perception, high transaction costs, lack of infrastructure, difficult terrains and low density of population, Beck et al (2007).

Another noticeable factor is the perception among bankers that a large number of rural population is un-bankable as its capacity to save is limited, needs small loans and earns low margins in handling small transactions. Also, non-availability of Know Your Customer (KYC) requirements such as documentary proof of identity and address can be one amongst the barriers in having a bank account particularly for migrants and slum dwellers (World Bank, 2005). Further, unsuitability of products and services that are offered to the rural people are not tailor- made for example, most of their credit needs are in form of small lump sums and banks are reluctant to give small

amounts of loan at frequent intervals. Consequently, they resort to borrowing money from moneylenders at exorbitant rates (African Development Bank, 2007). The poor market linkage or penetration of service providers also constitutes the major factors of financial exclusion compounded by biased perceptions among the bankers that the rural areas have poor repayment record.

Global literature explains financial exclusion also in the context of a larger issue of social exclusion of weaker sections of the society. While Leyshon and Thrift (1995) explain financial exclusion as such processes those aid to prevent some social groups and individuals from getting access to the formal financial system, Carbo et al. (2005) and Conroy (2005) opine that it is a state of inability of some poor and disadvantaged societal groups to access the financial system. Mohan (2006) reasons that financial exclusion implies the lack of access by some segments of the society to suitable, low-cost, fair and secure financial products and services from mainstream providers. From the above reasoning, it can be an indication that financial exclusion occurs mostly to people who are from the disadvantaged sections of the society.

On the demand side, persons are dissuaded from accessing and utilizing transaction banking services for a range of psychological and cultural reasons. Elderly people in rural areas who are part of a 'cash only' generation, migrants and low income people perceive banking as only being appropriate for people who are better off than they are and fear losing control of their money if they cease to deal only in cash, Mohan (2006).

One more issue of interest is whether low level of financial inclusion is associated with high income inequality, Kempson et al., (2004). Beck et al. (2007) have examined financial sector outreach and its factors by employing cross country data. Even in the developed economies too, studies have revealed that the exclusion from the financial system occurs to low-income groups, the ethnic minorities, immigrants and others Barr, (2004); Kempson and Whyley, (1998); Connolly and Hajaj, (2001). Studies by Leyshon and Thrift, (1995) and Kempson and Whyley (2001) highlight that the geographical factor that people living in rural areas and in locations that are remote from financial centres are more likely to be financially excluded.

This meant therefore that the levels of financial inclusion inevitably rise in response to both prosperity and declining inequalities. Another factor that can be related with financial exclusion is employment, Goodwin et al., (2000). Recent evidence also suggests that the continued payment of social security benefits and the State pension in cash is significantly related to financial exclusion Kempson and Whyley, (1999). Though informal sector accounts for a substantial share of employment in several less developed countries, it does not facilitate the process of financial inclusion International Labour Organisation, (2002). Formal employment also entails inclusion and hence the proportion of formal sector employment would be a vital indicator of the degree of financial inclusion.

In the Indian context for instance, the Committee on Financial Inclusion in India, also known as the Rangarajan Committee, (2008) defines financial inclusion as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost. The financial services include the entire gamut savings, loans, insurance, credit, payments and others. The financial system has to provide its function of transferring resources from surplus to deficit units but both deficit and surplus units are those with low incomes, poor background and other traits. By providing these services, the aim is to help them come out of poverty. Measurement of Financial Inclusion is not universally the same. Different countries adopt different indicators to measure financial inclusion using the definitional aspects of financial inclusion and exclusion and their indicators as recommended by World Bank (2014).

In the developed countries, the formal financial sector serves most of the population, whereas a large segment of the society in developing countries, mainly the low-income group, has modest access to financial services, either formally or informally. According to Peachy and Roe (2004) developed countries have experienced good levels of inclusion. However, it was reported by the African Development Bank (2007) that in the developing countries, formal financial sectors serve relatively a small segment, often not over 20-30 per cent of the population.

In Democratic republics, financial inclusion is imperative on the policies of the government to ensure equitable growth of all sections of the economy.

The rate of financial inclusion in developing countries is still low for instance in Uganda, inclusion levels are at 54% with about 50% of the bank account holders using their accounts not even once a month (BOU, 2014).

It is universally opined that the resource poor need financial assistance at reasonable costs and that too with uninterrupted pace. However, the economic liberalization policies have tempted the financial institutions to look for more and more greener pastures of business ignoring the weaker sections of the society. It is essential for any economy to aim at inclusive growth involving each and every citizen in the economic development progression.

According to CGAP (2009) report, “Banking the Poor via Government to Public Payments”, ‘promote a higher degree of financial inclusion with greater social impact’. However, Kemal, (2015) in the case study of Mobile-banking in Pakistan discovered that G2P payments promoted a lower degree of financial inclusion. He showcased this after investigating what type of mobile accounts were provided to users, as financial inclusion entails providing access to a wider array of financial services Ehrbeck, 2010; Bold, Porteous and Rotman, 2012). Although m- banking successfully connected millions of women to the banking system. It was however noted that provision of bank accounts is not enough for the financial inclusion drive. He revealed that users were provided with ‘limited purpose accounts’ that were conduit accounts and confined to withdrawals. As these bank accounts were not fully ‘financially inclusive’, they handicapped women in executing a broader spectrum of financial transactions that inter alia include transferring funds, making savings, accessing micro- credit and insurance to instigate local economic activity.

Kemal (2015) noted that although the m-banking infrastructure permitted a front-end access to banking services, via agents, the bank-led model was restrictive in terms of cost and proximity to agents in rural areas. Thus, financial inclusion per se was rather ‘limited’ to achieve ‘progressive transformation’ within households (Avgerou, 2010). Since financial inclusion was still in the ‘infancy’ stage to transform the micro-economic landscape for the poor and marginalized communities in Pakistan, m-banking diffusion was made more real and institutionalized within households to ‘alleviate’ poverty, premised on the structuration model. So,

m-banking failed to 'structurally' transform households for participating in economic activities in order to 'eliminate' poverty.

From the same study of Kemal (2015), through Orlikowski's practice lens (2000), women user's constant engagement with technology and financial structures, helped reform financial practices within socio-economic structures. Further, as there was a steep rise in women's learning curve, as they gradually learnt how to manage their household finances independently; financial inclusion was evident at the basic social level. This was attributed to lack of formal financial education needs that ought to be included within the financial inclusion drive. Kemal noted that training was not provided as management did not have the institutional or financial capacity to offer training, meaning that, there must be an intra-organizational capacity building on understanding the dynamics of financial inclusion. Evidence from literature also suggests that mobile technologies support micro-entrepreneurial development for accessing information within socio-economic networks (Jenson, 2009; Aker, 2008).

Battacharya and Thakor (1998) have also partly listed what they regard as the key questions and puzzles for financial intermediation research. Battacharya and Thakor mention the role of financial institutions in financial innovation as the first puzzle. This evidently is a subject par excellence for analysis with concepts like delegated monitoring and others. They equally look at the economic bases for differences among financial systems across countries and through time as another critical aspect. This is a wide area of research since Gerschenkron (1962) and Goldsmith (1969), gaining topicality in view of the developments in Eastern Europe and Central Asia, and with the financial crises in Asia, Africa Latin America in mind.

The theory of financial systems, however, so far appears to ignore the poorer areas in the world illustrated by the study of Allen and Gale (2000b) which encompasses empirical description, modeling and testing of different financial systems in their relation to macroeconomic growth patterns. A profound question that has remained unanswered is whether the financial system is welfare improving, welfare destroying or neutral. The evolution of the financial markets and financial innovation, next to optimal allocation of savings, should become analytical concepts of central importance. Institutional developments and the role of governments, banking

supervision, governance of market parties, problems of “crony capitalism” are gaining analytical attention as well (Beck and Levine, 2000; Demirgüç-Kunt and Maksimovic, 1998; Japelli et al 2005; Rajan and Zingales, 2000).

The need for a deep look into the issues in banking system design is another aspect that Bhattacharya and Thakor find to be of critical importance in financial intermediation. It looks at primarily the optimal size of banks whether bank mergers are beneficial to welfare. These issues, including those of competition between banks and other financial institutions and the question of whether some countries are overbanked, need an industrial economics and a product innovation or market development approach as well.

In general, the optimal scale found in most studies is much smaller than that of the modus of bank size in most modern economies. The studies also reveal skepticism in the blessings of bank mergers. Others such as Boot and Schmeits, (1999) presume that scale and scope economies could re-emerge as critical issues in the future as a consequence of technical progress, especially in payment systems. The dynamics of technologically driven product innovation will have to be introduced in the scale and scope and X-inefficiency research. Piloff and Santomero (1996) make the value- effects of bank mergers already an explicit subject of their research. The new research on essential and less essential bank functions and the concept of “contract banking” (Llewellyn, 1999) as examples of the new dynamic value-chain approach.

Since Bhattacharya and Thakor drew up their research agenda for contemporary banking theory in 1993, risk management and risk transformation in the intermediation process have become a common denominator in the research on financial intermediaries and financial intermediation. Risk transformation and management in the intermediation process has since then become a common denominator in the research agenda. However, risk analysis and management has been limited to regulated intermediation and yet the biggest population and inclusion catchment is in the non-regulated which leaves a conceptual gap, Hunter and Smith, (2002).

Therefore, it was hypothesized that:

H₁: There is a relationship between financial intermediation on financial inclusion.

Study methodology

Research design

The study was largely rooted in the analytical research paradigm which was chosen because by its nature, it enables a presentation of a picture of the specific details of a situation, social setting or relationship (Vanda and Vickery, 2011). The advantage of using analytical research is that it helped describe the situation in terms of its characteristics and equally created a set of categories or classified the information, that is to say, analytical research enabled the explanation of the phenomenon of financial inclusion using the particular characteristics of the studied population.

Study population

The study population from the two geographical areas of study namely Kiboga and Wakiso town councils, was 9,880 households, and 7 formal financial institutions registered. This was credible source of data because the study population either directly or indirectly interact with the services on offer by any of the financial intermediaries and besides, these were the people who either used the financial services through inclusion and access or did not because of exclusion. The study population for qualitative data was purposively chosen because on top of having only six institutions supervised by the Bank of Uganda, the two districts still rate high among National poverty indices in Uganda. Besides, Kiboga being one of the rural districts, it is one of the districts with low financial services and access to such services by the population (Finscope 2013). On the other hand Wakiso, being semi-urban, was able to show a comparative picture of what financial inclusion is in the rural and urban districts, the triangulation of which gave a better aggregated position of financial intermediation and inclusion in Uganda.

Sample size and selection

The sample size of research participants was calculated basing on Slovin's formula (1960). Determining the sample size using Slovin's formula for calculating sample size is given by

$$n = N / (1 + Ne^2)$$

Where: n = is the required sample size

N = Total population size

E = level of precision 0.05 (tolerable error) or level of confidence

Thus: $9880 / [1 + (9880 * 0.05)^2]$

$$9880 / 1 + [494^2]$$

$$9880 / 1 + 24.7$$

$$= 384$$

Table 2: Distribution of respondents across the study areas

Respondents category	Population		Sample size		Sampling technique		Reason for choice
	Wakiso	Kiboga	Wakiso	Kiboga			
Households	5,890	3,990	167	167	Simple random	Systematically derived	
Key informants							
Bank Managers	03	02	03	02	Purposive	Limited respondents	
MFIs managers	04	01	04	01	Purposive	Limited respondents	

Data quality control measures

Data quality control refers to the reliability and validity of the instruments used for collecting data. These two concepts are important in the acceptability of the use of an instrument for research purposes (Amin 2005). This is to ensure that the data collected is accurate. In order to ensure that data was accurate, a pre-test of the study tool was done with 47 respondents which helped the revision of the tool to ensure data accuracy.

Reliability

To ensure that the instruments which were used for the study are consistent, accurate and stable Cronbach alpha coefficient was used since it is helpful in measuring the extent to which reliability and consistence between two items at different levels of the same variable can attain consistent results (Struwig and Stead, 2001: 130). The reliability of 0.70 or > was used as the alpha coefficient to test the reliability of this study, which is in line with Nunnally and Bernstein (1994), for a social research. Thus, the reliability test was done through content analysis.

Validity

This is concerned with the instrument measuring what it is intended to measure (Cozby, 2009). Validity equally has to do with the operationalization of a construct like through practical tests developed from a theory and the actual measure of what the theory tests. It was thus concerned with measuring all the constructs developed from the concept and the various theories used for this study. This focused on the empirical and theoretical support for the interpretation of the construct to be measured. (Foxcroft et al, 2004).

An in-depth analysis of the theories used in this study was carried out in order to ascertain that all the measures are consistent with the theories. The researcher extracted and used measures that are consistent with the concepts in existing research. Item scales were then developed and convergent and discriminant validity were considered. This was through factor analysis, and components with Eigen values greater than one and items with correlation coefficient, equal or greater than 0.5 were extracted (Gummesson, 2005).

Factor extraction to establish the correlations between underlying constructs was done as recommended (Farrington, 2009) and this was followed by Principal Component Analysis with a Varimax Rotation where the extraction and rotation method for the sub models for constructs correlation was established. The Bartlett's Test of Sphericity was used with an intention of assessing the potential of factor-analysis of the data. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was also used to gauge the factor-analysability of the data. The closer a KMO is to 1; the more factor-analysable the data is (Rennie, 2002). For the purpose of this study, data with KMO's of $>+0.7$ ($p<0.05$) is considered factor-analysable. In addition, Eigen values of greater than 1 are considered significant and are used to explain the variance captured by a factor. Eigen values of less than 1 are considered insignificant and therefore excluded (Chong, Lin, Keng-Boon and Raman, 2009; 17). The Eigen values and the Percentage of Variance levels were explained.

Content validity involved measuring all constructs that were included and represented in particular theories used in the study (Crocker & Algina, 1986; DeVellis, 1991; and Gregory, 1992). Content validity index obtained by

dividing the proportion of items declared as valid by the total numbers of items was carried out (Amin, 2005). Stability of the items and constructs was considered in the instrument as recommended by Neuman (2006) and components with Eigen values greater than one and items with correlation coefficient equal or greater than 0.5 were extracted.

Tool testing

This section presents the findings, interpretation and discussions which were all handled at the same time. What is presented is in line with the study objective and hypothesis. The key variables examined are financial intermediation and financial inclusion. The interaction between these variables is explained.

Table 3: KMO and Bartlett's test of financial intermediation

Eigen Value	3.024	1.353
Variance %	40.320	18.046
Cumulative %	40.320	58.366
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.685
	Approx. Chi-Square	695.814
Bartlett's Test of Sphericity	Df	105
	Sig.	.000

Source: Primary data (2017)

The financial intermediation variable with its factors recorded a sampling adequacy of 0.685 which is well above the recommended minimum suggested by Field (2005), meaning that the results yielded by the survey of this variable are reliable. Regarding the degree to which the dimensions are inter-related measured using the Bartlett's Test of Sphericity with an expected minimum significance of $\text{sig} < .05$, the study yielded a test value of Sig 0.000 meaning that the two factors of financial institution size and depth are related under the financial inclusion construct and thus plausible. Ten questions relating to financial intermediation in two factors of institution size and depth were factor analyzed using principal component analysis with Varimax (orthogonal) rotation.

Table 4: KMO and Bartlett's test of financial inclusion

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.809
Bartlett's Test of Sphericity	Approx. Chi-Square	2611.383
	Df	351
	Sig.	.000

Source: Primary data (2017)

On the basis of Varimax Rotation with Kaiser Normalization, 2 factors were extracted. With the study yielding a sampling adequacy of .809 well above the minimum recommended value of 0.6, it can be deduced that the sampling was adequately ideal. Similarly, the inter-relatedness of the variables of study was significant. Field (2005) noted that for variables of study to be inter-related, the level of significance should be <0.5. The level of significance however between financial services access and usage is a significant 0.000 showing a high degree of inter-relatedness between the two.

Field (2005), notes that a value 0.6 is suggested as a minimum for sampling adequacy and from the results of the study, the sampling adequacy with a value of 0.685 means that the sampling was adequate enough to yield reliable results. On the other hand, the Bartlett's test of sphericity measures the degree to which the dimensions of the study variable are inter-related, it should have a significance of sig. <.05 value if the dimensions are inter-related. Having realized the sphericity test value of Sig 0.000, it was concluded that the two factors of financial institution size and financial depth were perfectly related.

Ten questions relating to financial intermediation were factor analyzed using principal component analysis with Varimax (orthogonal) rotation. The analysis yielded two factors explaining a total of 58.366% of the variance for the entire set of variables. Factor 1 was labeled financial Institution size as a determinant and enabler for access to financial intermediation and had high loadings by the following items: There are many different financial institutions present in this area and the existing financial institutions in this area have greatly expanded to the neighbourhood. This first factor explained 40.32% of the variance. The second factor derived was labeled financial depth. This factor equally recorded high loadings by the following factors: There is increased provision of financial services in this area and there is

increased volume of financial services in this area. The variance explained by this factor was 18.046%.

Findings of the study

Table 5: Correlation between Financial Intermediation and Financial Inclusion

	Mean	SD	1	2	3
Financial Intermediation	3.376	.936	1.000		
Financial Inclusion	3.021	1.116	.381**	.443**	1.000

** . Correlation is significant at the 0.01 level (2-tailed).

In table 5, the relationship between financial intermediation and financial inclusion revealed a significant and positive relationship between financial intermediation and financial inclusion ($r = 0.381$, $p < 0.001$). These results show that the greater the capacity of the institution to deliver financial services, the greater the number of persons that will be served by the financial services of the institution and hence, higher levels of inclusion. This equally means that if a financial institution starts up more branches in an area that was not previously served, the possibility of service consumers that have not prior to been served by financial intermediaries to access these financial services greatly increases. This also means that the increase in the volume of the services that are offered in an area would mean that the people, who have access to the financial services, shall have a greater level of satisfaction of the financial services, supporting hypothesis 1 (H1) stating that there is a relationship between financial intermediation and financial inclusion.

A critical look into every measure of how financial intermediation relates to financial inclusion yielded significant and positive correlations between the two variables, a clear indication that financial inclusion is heavily dependent on financial intermediation. Schumpeter (1997) examined the relationship between intermediation and inclusion and argued that financial intermediaries with well-developed financial systems and yet fully sized, tend to be in a much better position to extend credit to individuals and firms looking for credit than those that are less sized. This emphasizes that the bigger the financial intermediary, the more available or ease it is for credit access and thus inclusion. While recent studies have suggested that

unrestrained intermediation size that goes unchecked has led to a number of crises, this study's findings are in agreement with the big correlation between intermediation and the ease to access credit from such an institution as a factor of inclusion.

The ability to access financial services, especially by small and medium-sized institutions has become critical. Small and medium-sized financial institutions make up a large part of the financial service players in most countries, including Uganda, but these are equally more constrained in their bid to gain meaningful entry into the market so people with extra resources can deposit and be able to in turn lend out on top of gaining access to financial services from larger institutions (Ayyagari, Beck and Demirguc-Kunt, 2007; Beck, Demirguc-Kunt and Maksimovic, 2005). While it was evident that microfinance institutions and credit cooperatives have helped to reduce the levels of lack of access to finances by the poor by adapting specific lending techniques such as group lending, it seems less conducive to easing financing constraints of more formal and larger enterprises. It is therefore clear that, the financial intermediary size and ease to access financial services such as credit affects both the borrower and the firm. The inability of the relatively smaller financial intermediaries to get access to services such as credit is directly transferred to the individuals in need of credit. The question of the intermediary size, which is often intertwined with the ownership question has a direct relationship on how easy it is for such an intermediary to access credit which is resultantly related to entry barriers.

Another intriguing finding is that, for each financial intermediary interviewed, there is a practice of maintaining a relationship between the borrower and lender through the credit reform database, also known as credit reference bureau. This is used by these intermediaries to establish the capacity of the borrower in terms of their size, payback ability and credit worthiness as well as monitoring and follow up of these clients. The results of the study suggest that more young businesses and/or individual borrowers that do not have a relationship with large financial institutions such as Stanbic Bank and Centenary Bank which are the major players in the Ugandan Financial market in the areas of study, are less likely to use bank finance and as such, report more difficulties in getting bank credit which limits the financial inclusion levels.

It can thus be argued that, the more spread a financial intermediary is, the higher the chances of extending financial services to the people in a given locality where such an intermediary is. This confirms the argument of Degryse et al (2014) in which they discovered that, there is an almost two fold percentage difference for inclusion in terms of credit access in areas with more coverage than those with bare minimum institutions.

Evidence from the study suggests that intermediation is highly characterized by presence of many different financial institutions, a wider network of financial institution offices and existence of outlet points for service access such as ATMs, which translate into increased levels of inclusion in an area. However, this contradicts with the actual situation in regard to person specifics as the existence of these services has not translated into inclusion measures such as account holding in financial institutions as well as credit access among others as only 46% of the respondents are formally included. This means that inclusion cannot be solely pegged to presence of financial intermediation as there is more to it that may facilitate the usage such as financial literacy, and reduction in transaction costs so that alternatives are not seen as cheaper options among others.

A study by Spence (1973) shows that, there is an impact of the financial intermediary's size on the usage of the services they offer as this is enabled by a number of innovations that help extend the reach of the intermediary closer to the populations.

The findings of this study are in tandem with studies conducted earlier. Hannan (2002, 2004); Hannan and Prager (2004a, 2004b); Park and Pennacchi (2004), argue that the trend towards consolidation of branches in very large branch networks has implications for both bank customers and the banks themselves. Consumers and small businesses are the customer segments that have traditionally relied most heavily on branches to access bank services. Prior research suggests that these customers face something of a trade-off in light of the growth of very large branch networks.

On the one hand, larger banking organizations and organizations that operate in multiple markets tend to charge higher fees and offer lower deposit rates than smaller, single-market institutions. This suggests that, branch-dependent customers could face additional costs as branches are

increasingly consolidated into the large branch networks of multi-market banking organizations.

On the other hand, large branch networks offer the convenience of many possible points of contact with the institution and, potentially, the ability to avoid ATM surcharges and other usage fees by staying within the bank's own network. Earlier studies such as one conducted by Dick (2003) suggest that depositors value geographic reach like having branches in many towns and municipalities, and local branch density, which is, having many branches of an institution in a given area when selecting a depository institution. Market surveys also suggest that, customers place quality on convenience when choosing their bank; 39 percent of bank customers surveyed in 2001 indicated that they selected their bank primarily due to its location (Fung 2001). These factors imply that the scope and scale of large branch network are qualities that many customers value.

From the perspective of the institutions themselves, the growth in the number of bank branches and the consolidation of branches within very large branch networks has implications for cost structure, business focus, and profitability. Full service branches impose significant costs that banks must cover through the revenues generated by these networks, primarily the hidden and clear income associated with deposit accounts (Orlow, Radecki and Wenninger 1996). Continued expansion of branch networks seems consistent with a belief by these organizations that branches will continue to be an effective channel for generating retail banking revenues, despite these costs and the development of alternative distribution channels such as call centers, ATMs, online banking and mobile banking.

Apart from collecting deposits, branch networks that characterize size of the financial intermediary also generate new lending, especially consumer and small business lending. While at many larger banking organizations, credit decisions have been removed from the branch and centralized in regional or at head office credit departments, branches arguably continue to serve as initial points of contact for new small businesses and individual customers. Thus, one measure of productivity for a branch network is the volume of new retail lending generated through these contacts.

It is also important to note that, the net deposit costs vary significantly across branch network size groups. Institutions with fewer branches have a higher net deposit cost for the clients while those that have more branches tend to have lower net deposit costs meaning that this cost is passed onto the clients in the proportions in which they are spread across the branches. This is a clear evidence of how the size of the financial intermediary affects inclusion of the populations in the locality of the intermediary.

However, it should be noted that the intermediary size does not have any consistent relationship with the profitability of the financial institution. In most cases, the financial institution size variables are not statistically significant and there is no clear pattern in the sign and magnitude of the coefficient estimates over time.

Recent work on the possible consequences of large financial institutional size include Cetorelli, (2014), who found that, the growth of financial intermediary size and complexity may lead to complicated and ineffective monitoring and that the design of informed regulation of complex banking organizations presents a key challenge. Bank size can affect risk through the choice of investment strategy that an intermediary adopts as it grows and diversifies or through decisions about funding and capital structure. Using a theoretical model, Claessens and Ratnovski (2014) found that, wholesale funds used to supplement retail deposits can create risks in banks that hold mostly investment assets rather than loans because random or inaccurate information about these asset values may trigger inefficient liquidations and subsequently lead to institutional closure.

Looking at the depths of a financial intermediary, the aspect of institutions having increased provision of financial service in the areas was considered to assess how this influences the usability of financial services by community members. Mishkin (1998) noted that credit markets as part of the financial markets are a very important aspect of measuring depth of financial depth. However, in this area of study, credit markets are non-existent given that the concentration of such services is clustered in a few urban centres, mostly in Kampala.

Given that the majority of the respondents expressed the fact that they had a positive thinking about credit, it means that there is a willingness to

consume the services of the financial intermediaries like credit. However, many are not able to because of the structural hindrances to the acquisition of these services. While the depth of the financial intermediaries is thin on ground, the presence of formal institutions is not utilized to capacity meaning that depth, while it has an effect on the levels of inclusion, it does not solely explain inclusion or exclusion. This finding augurs well with the findings of Lorraine (2015) who noted that even in areas where Islamic banking is practiced such as in Middle East and North Africa; the banking system had a limited impact on financial inclusion. Lorraine (2015) equally noted that countries from the Organization of Islamic Cooperation (OIC) have less access to financial services and make less use of them than the rest of the world. This is a clear illustration that while depth means that services are moved closer to people, it does not translate into financial inclusion.

In a bid to understand this relationship more clearly, private credit was used as a big indicator measure. Čihák, *et al.* (2012) concluded that the higher the ratio of private credit to Gross Domestic Product a particular country has, the higher the financial depth of the financial institutions in that country will be. The banking sector is part of the depository financial institutions which has generally dominated the channeling of private credit.

There are two main indicators of financial depth for the financial institutions namely private credit to GDP and assets of financial institutions to GDP. In developed countries there is a proven relationship between having very high private credit to GDP ratios unlike in developing economies such as Uganda where there are a lot of situations of credit access that is not documented. Thus, the exactness in terms of these ratios cannot be established in Uganda's case.

Djankov, *et al.* (2008) with a case study of Mexico, found that 89% of people with no access to the financial system claim not to have adequate money, whether their own or credit facilities. Another study by Martinez, Hidalgo, & Tuesta (2013) which also used Mexico as a case study, found out that the main constraint of respondents for not having financial access was the lack of income earned. This matches entirely with the findings of this study in Uganda where the unbanked majority cited lack of income earned for not having adequate money to join any financial intermediary. This therefore means that however much spread a financial intermediary may be

with a thick depth, the use of the services that are offered by these intermediaries may still remain low because the population does not have income earned to facilitate the use of the offered services. Besides the above hindrances to financial access being identical in Uganda and Mexico, the two have a similar background as developing lower income countries with the same development concerns related to poverty, limited income gap, and low levels of education.

In order to be able to understand the phenomenon and to make sense of the same regarding the population that is unbanked, focus group discussions for this category of people were conducted and the participants were purposely chosen to make meaning and enable the researcher get to the core of the problem to address the underlying challenges.

One interesting finding however was that the targeted population had a much better degree of trust in private money lenders and loan sharks as compared to financial institutions. While most of these are unregulated, the public, especially those lacking security and those without an assured income continue using them for credit access because they are more accessible and have flexible pay back terms and periods. These however charge higher interest rates, sometimes over 30% per month, which in an ideal environment is too high. However, the demand for credit access is unexpectedly high majorly because of the personal connection with these loan sharks coupled with the low financial literacy and the bureaucratic process of getting the same financial support from the formal intermediaries. This explains why most of the local people that have accessed credit from such unregulated credit providers have failed to pay back leaving the debtors in a vicious cycle of poverty Usman, et al. (2004).

Many scholars have come to perceive the relationship between institutional depth characterized by branches and financial inclusion as a 1:1 relationship. In India for instance, the assumption is that, if inclusion is to be achieved, then more branches are needed. However, empirical evidence even from the developed economies with high levels of financial inclusion suggests otherwise. For instance, India has just 110 branches per a million persons, compared with the USA which has more than 300 branches per a million persons, and Spain with a whopping 900 branches per million persons, with the next nearest in the EU being Italy with 650 branches per a

million persons. This would normally mean that there is a need for India to design strategies of matching the numbers of the already established economies regarding branch density in order to rouse financial inclusion.

In a stark contrast to the above position, some countries such as Norway with 90 branches per million persons has a 98.6% inclusion level, Sweden with 150 branches per a million persons has a 99% inclusion level yet some countries with more branches such Italy with 650 branches per a million people at 84.0%, Greece at 360 branches per million people has 84% inclusion percentage while Spain with an incredible 900 branches has an inclusion level of 92% with 22% of its population opting for loans from friends and family, World Bank (2014). This therefore means that the number of branches doesn't necessarily translate into inclusion.

This picture in essence means that financial inclusion is actually not enhanced by branch density. To understand this clearly, the example of Kenya, with 50 branches per a million people has only got a 20% financial inclusion through a bank and 65% financial inclusion through a mobile phone or mobile money account. This correlation however may not be related to branch density, but with the regulators propensity to know their customers in a branch as a requirement for account opening. Brett (2016) argues that the Identity Verification in-branch is the single biggest hurdle to financial inclusion today in both the developed and developing world.

De Soto, (2000) argues that, there is not any economy in the world that has improved financial inclusion for poorer segments of the market through branch access, and no market in the world will ever get 100% financial inclusion based on branch density and traditional in-branch on boarding. However, recent trends show that there is a possibility of countries such as Kenya that have a relatively low formal inclusion and higher levels of informal intermediation such as mobile money to surpass levels of countries such as USA with high density although this inclusion can be made better through provision of prepaid debit cards and other alternative financial services that may exist in better developed economies.

From the contextual understanding and findings of this study informed by the feedback of the respondents, more branches may not be the answer for financial inclusion in Uganda. Rather, the strengthening of the non-

formal mechanisms such as mobile financial transactions may be more appropriate. For instance; the ownership of a mobile money account by an individual should not be a luxury but a necessity for any Ugandan. This is mainly because of the perception of the community members that bank services are expensive and may equally be attributed to financial literacy. Thus, even if branches were increased, there is a very high likelihood that people may still not make use of the newly created branches. Besides, apart from the services offered, these financial institutions tend to have limited knowledge of their clients and so there is a big disconnect between the two entities.

Regulated intermediation requires physical presence of an individual and a signature of the same for identity verification. This inadvertently works against the objective of achieving total inclusion because it limits inclusion and transaction to physicality. However, modern systems that permit the usage of mobile phones for primary bank accounts, both opening and transacting calls for prioritizing of mobile on boarding.

The closer relations between the financial intermediary that provides account opening and access using mobile on boarding shifts to a platform where the provider is able to interact with behavioral learning around the customer including spending patterns, the saving ability, and other traits which can be generalized as opposed to being one offs as may be the practice with physical branch account holders. This not only helps clients with easy access but also benefits expand the information base of a financial intermediary about a client. The lack of provision to allow on-boarding of new bank accounts via a mobile phone, means that such a financial intermediary is left behind in regard to numbers especially when it comes to inclusion and the customer behavioral adoption when it comes to banking.

From the study findings, more than a third of the respondents reported using a formal financial institution for financial services, banks and Microfinance Institutions for a number of purposes including their routine financial transactions and financial advice and management among others.

Previous research indicated that there is a very big impact of the depth of financial institutions on the usage of the financial services in any geographical location. Demirgüç-Kunt et al, (2008) argue that banks are not

generally geographically accessible for the poor since financial institutions are likely to be located in richer neighborhoods. The poor are also burdened by lack of collateral and inability to borrow against their future income because their income streams tend to be hard to track and predict, meaning that depth of a credit lending institution has a proportionate impact on the usage of their services which accounts for the fact that in many countries, financial access is still limited to only 20–50 percent of the population, excluding many poor individuals and [SMEs](#), simply because the cost of increasing depth in a given locality may not bring returns to the financial institution because of the likelihood of the unprofitability to serve the small credit needs and transaction volume of the lower-income population, Demirgüç-Kunt et al, (2008).

This Demirgüç-Kunt et al, (2008) argument concurs with the empirical findings of this study. Because of the likely losses, there was a noticeable concentration of financial service outlets in areas that seemed highly populated in the two districts of study. Looking at how services are used across the different education levels points to a glaring fact that respondents who were below a diploma level of education seemed to favour friends and family as their sources of financial information as opposed to banks, and expressing use of mobile money more than formal institutions for their financial transactions. This means that there is a degree of difficulty among this category of people who despite the presence of intermediary structures, opt for other alternative sources.

Ghatak (1999) reasons that, accessing financial services is basically a social construct which is so reliant on faith and trust among the intermediary and borrower. In his argument, he emphasizes the fact that regardless of the information asymmetry as an advantage on the intermediary and transaction costs being borne by the same, transaction cannot take place between the financial intermediary and the borrower unless there is such a degree of faith in the institution and trust in the capacity of the borrower to pay back. Thus, there is a contract between the institution and the borrower which has to be honoured with all its terms, Gleaser & David, (2002) and while this reasoning relates to individual persons as a unit of measure, it applies to the community or location as a collective entity. If a financial intermediary does not have trust in the ability

of a given location to consume and maximally utilize its services on offer, the logic of increasing depth in such a locality does not make business sense.

Many theories have been advanced with a notion that a bank with physical presence develops considerable knowledge of the credit risk and business opportunities in its market through its interaction with consumers and businesses, which are a basis of its loan and deposit products. Agarwal et al (2007) stress the fact that having physical presence is key because the bank has to interact repeatedly with the community to develop the necessary relationships and from this, credible information regarding the potential borrowers and depositors can be got.

However, enhanced Institution-customer relationships can overcome this obstacle resulting from the intermediary depth. Banks are able to generate information from a particular customer using soft information, which may not be easily accessed through any other means for instance, the tendency by a prospective client to over draw his/her account can easily be traced through such a relationship. Berger et al. (2005) argue that, banks that have access to this sort of usage information from their loan customers' accounts are able to identify creditworthy borrowers.

Banks operating in a local market are also more likely to have information on the local economy, giving them a context from which they can determine to have physical presence or otherwise. This means that they can evaluate the future prospects of a borrower that is not readily available to an out-of-market lender. For instance, a bank with close ties to a clients' market may know that their employer is experiencing financial difficulties and that their request for a loan was turned down by a potential lender. This would make such an employee, a high-risk borrower. Given the difficulty in generating soft information without a physical presence in any local market, the closure of any intermediary branch translates into the failure to secure a loan even if they moved to a far off lender.

Young et al (2007) in their study on commercial lending discovered that low-income homebuyers who obtain their credit from banks with branches in their neighborhoods are less likely to default than homebuyers who use banks without a branch in the area or mortgage brokers. This effect is especially strong among borrowers with low credit rating. Young et al (2007)

also noted that, average default rate for this group was around 20 percent while the default rate of those borrowers who took their loans from a local bank was up to 4.3% less. This equally aligns with the findings of this study that majority of the respondents strongly believed the financial services in the area to be cheap while 59.8% of the same respondents shared a view that these financial institutions plying their trade in their areas bother to reach out to them to market their services to the locals and are thus appreciated, a confirmation of the findings of Young et al (2007).

From this study, it can be deduced that, physical presence gives an intermediary the opportunity to get to know distressed individuals and areas better and channel resources to people who can manage them best. However, the majority of these creditworthy people are also likely to be financially constrained, and so unlikely to bear the full cost of keeping a branch open in an area with declining business opportunities. Thus, they are the ones who will be worse off when branches close. This study equally reveals that the benefits that come from creditworthy borrowers in declining low-income areas being in close physical proximity to a bank branch.

It should be noted that while it would be considered a deterrent to usage of financial services, majority of the respondents contended that the longer distances travelled to the financial institutions are no hindrances to accessing the services needed. This means that to this category of respondents, the demand for credit services supersedes the distance they have to cover in order to access credit. This finding is in stark contrast with the findings of Pedrosa (2008) while studying the effect of geographic distance on credit in Niger. They discovered that when considering an economic transaction between two agents; a borrower and a lending institution the effect of distance consists of the physical cost that either of them has to meet to realize the success of the transaction. They noted that distance affects the credit market in a number of ways including the direct transaction cost in terms of the actual transportation cost to deliver financial services to the borrower. While costs such as screening of projects for borrowers, monitoring of the borrower and others are supposed to be borne by the borrower, in instances where the distance between the two is far apart, the intermediary may have to meet some costs which influences the decision whether or not to monitor such a prospective client.

Undisputed evidence points to the fact that relatively long distances moved because an intermediary does not have physical presence is also associated with and equally explains higher interest rates and lower loan amounts. It also underpins the lower frequencies of monitoring, lower default rates and a higher prevalence of female group lending even though women have a higher rate of illiteracy compared to their male counterparts at 83% for individuals aged 15-24. (World Bank, 2008).

Geographic distance between members captures social connections for many reasons. Monitoring costs which would have been lumped on a single individual are in this case reduced when individuals live closer to each other, making monitoring easier and less costly. Of critical benefit is the fact that people who have more common associates or people in their circles are able to easily access information from and about other members in their circles. Given that members are known to each other and fear to lose their reputation and respect, becomes handy in pushing the potential defaulters to the limits to meet their obligations since such people are likely to have more frequent future interactions and more connections in common.

Conclusion

The study results suggest that institutions with mid-sized branch networks have lower deposits per branch than those with both larger and smaller branch networks. They also hold lower levels of small business loans per branch than smaller institutions. In summary, these findings suggest that, banks with mid-sized branch networks may face profit pressure in their branch network operations since their per-branch performance appears to lag than of both smaller and larger institutions, with no offset in deposit interest costs relative to the larger institutions.

While the study revealed that, there was an evidently strong effect of financial intermediation on financial inclusion, and that financial intermediaries have availed financial products to their clients, the study also pointed to the fact that depth and size do not seem to ably respond to the problem of financial exclusion meaning on top of having presence in a community with many branches, intermediaries need to invest more in the non financial drivers of access to and usage of financial services such as the intermediary cum personal relationships with prospective clients, capacity building of these organised groups of such things as risk management,

organizational capacity building and education on financial literacy and other aspects. The findings are illustrative of a gap regarding knowledge of financial intermediaries for their potential clients and understanding what their specific financial needs may be in order to be able to ably respond to them.

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