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# Social capital: mediator of social intermediation and financial services access

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## Abstract

**Purpose** – The paper examined the mediating effect of social capital in the relationship between social intermediation and financial services in Ugandan micro finance industry. The purpose of this paper is to establish the role of social capital in the relationship between social intermediation and financial services access.

**Design/methodology/approach** – The paper adopted the MedGraph program, Sobel tests and Kenny and Baron approach to test for mediation effects.

**Findings** – It is clear that the true drivers of access to financial services in the micro finance industry are social intermediation and social capital. However, social capital exhibits partial form of mediation in the relationship between social intermediation and access to financial services.

**Research limitations/implications** – A single research methodological approach was employed in the study. Owing to limitations associated therein, future research through interviews could be undertaken to triangulate.

**Practical implications** – Since social capital is found to be a causal chain in the relation between social intermediation and financial services access in this study, managers in the micro finance industry should endeavor to reinforce agents of social capital (i.e. trust and social networks) since the lending relationships between the micro-finance operators and marginalized communities are driven by social collateral.

**Originality/value** – This is the first study that focuses on testing the mediating effect of social capital in the relationship between social intermediation and financial services access in the Ugandan microfinance industry.

**Keywords** Social intermediation, Social capital, Microfinance industry, Mediating effect, Financial services access, Financial services, Uganda

**Paper type** Research paper

## Introduction

One of the most important developments in the literature linking social intermediation to access to financial services in the microfinance industry is social capital. According to Putnam (1993), social capital refers to networks, norms and trust that facilitate cooperation for mutual benefit. Scholars such as Dusuki (2008) and Claessens (2005) argue that social capital, an outcome of social intermediation, gives rise to trust. Through trust, social capital promotes cooperation and contributes to the achievement of agreements that involve risks in making decisions. Ledgerwood (1999) argued that

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trust plays a paramount role in the formation of group lending success, particularly in the absence of collateral, as in the case of the microfinance industry. Social capital, therefore, creates creditworthy borrowers, strong networks within the group, peer monitoring and guarantee mechanism, better flow of information between lenders and borrowers, and, hence, less adverse selection and moral hazard in the credit market (Bhatt and Tang, 1998; Collier, 1998).

Dusuki (2008) contends that social capital creates an “information asset,” which acts as the collective endorsement of character that each member of the group provides the other, that will easily be accepted by the financial intermediary in lieu of other assets. In any case, the created information asset reduces information asymmetry, increases level of awareness and transparency, which, in turn, enable the communities to gain access to financial services (Lynn, 1996; Goldberg, 1994). Ledgerwood (1999) shares the same view and observed that social ties and information asset created are capable of increasing awareness of financial services and social collateral, which are determinants of access to financial services in the microfinance industry.

As a sector that is excluded from the traditional banking practice due to lack of collateral and clear formal structures (Labie, 2001; Ledgerwood, 1999; Kalyango, 2004; Megicks *et al.*, 2005), the microfinance industry solely thrives on social capital. The industry is characterized by low-income households and the economically poor (Nannyonjo and Nsubuga, 2004) who lack economic assets and, therefore, collateral to mortgage for credit facilities. Members in a group, instead, use social guarantees to obtain credit facilities. For example, in the case of solidarity loans, members can be the social collateral for the loans. In essence, responsibility and trust between members in the microfinance industry allows for obtaining loans without excessive collateral. In essence, social capital, which is believed to mediate social intermediation and access to financial services, plays a key role in linking lenders and borrowers in the microfinance industry (Baguma, 2010).

Whereas theoretical assertions confirm that social capital mediates the association between social intermediation and access to financial services (Ledgerwood, 1999; Bhatt and Tang, 1998; Collier, 1998), empirical evidence in the existing microfinance literature is limited (Mackinnon, 2008). This study, therefore, investigated the empirical role of social capital in the relationship between social intermediation and access to financial services in the microfinance industry.

This study is expected to enable scholars and practitioners to have a more definite and direct understanding of the implication of social capital in the association between social intermediation and access to financial services. Besides, more explanation as to how social capital diffuses the outcome of social intermediation to access to financial services will be explained.

### Literature review

Whilst there are plenty of general delineations of social intermediation, there is so far no generally established definition (Ledgerwood, 1999). Nonetheless, definitions that have stood the test of time include one Lynn's (1996) and Goldberg's (1994) who identified it as:

[...] a process in which investment is made in the building up of both human resources and institutional capital, with the aim of increasing the self-reliance of marginalized groups, and preparing them to engage in formal financial intermediation.

Edgcomb and Burton (1998) broadened the definition of social intermediation to financial intermediation with a capacity-building component, aimed at those sectors that lack access to credit and savings facilities.

Social intermediation, thus, involves the building of social capital within groups. Social ties and trust created amongst group members will promote a lending relationship between financial organizations and clients in the credit industry. Other than social ties and trust that emanate from social intermediation, the latter enhances the establishment of systems and structures in which one or more institutional players create a sustainable process that successfully links poor borrowers to sources of capital and financial services, both credit and savings (Edgcomb and Burton, 1998). Further observations have been made by Ledgerwood (1999) who argued that social ties and information asset boost social collateral, which in turn influences access to financial services in the microfinance industry.

### **Social intermediation and social capital**

Social capital refers to the willingness of individuals to co-operate with other individuals and with institutions for a common purpose (Berenbach and Guzman, 1992). According to the World Bank social capital initiative, social capital is the internal social and cultural coherence of society, the norms and values that exist among people and the institutions in which they are embedded. Social capital is thus known as a foundation of group lending model because it creates social collateral, which compensates for lack of material assets in group lending arrangements.

Increasingly, the created social capital will lead to creation of creditworthy borrowers, strong networks within the group, trust, peer monitoring and guarantee mechanism, better flow of information between lenders and borrowers and, hence, less adverse selection and moral hazard in the credit market. Pischke (1991) argued that financial intermediation depends upon trust between the borrower and the lender that contracts will be honored. In this case, trust, which results from social capital, plays a paramount role in the formation of group lending success, particularly in the absence of collateral. It is worth noting that the main theme of social capital is the level of mutual trust, respect and friendship that arises out of close interactions between internal and external partners (Kale *et al.*, 2000). Trust, according to Morgan and Hunt (1994), exists when one party has confidence in an exchange partner's reliability and integrity. It is, therefore, embedded in a particular exchange relation and becomes a fundamental basis of long-term relationships between partners.

Besides, the extensive literature defends the relationship with stakeholders as the necessary condition for building, maintaining and renewing resources, structures and processes over time. Through external relationships, firms can access critical and complementary resources and capabilities that may otherwise not be available (Vainio, 2005). Drawing from the social capital theory by Nahapiet and Ghoshal (1998), networks of relationships constitute a valuable resource for the conduct of social affairs and much of this capital is embedded within networks of mutual acquaintance. Consistent with the social capital theory, Bontis (2000) argued that it is this social relationship that increases the efficiency of action and aids co-operative behavior. However, Hinge (2006) argued that networks of relationships can yield tangible results if the parties involved are capable and willing to do so.

Microfinance institutions that have embraced social capital and built strong ties with their clients, have been able to take advantage of low cost marketing, knowledge diffusion,

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low operational costs and the like. This has consequently enabled them to enjoy the economies of scale in the industry. In a related case, the created social capital normally creates an “information asset” for the active poor. The created “information asset” acts as the collective endorsement of character that each member of the group provides the other that will easily be accepted by the financial intermediary in lieu of other assets. Information asset, therefore, reduces information asymmetry; a barrier to financial intermediation (Dusuki, 2008). Besides, the increased level of awareness and transparency enable the communities to make viable financial decisions and selection of legitimate suppliers of financial services, which is key in hedging against commercial risk.

Notwithstanding the above assertions, interaction within the microfinance institution groups creates co-operation and trust that not only facilitate microfinance activities but also contribute benefits beyond loan accesses. Such benefits may include a greater sense of community, trust and reliance on the group in time of crisis, sharing of valuable social and market information and more positive social practices. The networks and norms created by groups are thereby said to be a positive form of social capital, which, in turn, can lay building blocks for other social capital development in a community.

Extensive empirical literature exists globally on the relationship between social intermediation and access to financial services, but the results are silent on the mediating role of social capital in the relationship. Thus, the mediating effect of social capital in the relationship between social intermediation and financial services access in the microfinance industry has remained sparse. Insufficient literature in this area is, therefore, a matter of great concern in this study. This, therefore, leads to the following hypothesis:

*H<sub>1</sub>*. Social capital positively relates to social intermediation in the microfinance industry.

In a related case, Ledgerwood (1999) observed that the power of social intermediation influences access to financial services through social capital. This assertion pre-supposes that social capital plays a mediating role in the relationship between social intermediation and access to financial services. Theoretically, the mediation effect of social capital in the relationship between social intermediation and access to financial services is indisputable (Dusuki, 2008; Ledgerwood, 1999).

Whereas theoretical assertions authenticate the mediating role of social capital in the relationship between social intermediation and access to financial services, empirical evidence in the existing literature is limited. According to Rosenberg (1968), a relationship study that does not address the mediating mechanism ends up with facts, although with an incomplete understanding. In the same vein, Bennet (2000) argued that the study that fails to consider the possibility of a mediator effect in the data may miss more explanations for an outcome. Friedrich (1982) further asserts that exploring the mediating effect of variables in the relationship spells out the nature of the relationship and the extent to which the connection between the two variables are influenced by the mediating variable. In light of the above, this study investigated the practical role of social capital in the relationship between social intermediation and access to financial services in the microfinance industry. The following hypothesis is thus derived:

*H<sub>2</sub>*. Social capital mediates the relationship between social intermediation and access to financial services in the microfinance industry.

### Study design and methodology

This study applied cross-sectional and quantitative research designs to address the hypotheses covered in this research.

The population included clients of the microfinance institutions in Uganda. On the basis of Ntoumanis's (2001) and Field's (2006) guidelines, this study covered a minimum of five clients per microfinance institution. Since the clients' sampling frame could not easily be established, snowball sampling technique was used. From 78 registered microfinance institutions in Uganda (AMFIU, 2010), a total of 390 clients constituted a sample (i.e. five per firm  $\times$  78 firms). However, out of 390 clients, 275 responded, hence, giving a response rate of 70.5 percent.

All items were anchored on a five-point Likert-type scale ranging from 5 (strongly agree) to 1 (strongly disagree). The questionnaire was validated through expert interviews and a panel of practitioners. The reliability of the instrument (using internal consistency approach) to find out whether it consistently measured the study variables on the scales used (Anastasi, 1982; Nunnally, 1978) was tested. The computed Cronbach'  $\alpha$  coefficient results were all above 0.6.

Common method bias was addressed in this study by collecting data from at least five clients from each MFI, and potential effects of response pattern biases were reduced by incorporating negatively worded items on the questionnaire (Hinken, 1995; Drasgow and Idaszak, 1987). The logic is that negatively worded items are like cognitive "speed bumps" that require respondents to engage in a more controlled as opposed to automatically cognitive processing (Hinken, 1995).

Data were screened to establish the distribution of data and assess whether the assumptions of parametric data are tenable. Specific assumptions tested included normality of the distribution of the data, homogeneity of variance, linearity of the data independence of errors and multi-collineality. Multi-collinearity was tested by running the variance inflation factor (VIF) and the tolerance levels, and standard cut-off points suggested by Scott (2003) and Yu (2008) were observed.

Tests for mediation were conducted to establish the nature of mediation and the extent to which social capital influences the association between social intermediation and access to financial services. The test for mediation was performed using MedGraph program by Jose (2008), which is based on the works of Brambor *et al.* (2002), Field (2006) and Kenny and Baron (1986).

### Results

#### *Sample characteristics*

Response rate of 70.5 percent was registered; females and males represented 37 and 63 percent, respectively. Of these, 42 percent were from Central, 22 percent Western, 15 percent Northern and 21 percent Eastern regions of Uganda. The findings further indicate that 86 percent of the clients have been getting financial services from MFIs for more than ten years. The mean scores of variables studied ranged between 3.01 and 4.21 and standard deviations in the range of 0.57-0.71. Since the standard deviations are small compared to mean values, it is true the computed means highly represent the observed data. In effect, the calculated averages are a good replica of reality (Garson, 2000; Field, 2006; Saunders *et al.*, 2006).

Correlation results presented in Tables I and AI indicate that social intermediation and social capital have a substantive and significant relationship with financial

services access ( $r = 0.281, p < 0.01, r = 0.390, p < 0.01$ ). The results signify that increased levels of social intermediation and social capital are highly associated with increased access to financial services in the microfinance industry.

**Testing for mediation**

Mediation tests were performed to establish whether the conditions suggested by Kenny and Baron (1986) were met. Besides, the MedGraph program, a modified version of the Sobel test, was used to compute the Sobel  $z$ -value and the significance of the mediation effect of social capital in the association between social intermediation and access to financial services. The results are shown in Table I and Figure A1, respectively.

Table I indicates that the four conditions for mediation according to Kenny and Baron (1986) are met. First, there is an effect to be mediated ( $B = 0.73, p < 0.01$ ). Second, there is a significant relationship between social intermediation and mediator ( $B = 0.23, p < 0.05$ ) and, third, the coefficient of the mediator (social capital) is significant in regression three ( $B = 0.31, p < 0.01$ ) with both social intermediation and social capital as predictors. Finally, the absolute effect of social intermediation on access to financial services is less in regression three (standardized  $\beta = 0.356$ ) than in regression two (standardized  $\beta = 0.390$ ).

The significance of the mediation effect and nature or type of mediation was also tested by calculating Sobel’s  $z$ -value and ratio index using the MedGraph program and results are shown in Figure 1, which is a copy of the appended Figure A1.

The MedGraph program graphically depicting mediation among three variables (social intermediation, social capital and financial services access).

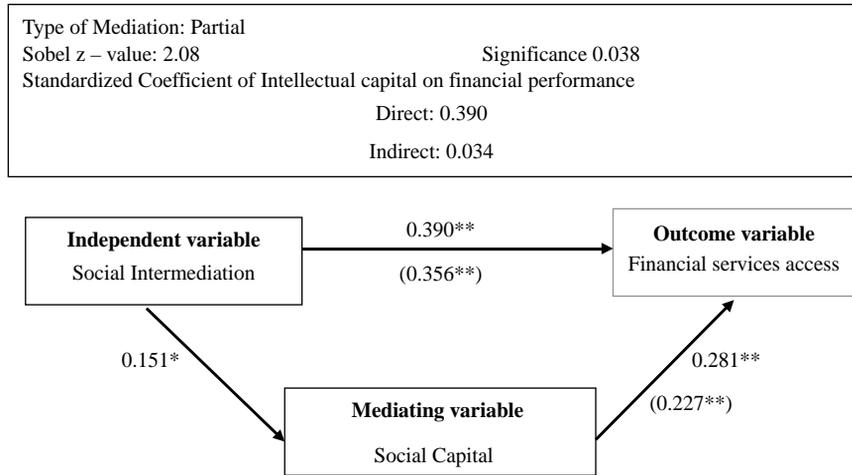
From Figure 1, Sobel  $z$ -value of 2.08 with  $p$ -value of 0.038 and the beta weight for the basic relationship between social intermediation and access to financial services ( $r = 0.356, p < 0.001$ ) were registered. These results indicate that: First, since the Sobel  $z$ -value is large with a  $p$ -value less than 0.05, it means that a significant mediation of social capital in the relationship between social intermediation and access to financial services existed. In a real sense, it indicates that the association between the predictor variable (social intermediation) and the criterion variable (access to financial services) has been significantly reduced (i.e. from 0.390 to 0.356) by the inclusion of the mediating variable (social capital) in the third regression model (Jose, 2008). Second, a partial type of mediation was also registered because the correlation between independent variable and dependent variable was reduced to a significant level (i.e. from 0.390\*\* to 0.356\*\*).

Third, the ratio index of 8.8 percent given by  $(0.034/0.390 \times 100)$  implies that 8.8 percent of the effect of social intermediation on the access to financial services goes through the social capital and about 91 percent of the effect is direct.

Predictor	Dependent variable									
	Social capital			Access to financial services						
	Model 1			Model 2		Model 3				
	B	SE	$\beta$	B	SE	$\beta$	B	SE	$\beta$	
Intercept	2.16**	0.37		-0.92	0.65		-1.21*	0.81		
Social intermediation	0.230*	0.05	0.151	0.73**	0.21	0.390	0.62**	0.13	0.356	
Social capital							0.31**	0.17	0.227	

Notes: Significant at: \* $p < 0.05$ , \*\* $p < 0.01$ ;  $n = 275$

**Table I.**  
The mediating effect of social capital in the relationship between social intermediation and access to financial services



**Figure 1.**  
Social capital: mediating  
social intermediation and  
financial services access

### Discussion and conclusion

This research investigated and tested the mediating effect of social capital in the relationship between social intermediation and access to financial services in the microfinance industry in Uganda. The essence of the study was to test specific causal theories about time-ordered relationships among variables and the particular mechanism or pathway by which a relationship occurs. In this case, the results as indicated in the previous section, have shown the specific drivers of access to financial services in their causal chain relationships. Accordingly, the findings indicate that social capital partly mediates (partial mediation) the relationship between social intermediation and access to financial services. This means that the entire effect on access to financial services does not only go through the main predictor variable (social intermediation) but also social capital. This signifies that the connection between social intermediation and access to financial services is weakened by the presence of social capital in the model. The foregoing discussion confirms that the presence of social capital partly acts as a conduit in the association between social intermediation and access to financial services in the microfinance industry. Thus, social intermediation and social capital are true drivers of access to financial services in Uganda’s microfinance industry.

This finding links well with the conclusions of Pischke (1991) who argues that financial intermediation and, thus, financial access depends upon trust (a major component of social capital) between the borrower and the lender that contracts will be honored. The fact is that though social collateral takes precedence in the lending relationship in the microfinance industry, one cannot completely divorce social capital from access to financial services.

Likewise, social capital theory by Nahapiet and Ghoshal (1998) links well with this finding. The theory argues that networks of relationships constitute a valuable resource for the conduct of social affairs and much of this capital is embedded within networks of mutual acquaintance. In the same vein, Gratton and Ghoshal (2003) observed that twin concepts of sociability and trustworthiness, antecedents of social capital, are central to financial services access. This point of view is also consistent with Bontis (2000),

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who argues that social relationships increase the efficiency of action and aids co-operative behavior. In this case, trust that emanates from social capital enables group members to pursue the collective goals by sharing knowledge and work in teams. It is this synergetic effect that partly enables the communities to access financial services in the microfinance industry.

In a nutshell, the true drivers of access to financial services in the microfinance industry are social intermediation and social capital. However, social capital exhibits a partial form of mediation in the relation between social intermediation and access to financial services. This signifies that the entire effect does not only go through the main predictor variable (social intermediation) but also social capital. Hence, a specific mechanism or pathway by which a relationship occurs between social intermediation and access to financial services is direct, though social capital partially mediates the connection between the two.

### **Implications for management and researchers**

On the basis of the results of this study, a series of issues calls for the practitioners' and researchers' attention. Although social intermediation is very much emphasized as means of promoting access to financial services in Uganda, promoters or managers should realize that it cannot be completely divorced from social capital. According to Lynn (1996) and Goldberg (1994), social intermediation aims at building the capacity of human resources so as to increase the skills and self-reliance of marginalized groups. In essence, social intermediation does not seriously emphasize the building of social networks and social ties which are the cornerstones of social capital. Since social capital is found to be a causal chain in the relation between social intermediation and financial services access in this study, managers in the microfinance industry should endeavor to reinforce agents of social capital (i.e. trust and social networks), since the lending relationships between the microfinance operators and marginalized communities are driven by social collateral.

More so, it is always a sign of a maturing discipline when the role of the third variable in the relationship is examined so as to make meaningful logical conclusions. In so doing, this study has tested theories of mediating effects so as to uncover real versus spurious relationships in the phenomenon that addresses access to financial services. Since this study demonstrated that the intervention of the third variable (social capital) in the model influences change and is therefore effective, researchers and practitioners are advised not to underrate its role in the microfinance literature, especially when dealing with matters of credit access and other related areas. In support of this assertion, Rosenberg (1968) and Friedrich (1982) observe that a relationship study that does not address the mediating mechanism ends up with facts but with incomplete understanding. In this case, researchers are cautioned not to underestimate the intervention of third variable(s) in research if more explanation for an outcome is to be registered.

### **Limitations of the study**

The findings of this study are subject to some limitations that provide initiatives for future research.

One of the possible reasons for the varied results of the study is the methodology used for measuring social capital and social intermediation. Although the constructs have been defined as precisely as possible by drawing upon relevant literature and being validated by practitioners, the measurements used may not perfectly represent

all the dimensions. The implication is that the constructs used can realistically only be proxies for an underlying latent phenomenon that is itself not fully measurable.

Future studies could use the same basic hypotheses but implement the study in terms of a longitudinal rather than a cross-sectional design. The longitudinal study would need to correct changes in data relative to the time element.

Finally, only a single research methodological approach was employed and future research through interviews could be undertaken to triangulate.

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**Further reading**

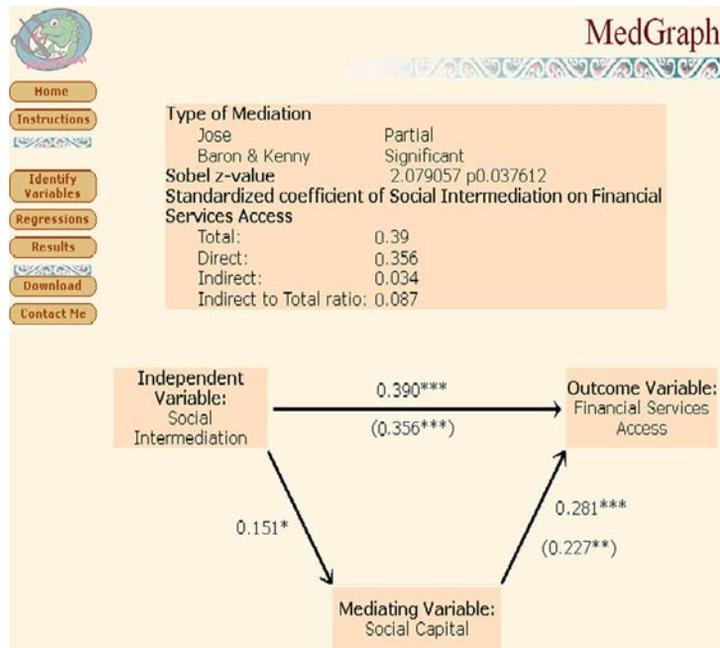
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**Appendix**



**Figure A1.** Social capital: mediating social intermediation and financial services access

		Correlations		
		Social capital	Social intermediation	Financial service access
Social capital	Pearson correlation	1		
Social intermediation	Pearson correlation	0.151*	1	
Financial service access	Pearson correlation	0.281**	0.390**	1

**Note:** Correlation is significant at: \*0.05 and \*\*0.01 levels (one-tailed)

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