

Social Networks and Subjective Norms: The Mediating effect of financial self efficacy on Financial Inclusion

1

Financial Inclusion

Dr. Rachel K. Mindra
Department of Finance;

Makerere University Business School, Kampala, Uganda
rmindra@mubs.ac.ug

Prof. Musa Moya
Department of Business Computing,

Makerere University Business School, Kampala, Uganda

Abstract

Purpose: The purpose of this study was to examine the mediating effect of financial self-efficacy on the relationship between social networks, subjective norms and financial inclusion among individuals in Uganda.

Design/Methodology/Approach: We used a quantitative approach and cross sectional research design with a sample of 400 individuals from urban Central and rural Northern Uganda. Structural equation modeling was used to establish and test the hypothesized relationships and mediation effects between social networks, subjective norms and financial inclusion.

Findings: The results suggest that financial self-efficacy is a mediator of the relationship between social networks, subjective norms and financial inclusion. Furthermore, significant relationships between social networks, subjective norms and financial inclusion were found.

Research Limitations: The study was assessed using both potential and actual consumers of financial services collectively. However, if separately assessed, possibly there would be a variation in perceptions or behavioral responses towards financial inclusion.

Practical Implications: There is a need to develop and sustain high levels of financial confidence among individuals to enable them use formal financial services through the social networks and subjective norms in which they are embedded and social values they uphold.

Originality/Value: The results contribute towards the limited empirical and theoretical evidence regarding the mediating role of financial self-efficacy in explaining financial behaviour.

Keywords: Financial inclusion, financial self-efficacy, Social networks, Subjective norms, SEM
Paper type: Research paper

Introduction and motivation

Financial inclusion (FI) plays a critical role in economic development by facilitating growth and reducing inequality and deprivation of those excluded from the formal financial markets (Gupte et al., 2012). This is only possible when an economy utilizes a “balanced mediation effect” between the demand-side and supply-side (Kumar and Mohanty, 2011; Agrawal, 2008) in order to overcome income inequality and achieve more inclusive formal financial systems. The economic rationale of FI is to assist economies in preventing exploitative informal financial markets from flourishing at the expense of the vulnerable poor and the financially illiterate. Pande and Burgess (2005) argued that at a micro level, branch network in often excluded rural locations significantly reduced rural poverty through increased savings mobilization and loan



distributions by banks that perhaps improve their welfare through the resources allocation process. Similarly, at a macro level, increasing the depth of financial services to the lower level segment through expansion of individual access to formal financial services may contribute to lower income inequality (Cull, Demirgüç-Kunt, and Morduch, 2013; Demirguc-Kunt and Klapper, 2012; Ehrbeck, Pickens, and Tarazi, 2012; Kasekende and Brownbridge, 2011).

According to Kempson and Whyley (1999), there is clear incongruity among previous empirical assessments that many people across the globe are excluded from mainstream banking but the reasons for exclusion differ from one individual to another. Schindler (2010) argued that there is need to integrate the informal and formal financial markets because the volume of informal activity is far greater than that of organized financial institutions. Perhaps this integration can inherently improve the involvement and consequently wellbeing of such rural segments by providing them with a wider array of efficient, safe and reliable financial services to improve their financial strategies and welfare. In order to gauge whether the formal financial institutions are effective vehicles of FI, it is thus important to understand the individual capabilities from a demand side perspective of the different segments within the diversity of an economy like Uganda which is highly characterised by social integrations and norms that influence individual behavior (Mindra. 2016).

In that regard, the decision-behavior theories and empirical studies that relate to individuals' decisions towards choice of financial products and services have drifted towards increasing emphasis on understanding the psychological processes underlying observed judgments or choices (Allen, Demirguc-Kunt, Klapper, and Peria, 2012; Clamara et al., 2014; Demirguc-Kunt and Klapper, 2012; Martínez et al., 2013; World Bank, 2014). Therefore, using Sen's capabilities approach (Sen, 1970) to explain FI, this study focused on examining the mediating role of financial self-efficacy on the relationship between social networks and subjective norms as key capabilities in advancing financial inclusion across two distinct regions of Uganda.

The rest of the paper proceeds as follows. The next section is literature review in which we also develop the study hypotheses. What then follows is the methodology section which enlists the methodology and methods adopted for this particular paper. This is followed by the presentation of the empirical analysis and discussion of results therefrom. The paper ends with a conclusion and implications.

Literature review

Financial Inclusion

Massara and Mialou (2014), Hannig and Jansen (2010) and Serrao et al. (2012) postulated that the notion of FI can be advanced through its three dimensions: access, usage and quality of financial services in order to deepen understanding about factors that associate with FI that enables the testing of hypotheses between FI and other variables. In the same regard, World Bank, (2014) identifies the adoption of multidimensional approach to define and operationalize FI. This is to minimize the often mistaken supposition that FI can only be achieved by simply offering enough access points, savings products and frequency of use by individuals to provide more valid results and perspectives. Demirguc-Kunt and Klapper, (2012), Ardic et al., (2011) and AFI (2012) argued that FI is often measured through the three dimensions; the access dimension measures the physical and breadth of financial services, and individuals' ability to use the available financial products and services at a service point; Usage dimension measures an individual's ability to derive permanent purpose and utility from a particular financial product or service. The quality dimension measures the relevance of the financial products or services in the day-to-day needs of the financial consumer.

Social Networks and Financial Inclusion

As individuals manage their daily lives, they interact and embed themselves in complex relationships. Social networks, one of the topical concepts that has emerged in social science research, is the extent to which individuals are linked together through inter-relationships at different levels and their influence on the way they behave (Granovetter, 1990). Social network theories have identified the existence of significant relationships that include acquaintances or friends classified as weak ties whereas close friends, relatives, or neighbors are strong ties (Burt (1982). Such ties can be described as ego-centric or socio-centric (Ladin and Hanto, 2010). Social networks present a compelling way of examining collective behaviour through individuals' engagement in similar behaviours with others, flow of information within the networks or adopting the social norms within these interactions that inherently influence their behaviour and consequently beneficial outcomes where people are linked by relationships/ties (Ladin and Hanto, 2010, Fischer, 1982, Okten and Osili, 2004, Rowley, 1997; Carpenter et al., 2012, Kilduff et al., 2006, Phelps et al., 2012, Granovetter, 1985).

Therefore, the study argues that for FI to be achieved, individual's choice of financial services is shaped by social capabilities and the extent to which the individual effectively utilises the resource endowments like financial information that the networks possess to influence their financial behaviour and consequently FI. This is consistent with Zhang et al (2012) and Zhou et al (2009) who found a significant positive relationship between networks and household choice of financial intermediaries. The study therefore, hypothesises that:

H₁: There is a significant positive relationship between social networks and financial inclusion.

Subjective Norms and Financial Inclusion

Subjective norms refer to an individual's belief about whether significant others think that one should engage in a given behaviour and one's motivation to comply with the specific referents (Ajzen, 1991, Fishbein and Ajzen, 1975, Ajzen and Fishbein, 1980). According to the theory of planned behaviour (TPB), the stronger the subjective norm, the more likely the individual will form intentions to perform a particular behaviour. Evidence shows that the reason for this influence and pressure imposed by the social environment, is that an individual would perform the behaviour even though the individual may not be in favor of undertaking a particular activity or behaviour (Venkatesh and Morris, 2000). Empirical studies in various disciplines (Latimer and Martin Ginis, 2005; Liu et al., 2014; Parker et al., 1995; Rice et al., 2010; Clowes and Masser, 2012; Roberto et al., 2012; Park et al., 2009) have shown varied results regarding subjective norms as a predictor of behaviour. However, (Liu et al. (2014); Taib et al. (2008); (Gopi and Ramayah, 2007, Azam and Lubna, 2013, Lean et al., 2009) found that there was a strong interaction between social norms and financial incentives. This study therefore, hypothesizes that;

H₂: There is a significant positive relationship between subjective norms and financial inclusion.

Financial Self- efficacy (FSE) and Financial Inclusion

The social cognitive theory (SCT) explores the role of cognitive thinking in guiding individuals' motivation and financial behaviour (Sandler, 2000) which is linked to FSE. FSE refers to the measure of confidence an individual possesses to use financial services which was anchored in the context of the finance domain. Bandura, (2005) argued that a 'one measure fits it all' approach usually has limited explanatory and predictive value because most of the items in an all-purpose test may have little or no relevance to the domain functioning". For instance, Kinard and Webster (2010) in their study examining the relationship between self-efficacy and unhealthy consumption behaviour, found that self-efficacy is a weak predictor of risk behaviours. The lack of significance was attributed to the use of a general scale rather than the domain specific measure.

FSE is proposed to predict the likelihood of an individual being able to access and use formal financial services. Examining the financial self-efficacy concept and its relation to FI is particularly relevant because a financial consumer's cognitions and behaviours might have notable influence by belief in their abilities to engage in a specific task or activity. Despite the significant influence of self-efficacy on individual behaviour, a number of researchers, though limited in comparison with other disciplines, have explored the relationship between the financial self-efficacy and higher levels of financial well-being (Lown, 2012). For instance, Tokunaga (1993) concluded that, financial self-efficacy seems to be the missing link between knowledge individuals possess and effective financial action and outcomes.

In line with other scholars, Danes and Haberman (2007) emphasised that self-efficacy significantly influenced financial behaviour especially when teens have financial knowledge. Tokunaga (1993) and Engelberg (2007) also found that among other psychological capabilities, self-efficacy helped in predicting the likelihood of credit problems. In that regard, these findings are in line with the hypothesised perspective that the importance of such financial confidence required by a financial consumer to propel them into considering the use of financial products and services is important. Therefore, with reference to FI, a high level of self-efficacy is likely to positively influence financial consumers' actions to access financial services. Ozmete and Hira, (2011) carried out a conceptual analysis of behavioural theories and their application on financial behaviour. They found that self-efficacy is one of the key determinants of financial behavioural change in different environments. This implies that when an individual consumer has significantly high levels of self-efficacy, it may influence them to access and use a financial institution of their choice, products and services.

Therefore, people with high self efficacy tend to focus on opportunities and shun obstacles in anticipation of a positive outcome (Locke and Baum, 2007). For instance, a financial consumer with high self-efficacy will anticipate the improvement in welfare if they were able to save, acquire credit, insurance services, make payments and invest and view the obstacles towards inclusion merely as part of the game (Mindra. 2016). We therefore hypothesise that; **H₃**: *Financial self-efficacy is significantly related to financial inclusion among individuals in Uganda.*

The Mediating Role of Financial Self-efficacy

Self-efficacy influences individual tasks or choices directly and also indirectly to realize positive outcomes that individuals usually anticipate (Bandura, 1994). In line with this, self-efficacy has been used in some studies as a mediating variable and has been identified as a much more consistent predictor of behaviour and behavioural change (Bailey and Austin, 2006, Bandura, 1986, Zhao et al., 2005, Zimmerman et al., 1992). These studies are predominant in the health (Maciejewski et al., 2000), organisational studies (Gong et al., 2009, Stajkovic and Luthans, 1998), entrepreneurship (BarNir et al., 2011, Zhao et al., 2005) and academic learning domains (Diseth, 2011, Hejazi et al., 2009, Pintrich and Garcia, 1991, Weiser and Riggio, 2010, Zimmerman et al., 1992, Zimmerman, 2000). Few studies discussed below have examined the mediating role of self-efficacy in the finance context, specifically FI.

Empirical findings for instance (Bandura & Schunk, 1981; Bouffard-Bouchard, 1990) over the years have supported Bandura's argument that self-efficacy beliefs actually mediate the relationship between various variables and performance attainments in specific domains. In addition, these findings have also demonstrated that self-efficacy beliefs influence these attainments by influencing effort and perseverance to achieve certain outcomes and tasks which is unlike other personality attributes. For instance Wood et al (1987) found that academic self-efficacy influenced achievement indirectly, implying that the students believed that their capabilities used more cognitive strategies with increased levels of self-efficacy to

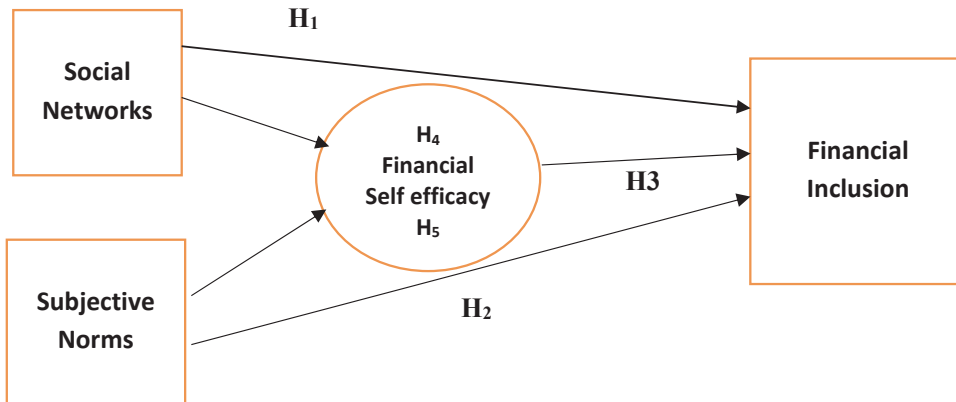
persist through given tasks. These findings are consistent with Pintrich and Garcia (1991) who concluded that self-efficacy played a facilitative role in the process of cognitive engagement among students to realize more successful performance propelled by the will to achieve besides the skills they possessed. In addition, (Hejazi et al., 2009) found that academic self-efficacy beliefs have a significant mediating effect on the relationship between identity styles and academic achievement. Maciejewski et al (2000) in their study about depression found that self-efficacy mediates approximately 40% of the effect of dependent stressful life events on individuals with symptoms of depression which showed a relatively influential effect of self-efficacy. Zhao et al (2005b), in their study examining the mediating role of self-efficacy in development of entrepreneurial intentions, found that the effects of perceived learning from entrepreneurship-related courses, prior entrepreneurial experience, and risk propensity on entrepreneurial intentions were fully mediated by entrepreneurial self-efficacy.

Therefore self-efficacy is a dynamic attribute individuals may possess in various contexts, and hence it can be altered by specific individual behaviour, biological events and the environment within which they interact (Bandura, 1997; Stajkovic and Luthans, 1998). At present, a detailed discussion on FSE is almost non-existent, considering the fact that in other fields, self-efficacy has been found to have a positive mediating and moderating association to individuals' behaviours. Based on prior empirical findings the study hypothesizes that;

H₄: *Financial self-efficacy significantly mediates the relationship between social networks and financial inclusion among individuals in Uganda.*

H₅: *Financial self-efficacy significantly mediates the relationship between subjective norms and financial inclusion among individuals in Uganda.*

Conceptual Framework



Methodology

Philosophical assumptions

This study is rooted in the positivist epistemology. The positivist epistemology focuses on explaining and predicting what happens in the social world by focusing on revealing causal relationships between its elements or variables (Crotty, 1998; Babbie, 2012). The positivist approach is applied to research where the overall aim is to record, measure and predict reality through a set of variables and constructs. It is argued that positivists presuppose that the reality in the societal world is tangible and its meaning can be identified, studied and measured using approaches of natural science (Ardalan, 2011; Babbie, 2013; Saunders et al., 2011.). Further,

this study is framed within the objectivist ontological perspective which assumes that there is a single reality in the social world, whereby human behaviour is measured 'from outside' without accessing the meanings that individuals give their measurable behaviour (Sarantakos, 2005). In this regard, a quantitative research methodology and large sample size was applicable, given the expectation of the positivist epistemology and objectivist ontological perspective. This approach enabled the identification of the underlying associations of study independent variables and financial inclusion.

Theoretical perspective

The capability approach (CA) developed by Sen (1970) postulates that an individual may possess certain desirable capabilities like social networks and subjective norms in order to realise certain outcomes for instance financial inclusion intended to improve their social inclusion as well as improved welfare (Nussbaum and Sen, 1993; Robeyns, 2003; Iversen, 2003; Hill, 2003). CA was used to articulate this study because of its focus on the capabilities individuals are likely to possess that enable them become more inclusive in the formal financial system. FI is one such anticipated outcome and development strategy intended to foster livelihoods and reduce poverty in developing countries like Uganda especially in the predominantly financially excluded rural areas.

CA is an analytical framework in defining and analysing capabilities such as the ability to access and use financial services to improve welfare and quality of life (Sharma, 2005). In line with the assumptions of CA, this study argues that the perspective relating to individual capabilities such as the possession of social networks and subjective norms influence individuals' financial decisions that frame the understanding of FI in a developing country context like Uganda.

Research Design

The study adopted a cross-sectional survey research design which involved collecting data at a particular point in time that is useful in obtaining facts and perceptions of respondents. Additionally, the quantitative method approach generated data from a cross sectional survey which was useful in making statistical explanations and inferences about the key variables of the study (Saunders et al., 2011). Specifically, statistical relationships between the personal capabilities, societal capabilities (social networks, subjective norms) and financial inclusion were examined. Cross-sectional studies are perceived to be relatively inexpensive, faster and easier to do, useful for generating and clarifying hypotheses and can lay the groundwork for decisions about follow-up studies (Sekaran, 2000).

A deductive approach of scientific research was used to carry out this study. An argument is deductive in nature if its conclusion is a logical consequence of its hypotheses (Brink, Van der Walt and Van Rensburg, 2006; Sserwanga, 2011). In addition, with deductive reasoning, a researcher takes a general theory or idea, tests it and consequently arrives at a specific conclusion which enables the researcher to arrive at a valid position of reasoning within a specific context. In this, a deductive approach of investigation and analysis was used because the alternative, the inductive approach, which uses exploratory techniques to establish relationships among constructs, leaves a lot of room for assumptions and generalizations (Popper and Popper, 1972; Saunders et al., 2011).

Study population and Sample size

The study population included all adults aged 18 years and above within the Central and Northern regions of Uganda provided by the Uganda Population and Housing Census, 2014 (UBOS, 2014). The population consisted of 2,471,477 individuals located in these selected districts in the Central region (Kampala and Mukono districts) and Northern region (Maracha

and Kaabong) (UBOS, 2014). Individuals were specifically considered because the study is demand side focused at individual level, and they were able to inform the study on the capabilities relating to financial inclusion. Additionally, the choice of these districts was based on the level of financial inclusion and significant variations that exist in these locations.

The selected districts in the Central region represent highly urban and peri-urban locations that enjoy high levels of financial inclusion whereas the selected districts in Northern Uganda represent the rural locations register that high levels of financial exclusion in Uganda (BoU, 2013; Finscope, 2013; UBOS, 2014). Furthermore, this selection provides a balanced sample of the population given the differences in economic and social aspects of the rural and urban areas. This mixed approach (rural-urban divide; included-excluded) controlled for individual specifics which could influence FI from a demand side perspective given the disparities that exist in the formal financial system.

A Sample size of 400 individuals was targeted. This was determined by adopting Yamane (1973) sample size selection approach. According to Yamane's formula, sample size is determined by: $n = \frac{N}{1+N(e)^2}$ where: n - is a sample size; N - is total population; and e - is tolerable error. On the basis of Yamane's approach with total population (N) and tolerable error (e) 5%, the sample size (n) Yamane's sample selection was preferred because it fairly yields a representative sample.

Data collection and variable measurement

Data were collected from respondents using a self-administered questionnaire. Reliability of the data collection instrument was tested using Cronbach's alpha coefficient ensuring that all variables had alpha coefficients .70 threshold. The questionnaire was categorized into three sections examining the demographic characteristics of the respondent, financial inclusion (dependent variable), financial self efficacy (mediating variable), social networks, subjective norms (independent variables) respectively. The questionnaire items developed were adopted from previously established valid items and modified to suite the current study. The manifest variables can be found in Table V.

Measurement of Key Variables

Social Networks

The network application with an external view was adopted; measuring social networks in terms of network availability which indicates the possession of valuable resources used by individuals and network intention which indicates an individual's desire to use the relationships/ties to achieve specific outcomes (Borgatti and Foster, 2003; Carpenter et al., 2012; Hallen, 2008; Kilduff et al., 2006). (refer to Table V for manifest variables)

Subjective Norms

Subjective norms were measured in terms of an individual's normative beliefs of image, visibility and referent people. The respondents were required to indicate the extent to which other people significant to them influence their financial behaviour (Ajzen and Fishbein, 1980; Ajzen, 2011; Ajzen, 1991; Fishbein and Ajzen, 1975; Clowes and Masser, 2012; Roberto et al., 2012; Chau et al., 2004; Rice et al., 2010; Liu et al., 2014).(Table V)

Financial Inclusion

Financial inclusion was operationalized using access, usage and quality dimensions (Center of Financial Inclusion, 2013; Demirguc-Kunt and Klapper, 2013; Ssonko, 2010; Ddumba-Sentamu, 2009; Global Financial Inclusion Database; World Bank, 2014). (Table V)

Data analysis

Data analysis process involved screening and performing various statistical tests that are relevant in explaining the study variables. Before the data were analysed, they were cleaned by checking for errors and completeness, edited, coded, transcribed and entered into the Statistical Package for Social Scientists (SPSS) for screening and preliminary analysis. Analysis of Moment Structures (AMOS) was then used for confirmatory factor analysis for validity analysis and Structural Equation Modeling (SEM) to test the study hypotheses.

Empirical Analysis and Discussion of Findings

A geographical assessment in terms of gender, community lived in, education level and monthly income across Central and Northern regions of Uganda was necessary as earlier presented in the methodology section. This was specifically to establish how they demonstrate the facilitation or limitations of access to financial services given the infrastructural and economic differences, cultural and natural barriers among others as key characteristics of the respondents. The cross tabulations of the characteristics presented in Table I were selected because they provide important background information about the individual respondents associated with financial inclusion.

Variable	Region			
	Central %	Northern%	Total %	
Gender	Male	29.5	22.2	51.7
	Female	20.5	27.8	48.3
Total	50	50	100	
Community lived in	Rural	0	50	50
	Urban	50	0	50
Total	50	50	100	
Job	No	17.5	16.8	34.3
	Yes	32.5	33.2	65.7
Total	50	50	100	
Education attained		3.0	6.2	9.2
Did not attend		3.2	31.0	34.2
Primary	O-level	9.0	5.8	14.8
	A-Level	7.5	2.0	9.5
Vocational with no formal		0.5	0.5	1
Vocational after primary		1.5	1.5	3
Vocational after secondary	Diploma	3.8	1.5	5.3
	Bachelors	7.8	1.5	9.3
Masters and above		10.2	0	10.2
Demographic		3.5	0	3.5
Characteristics of Respondents across Region	Total	50	50	100

Table I:
Demographic
Characteristics of
Respondents across
Region

Source: Primary Data

Diagnostic tests

The diagnostic tests were performed on the normality, linearity, multicollinearity and homogeneity of variance and results are presents in Table II.

Variables	Skewness	Kurtosis	R ² Coefficients	VIFs	ANOVA F-statistic (Sig<0.05)	Levene Test (Sig>0.05)	Kolmogorov (Sig>0.05)
Financial inclusion	.730	-1.508			110.197	2.891	0.353
Financial self efficacy	-.337	-.949	.63	3.106	122.593	8.412	0.432
Social networks	-.213	-.730	.40	1.538	125.382	.004	0.323
Subjective norms	-.485	.472	.60	2.732	222.874	16.232	0.243

Financial Inclusion

Table II:
Diagnostic Tests

Source: Primary data

Normality was tested using Kolmogorov, skewness and kurtosis tests. Skewness and Kurtosis test results indicated that data on all study variables were fairly normally distributed as presented in *Table II*. The results were within the recommended distribution values of ± 2.58 at .01 significance level and ± 1.96 at .05 error level respectively (Hair et al., 2010). Kolmogorov test indicates sig. values greater than 0.05 an indication that the data is fairly and normally distributed. *Multicollinearity* was tested using the variance inflation factor (VIF). The common cutoff value for VIF of 10 (Field, 2009; Hair et al., 2010). The results in Table II indicated that all VIF values were less than 4. Linearity was assessed by examining the line of best fit, the R² co-efficient on the scatter plots were moderate to high ranging from .40 to .63 and ANOVA F-statistic which were significant in a simple regression which is a clearer representation of a linear relationship if it actually exists (Hair et al., 2010). The scatter plots showed a linear relationship between the variables and thus upholding the linearity parametric assumption as presented in Table II. *Homogeneity of variance* was tested using the Levene test to assess equal variance dispersion. The results in Table II indicated a not significant Levene statistic - an indication that the data was homogeneous as recommended by Pallant (2010) and Field (2009).

Measurement and Structural Models

Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM)

Convergent and Discriminant Validity

In CFA, Average Variance Extracted (AVE) were all above 0.5 indicating convergent validity and the square roots of the Variance Extracted (VE) for each manifest variable were greater than the correlation coefficients with financial inclusion, implying discriminant validity. The results confirm construct validity and composite reliability of financial inclusion, social networks and subjective norms as presented in Table III.

Table III:
Summary of
Convergent and
Discriminant
Validity

Measurement Scale	EFA		CFA	
	Communalities	Range	AVE	Square root of AVE
Financial Inclusion	0.61	– 0.95	0.893	0.945
Social networks	0.64	– 0.81	0.760	0.872
Subjective norms	0.62	– 0.75	0.677	0.823

Source: Primary Data

Structural equation modeling (SEM) is a theory driven technique that combines factor analysis with multiple regression in order to simultaneously assess the contribution and relationships among multiple observed and unobserved variables (Schreiber et al., 2006; Hair et al., 2010; Ullman, 2001). In this study, SEM was used because of its ability to explain a set of hypothesised relationships at the same time, its ability to allow one to test theoretical prepositions and directionality of the variables through path analysis while minimising measurement error. Additionally, SEM was used to test the mediation hypotheses accordingly. These have been identified as major drawbacks in the factor analysis and traditional multiple regression analysis which SEM overcomes in order to draw more robust conclusions regarding the stipulated hypotheses. The statistical significance and model fit indices were used to assess the significance of the measurement model and structural paths representing the effect of hypothesised variables respectively. In this study, the specific model fit indices used to assess the measurement and structural models were; absolute fit indices which included chi square value whose cut off should have a ratio to degrees of freedom ≤ 2 or 3; and incremental and parsimonious fit indices which included Normed fit index (NFI), Incremental fit index (IFI), Tucker-Lewis Index (TLI), comparative fit index (CFI) whose cut off for acceptance should be .95 and root mean square residual (RMSEA) $< .08$ with 95% confidence interval were used to assess how the articulated theoretical model fits the sample data and alternative models (Hair et al., 2010).

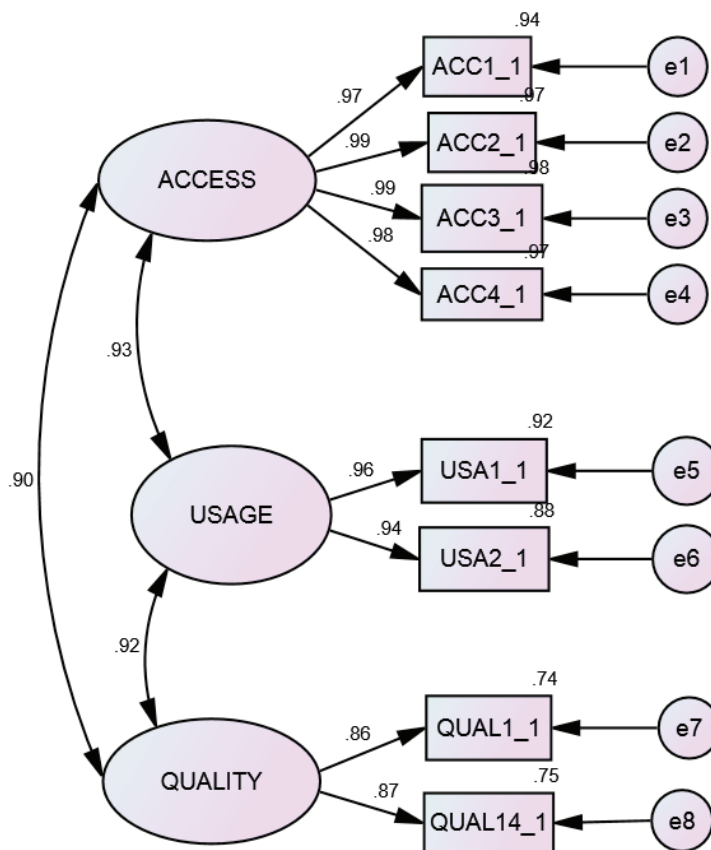
Measurement Models

CFA confirmed a specific number of items presented in Table IV respectively for the constructs with the latent and manifest variables clearly indicated by the regression weights, and a presentation of the model fit summary indices for each factor. Consequently, the structural models were developed explaining financial inclusion among selected individuals in Uganda from a demand side behavioural perspective.

Financial inclusion

Financial inclusion was measured in terms of access, usage and quality of financial services. CFA confirmed and retained the three constructs and four items were retained for access, two for usage and two for quality with the observed variables of financial inclusion as shown in Table IV, Figure 1 and regression weights in Table V. This suggested a good representation of financial inclusion items.

CFA confirmed and retained five items to measure a one factor model of financial self-efficacy as shown in Table VI, Figure 2 and the regression weights Table V. The results indicated a good model fit. This suggested a good representation of financial self-efficacy items hence confirming the factors or items used in the CFA model and the overall hypothesised measurement model for the study.



Chi-square = 49.825
 Df= 17, p= .000
 CMIN=49.825, CMIN/Df=2.931
 GFI=.970, AGFI=.936
 NFI=.991, RFI =.986, IFI=.994, TLI=.990, CFI=.994
 RMSEA=.070

Figure 1:
 Financial Inclusion
 Measurement
 Model

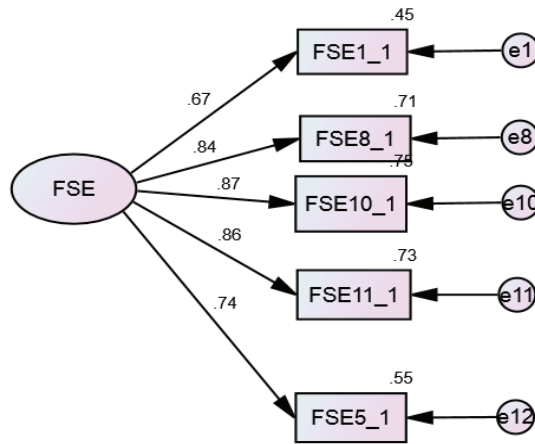


Figure 2:
Financial self
efficacy (FSE)
Measurement
Model

Chi-square = 53.456
 Degrees of freedom = 5, p=.000
 CMIN=53.456, CMIN/Df=10.691
 GFI=.943, AGFI=.830,
 NFI=.956, RFI =.916, IFI=.960, TLI=.920, CFI=.960
 RMSEA=.06

Social Networks

CFA confirmed and retained four items to measure a one factor model of social networks as shown in Table IV and Figure 3. The results provided a good model fit suggesting a good representation of social networks items retained in the CFA measurement model.

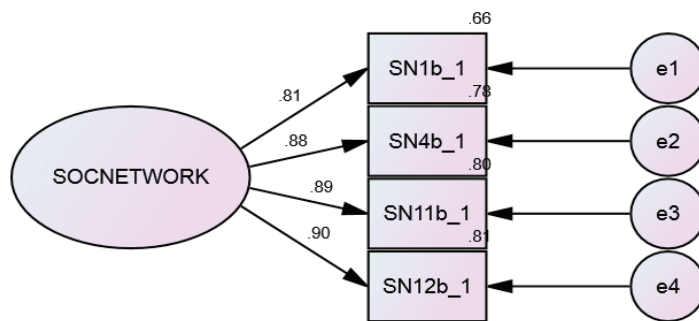
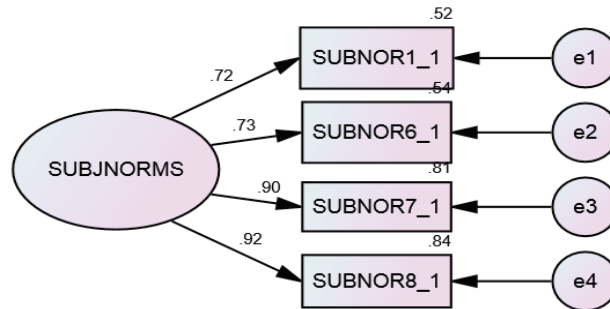


Figure 3:
Social Networks
Measurement
Model

Chi-square = 8.045
 Df = 2, p=.018
 CMIN= 8.045, CMIN/Df=4.022
 GFI=.990, AGFI=.952, NFI=.994, RFI =.981, IFI=.995, TLI=.986, CFI=.995
 RMSEA=.08

Subjective Norms

CFA confirmed and retained four items to measure a one factor model of subjective norms measured as shown in Table V and Figure 4 and the regression weights in Table IV which suggested a good representation of social networks items retained in the CFA measurement model.



Chi-square = 8.045
 Df=2, p=.018
 CMIN=14.108, CMIN/Df=7.054
 GFI=.983, AGFI=.915, NFI=.994, RFI =.981, IFI=.995, TLI=.986, CFI=.995
 RMSEA=.08

Figure 4:
 Subjective Norms
 Measurement
 Model

Table IV:
Constructs and
Items of Financial
Inclusion, Social
Networks and
Subjective Norms

Construct	Code	Items
Financial Inclusion (FINCLU)	ACC1_1	There is an usable access road leading to the nearest formal financial institution
	ACC2_1	The nearest bank is less than 5km from in my home
	ACC3_1	I live within less than 1km of an ATM that I can easily visit to access my account
	ACC4_1	There is an usable access road leading to the nearest formal financial institution
Social Networks (SO- GINTEN)	USA1_1	I am aware of the formal products and services (savings, loans, insurance and payments/remittances)
	USA2_1	I have used my savings account to save for future expenses
	QUAL1_1	I know which documents are required to open a bank account
	QUAL14_1	I receive prompt information regarding my transactions
Subjective Norms (SUBNORM)	SN1b_1	Social networks are the most important source of financial information
	SN4b_1	I use the opportunities within my networks to attain my financial goals
	SN11b_1	I use opportunities within quickly in order to attain my financial goals
	SN12b_1	I get involved in activities within my networks that improve my financial wellbeing
Financial self efficacy (FSE)	SUBNOR1_1	The people who influence my decisions expect me to save my money in the bank
	SUBNOR6_1	People whose opinions I value would approve of the usefulness of insurance services
	SUBNOR7_1	The people important to me believe I can afford formal financial services
	SUBNOR8_1	The people important to me think that formal financial services are cheaper to use
Source: Primary Data	FSE1_1	I am confident that I can manage my finances
	FSE5_1	I can easily spend less than my income each month
	FSE8_1	I can confidently deposit money in the bank to plan for the future
	FSE10_1	I have the ability to borrow money from the bank
	FSE11_1	I have what it takes to use financial services to manage my financial goals

			B	S.E.	β (Beta)
Social Networks					
SN1b_1	<---	SOCINTEN	1.000		.813
SN4b_1	<---	SOCINTEN	1.040	.049	.882***
SN11b_1	<---	SOCINTEN	1.032	.048	.892***
SN12b_1	<---	SOCINTEN	1.121	.052	.898***
Financial Inclusion					
ACC1_1	<---	ACC	1.000		.969
ACC2_1	<---	ACC	1.040	.016	.985
ACC3_1	<---	ACC	1.044	.016	.989
ACC4_1	<---	ACC	1.039	.016	.984
QUAL1_1	<---	QUAL	1.000		.861
QUAL14_1	<---	QUAL	1.022	.046	.867***
USA2_1	<---	USA	.971	.025	.939***
USA1_1	<---	USA	1.000		.957
Subjective Norms					
SUBNOR1_1	<---	SUBNORM	1.000		.720
SUBNOR7_1	<---	SUBNORM	1.115	.064	.899***
SUBNOR8_1	<---	SUBNORM	1.190	.068	.918***
SUBNOR6_1	<---	SUBNORM	.795	.056	.734***
Financial self efficacy					
FSE8_1	<---	FSE	1.268	.087	.842***
FSE10_1	<---	FSE	1.522	.101	.868***
FSE11_1	<---	FSE	1.462	.099	.856***
FSE5_1	<---	FSE	1.146	.087	.741***
FSE1_1	<---	FSE	1.000		.669***

Financial Inclusion

Table V:
Measurement
Model Regression
Weights for financial
inclusion, social
networks, subjective
norms and financial
self efficacy

Source: Primary Data

Testing for Relationships between Social networks, Subjective Norms and Financial Inclusion

After assessing the measurement models and identifying the construct and manifest variables of social networks, subjective norms and FSE & FI, structural equation models were fitted to test the study hypotheses. These were within acceptable standards, estimates of the hypothesised relationships using the structural model assessment component as explained in the following sections.

Relationship between Social Networks, Subjective Norms and Financial Inclusion

			B	S.E.	β	P	Hypothesis?
FSE	<---	SOCNET	.236	.052	.261	***	
FSE	<---	SUBNRM	.549	.062	.619	***	
FINCLU	<---	FSE	.943	.103	.570	***	
FINCLU	<---	SOCNET	.264	.065	.177	***	Supported H_1
FINCLU	<---	SUBNRM	.376	.083	.256	***	Supported H_2
FINCLU	<---	DMarried	-.385	.105	-.090	***	

Source: Primary Data

Table VI:
Regression
Weights for Social
networks, Subjective
Norms, Financial
Self-Efficacy and
Financial Inclusion

The SEM results for Figure 5 and Table VI generated generally acceptable model fit values for social networks, subjective norms and FI according to (Schreiber et al., 2006, Hu and Bentler, 1995, Hair et al., 2010). The results presented indicate that social networks were significant and positively related with financial inclusion ($p < .001$) therefore supporting hypothesis H_1 that there is a significant positive relationship between social networks and financial inclusion among individuals in Uganda. The results suggest that individuals' possession of distinguished relationships within their specific interactions through friendly or family relationships was a source of financial information on saving, credit, insurance and remittances that enable their effective utilization. The results are consistent with (Jones and Volpe, 2011; Cassar and Wydick, 2010; Kamukama et al., 2010; Black, 2013) who found that social relationships increased the availability of financial information useful in improving an individual's knowledge about existing financial services such as credit, savings, insurance and remittances. In this regard, this study provides an indication that the continuous interactions through meetings and other social activities are very common in Ugandan societies and may influence individuals' behaviours through the creation of awareness and advice on various financial choices or options, hence financial inclusion.

Social networks continue to be viewed as a platform for formulating shared values, preferences and instruments for pursuing them. Therefore, an individual's ability to value a specific outcome may very often depend on the possibility of acting together with others within the same network who value similar things or outcomes, for instance, the benefits of using formal financial services to improve one's welfare. This concurs with Evans (2002) who found that organised collectivities such as unions, political parties, village councils, women's groups, are fundamental to individuals regarding life they have reason to value.

The results further indicated a significant positive relationship between subjective norms and financial inclusion ($p < .001$) therefore supporting hypothesis H_2 that there is a significant positive relationship between subjective norms and financial inclusion among individuals in Uganda. The results infer that an individual's belief about what those significant to them. (For instance a spouse, family member, friends or supervisor thought about their choices and consequent behaviour) influencing their access and use of financial services. The findings in this study corroborate other empirical studies, for instance, the works of seminal economist, Akerlof (1980), who argued that subjective norms continue to exist because of the perceived loss of reputation to the individual intending to act from diverting from what the significant

others perceive or think about the intended behaviour. In the same regard, Liu et al. (2014); Taib et al. (2008); Gopi and Ramayah, (2007), Azam and Lubna, (2013), Lean et al., (2009) found that there was a strong positive and significant influence between social norms with individual and financial market behaviour respectively. Therefore, an individual has to observe the financial practices of those significant people and the values they uphold regarding the use of formal financial services. This is in line with the theory of planned behaviour (Ajzen, 1991) which posits that different individuals and environments influence different actions, outcomes, responses and results which is commonly experienced especially in African societies like Uganda.

Testing for Mediation Effect of Financial Self-efficacy on Social Networks, Subjective Norms and Financial Inclusion

Bootstrapping was selected over other methods like Sobel tests and the causal steps approach to test for mediation mainly because despite the complex and existence of multiple paths within a model, its extrapolation is based on the indirect effect between the predictor and dependent variable respectively Preacher et al., (2007). Prior testing for mediation effects, the Baron and Kenny (1986) criteria for establishing existence of mediation were met as presented below, thus providing a basis for testing mediation hypotheses; There was a significant direct effect of social networks ($\beta=.177$ S.E=.065, $p=.000$), and subjective norms ($\beta=.256$; S.E=.083, $p\text{-value}=.000$) on financial inclusion.

- a) There was a significant direct effect of social networks ($\beta=.261$; S.E=.052, $p\text{-value}=.000$) and subjective norms ($\beta=.619$, S.E=.062, $p=.000$), on financial self-efficacy.
- b) There was a significant direct effect of financial self-efficacy on financial inclusion ($\beta=.570$; S.E=.103, $p=.000$).

Results indicated that the effect of social networks and subjective norms increased when financial self-efficacy was introduced into the model.

Assessment of Direct and Indirect Mediation Effects of Financial self-efficacy

In this study, the bootstrap procedure provided by Preacher and Hayes, (2008), Preacher et al., (2007) was used to test significance of the mediation using the direct and indirect mediation effects in the following hypotheses: H_4 : *Financial self-efficacy mediates the relationship between social networks and financial inclusion*, H_5 : *Financial self-efficacy mediates the relationship between subjective norms and financial inclusion*.

Following the assessment of the significance of the direct and indirect effects on financial inclusion, confirmation of the hypotheses on relationship and mediation was done. Analysis was performed using the maximum likelihood (ML) parametric bootstrap method with 2000 re-samples of 400 observations. Maximum likelihood method was selected in order to maximise the number of iterations to achieve better results. The analysis provided the average bootstrap estimates of the indirect and direct effects and 95% confidence intervals. This was done by determining the 2.5% lower bound values and 97.5% upper bound values in the distribution of the indirect effect estimates from each bootstrap sample.

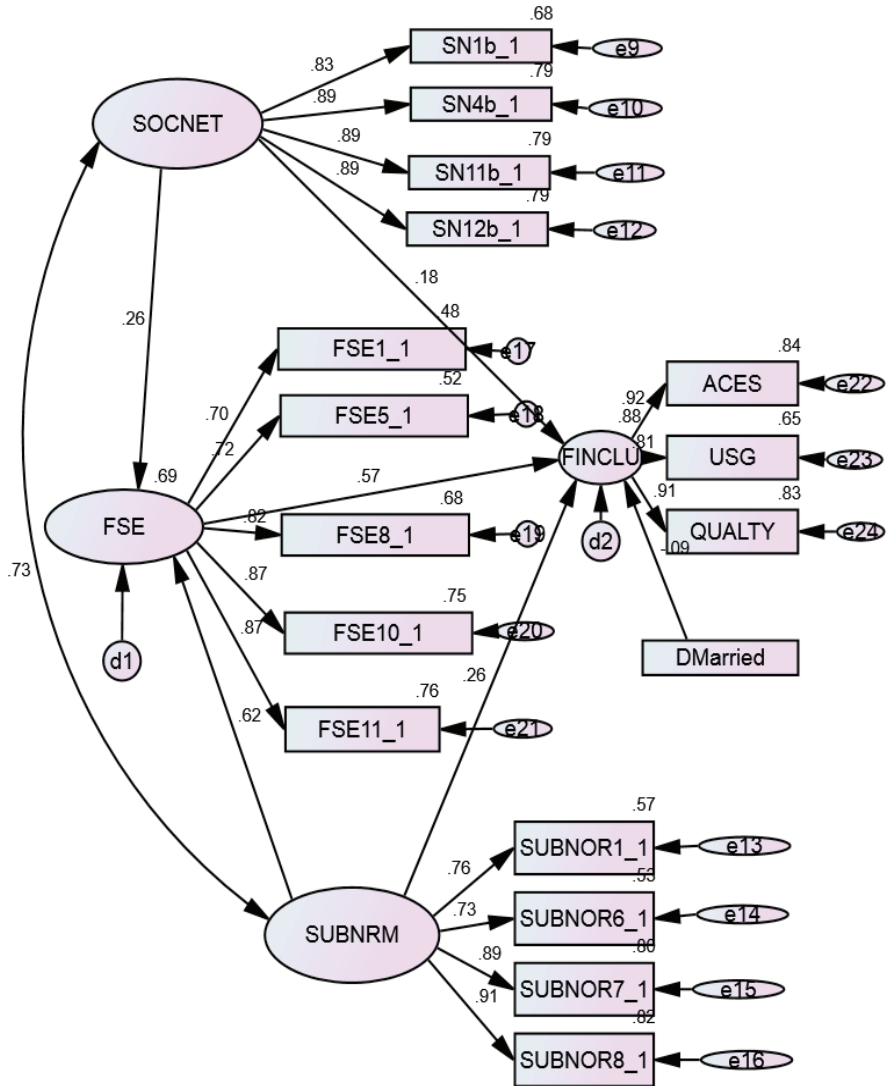


Figure 5:
Partial Mediation
of Financial
Self-efficacy on
the Relationship
between Social
Networks,
Subjective Norms
and Financial
Inclusion

Chi-square = 473.331,
Df = 113, p = .000
CMIN=473.331, CMIN/Df=4.189
GFI=.950, AGFI=.8914
NFI=.966, RFI =.952, IFI=.982, TLI=.975, CFI=.938
RMSEA=.052.

Structural Equation Models generated from figure 5.

FINCLU=.18SOCNET+.26SUBNORM+.524.....Equation 1

FINCLU = .26SOCNET+.57FSE+.524Equation 2

FINCLU = .62SUBNORM + .57FSE+.524.....Equation 3

FSE= .26SOCNET+.62SUBNORM+.485.....Equation 4

FINCLU = .18SOCNET+.26SUBNORM+.57FSE+.524.....Equation 5

Where; SOCNET is Social Networks, SUBNORM is Subjective Norms, FSE is Financial self efficacy and FINCLU is Financial inclusion, .485 is error term on Financial self Efficacy and .524 is error term on Financial Inclusion.

Standardized Total Effects			
	SUBNRM	SOCNET	FSE
FSE	.619***	.261***	-
FINCLU	.609***	.325***	.570**
Standardized Direct Effects			
FSE	.619***	.261***	-
FINCLU	.256***	.177*	.570***
Standardized Indirect Effects			
FSE	-	-	-
FINCLU	.353***	.149***	-

Table VII:
Bootstrap, Total,
Direct and Indirect
Effects for the
Mediated Model

Source: Primary Data

The results in Table VII indicate significant mediation effect of financial self-efficacy between social networks, subjective norms and financial inclusion respectively. The results further show that: 15% and 35.3% increased effect of social networks and subjective norms respectively on financial inclusion through financial self-efficacy is indirect. Further, the direct effect of social networks and subjective norms on financial inclusion through financial self-efficacy is 18% and 26% respectively. Given the significant results ($p < .001$) presented in Figure 5, Table VII, it is inferred that financial self-efficacy partially mediates the relationship between social networks, subjective norms and financial inclusion. The results therefore provide support for hypotheses; H_4 : *Financial self-efficacy mediates the relationship between social networks and financial inclusion* and H_5 : *Financial self-efficacy mediates the relationship between subjective norms and financial inclusion*.

The findings in this study further indicate that the relationships between social network, subjective norms and financial inclusion is not solely a direct one. This however, does not mean that the importance of these capabilities should be ignored. Given that financial inclusion is associated with high levels of social networks and subjective norms, efforts should be made to ensure that individuals also develop and sustain high levels of confidence to partake of financial services. In this regard, we note that financial self-efficacy is an important capability in propelling these capabilities towards achieving financial inclusion among individuals.

Whereas the study results provide relatively new empirical evidence in the financial inclusion literature, results are consistent with Zhao et al. (2005a) who found that the effects of perceived learning and risk propensity on entrepreneurial intentions were mediated by self-efficacy. Similarly, Maciejewski et al. (2000), Wood et al. (1987), Hejazi et al. (2009) found that self-efficacy had a partial influential mediation effect on individuals' behaviour in the academic context.

Conclusion and implications

This study established the importance of financial self efficacy as a partial mediator of social networks and subjective norms as attributes of societal capabilities to explain financial inclusion among individuals in Uganda. This implies that part of the effect is carried on to financial inclusion indirectly through financial self-efficacy. Nonetheless, the importance of social networks and subjective norms should not be ignored because these factors also directly influence financial inclusion despite the presence of the indirect effect by FSE.

The study emphasised the power of the additive effect of financial self-efficacy, which boosts the level of confidence to undertake the financial tasks/decisions in the relationships between social networks, subjective norms and financial inclusion respectively. Additionally, we can conclude that the study supported and built on the capability approach (theory) propositions that a set of capabilities, properly utilised can enable individuals' realisation of outcomes. This study concludes that the continuous interactions through meetings and other social activities, which are very common in Ugandan societies as well the values and influence of significant others influence individuals' financial behaviour and FI.

One of the key gaps in Sen's capability theory is the broad reference to a whole range of outcomes while focusing on just one element in a capability set. This study provides further theoretical contributions in terms of the mediation effects of financial self-efficacy in the relationship between social networks, subjective norms and financial inclusion respectively. From the social cognitive theory, social networks and theory of planned behavior perspective which posits a continuous reciprocal interaction of social and cognitive factors that influence the individual's accomplishment of an outcome, the study extends each theory independently from the interactive approach it adopted.

Policy makers and financial service providers should consider extending their expansion strategies to include group based community programmes especially in the rural areas where activities are more communal or network based or influenced by significant others in order to enable them become conceivably more bankable. The utilization of the social aspects of social networks and subjective norms will boost individuals' confidence to use formal financial services to improve their welfare.

There is limited literature on financial inclusion demand side studies specifically on social networks, subjective norms and financial self efficacy variables available specifically in the developing country context which limited the ability to compare the findings of this study to a certain extent. Given that the study was conducted in one country, it would require this study to be replicated in other countries because it has provided a valid foundation for further empirical research. The study adopted a cross sectional design which provides a snapshot at a particular time period. This would perhaps improve if a longitudinal study or randomised control trials (RCTs) were undertaken over a long term. The study was mainly assessed using both potential and actual consumers of financial services collectively. However, if separately assessed, possibly there would be a variation in perceptions or behavioural responses towards financial inclusion.

References

- AFI (2012): Alliance for Financial Inclusion (2012): "Agent banking in Latin America", AFI Discussion Paper, March
- Agrawal, A. 2008. The need for financial inclusion with an Indian perspective. *Economic Research*, pp. 1-10.
- Ajzen, I. 1991. The theory of planned behavior. *Organizational behavior and human decision processes*, Vol. 50, No.2, pp. 179-211.
- Ajzen, I. 2011. The theory of planned behaviour: reactions and reflections. *Psychology and Health*, Vol.26, No. 32, pp.1113-1127.
- Ajzen, I. and Fishbein, M. 1980. Understanding attitudes and predicting social. *Behaviour*. Englewood Cliffs, NJ: Prentice-Hall.
- Akerlof, G. A. 1980. A theory of social custom, of which unemployment may be one consequence. *The quarterly Journal of Economics*, Vol. 94, No.4, pp.749-775
- Allen, F., Demircuc-Kunt, A., Klapper, L., and Peria, M. S. M. 2012. The foundations of financial inclusion: understanding ownership and use of formal accounts. *The World Bank, Policy Research Working Paper Series: 6290*.
- Ardalan, K. 2011. On the role of paradigms in understanding economic Globalization. *Forum for Social Economics*, Springer, Vol.36, No2, pp.197-219.
- Ardic, O. P., Heimann, M. and Mylenko, N. 2011. Access to financial services and the financial inclusion agenda around the world: a cross-country analysis with a new data set. The World Bank, Policy Research Working Paper Series: 5537.
- Azam, S. and Lubna, N. 2013. Mobile Phone Usage in Bangladesh: The Effects of Attitude Towards Behavior and Subjective Norm. *International Journal of Business Studies and Research*, p.5.
- Babbie, E. (2012). *The Basics of Social Research: Cengage Learning*. Stanford, CT.
- Bailey, C. and Austin, M. 2006. 360 Degree Feedback and Developmental Outcomes: The Role of Feedback Characteristics, Self-Efficacy and Importance of Feedback Dimensions to Focal Managers' Current Role. *International Journal of Selection and Assessment*, Vol.14, No.1, pp.51-66.
- Bandura, A. 1986. *Social foundations of thought and action*, Englewood Cliffs, NJ Prentice Hall.
- Bandura, A. 1997. *Self-efficacy: The exercise of control*, Macmillan. New York, NY: W.H. Freeman
- Bandura, A. and Schunk, D. H. 1981. Cultivating competence, self-efficacy, and intrinsic interest through proximal self-motivation. *Journal of personality and social psychology*, Vol. 41, pp.586.
- Bandura, A. (2005). Evolution of social cognitive theory. In K. G. Smith & M. A. Hitt (Eds.), *Great minds in management* (pp. 9-35). Oxford: Oxford University Press
- Bank of Uganda (2013), "Financial stability Report", Issue No. 5, Bank
- Barnir, A., Watson, W. E. and Hutchins, H. M. 2011. Mediation and Moderated Mediation in the Relationship Among Role Models, Self-Efficacy, Entrepreneurial Career Intention, and Gender. *Journal of Applied Social Psychology*, Vol. 41, No.2, pp.270-297.
-

- Baron, R. M. and Kenny, D. A. 1986. The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, Vol.51, No.6, pp.1173.
- Black, J. 2013. Reconceiving Financial Markets- From the Economic to the Social. *Journal of Corporate Law Studies*, Vol.13, No. 2, pp.401-442.
- Borgatti, S. P. and Foster, P. C. 2003. The network paradigm in organizational research: A review and typology. *Journal of management*, Vol.29, No.6, pp.991-1013..
- Bouffard-Bouchard, T. 1990. Influence of self-efficacy on performance in a cognitive task. *The Journal of Social Psychology*, Vol.130, No.3, pp. 353-363.
- Burt, R. S. 1982. Toward a structural theory of action: network models of social Structure, Perception, and Action.
- Carpenter, M. A., LI, M. and Jiang, H. 2012. Social Network Research in Organizational Contexts A Systematic Review of Methodological Issues and Choices. *Journal of Management*, Vol. 38, No.4, pp.1328-1361.
- Cassar, A. and Wydick, B. 2010. Does social capital matter? Evidence from a five-country group lending experiment. *Oxford Economic Papers*, Vol. 62, pp.715-739.
- Chau, W.-L., Chan, S.-F. and Chan, Y.-K. 2004. *Study on financial management practices of university students in Hong Kong*, Healthy Budgeting Family Debt Counselling Centre, Tung Wah Group of Hospitals.
- Clamara, N., Peña, X., and Tuesta, D. 2014. Factors that Matter for Financial Inclusion: Evidence from Peru, *Working Paper 14/09 BBVA Research*, Madrid
- Clowes, R. and Masser, B. M. 2012. Right here, right now: the impact of the blood donation context on anxiety, attitudes, subjective norms, self-efficacy, and intention to donate blood. *Transfusion*, Vol. 52, No.7, pp.1560-1565.
- Crotty, M. 1998. *The foundations of social research: Meaning and perspective in the research process*, Sage.
- Danes, S. M., & Haberman, H. R. (2007). Teen financial knowledge, self-efficacy, and behavior: A gendered view. *Financial Counseling and Planning*, Vol.18, No.2, pp48-60
- Demirgüç-Kunt, A. and Klapper, L. 2012. Measuring Financial Inclusion: The Global Findex Database.
- Diseth, Å. 2011. Self-efficacy, goal orientations and learning strategies as mediators between preceding and subsequent academic achievement. *Learning and Individual Differences*, Vol. 21, No.2, pp.191-195.
- Cull, R. J., Demirgüç-Kunt, A., and Morduch, J. 2013. *Banking the World: Empirical Foundations of Financial Inclusion*, Cambridge, MA:MIT Press.
- Ehrbeck, T., Pickens, M., and Tarazi, M. 2012. Financially inclusive ecosystems: the roles of government today. *Focus note*, No.76.
- Engelberg, E. (2007). The perception of self-efficacy in coping with economic risks among young adults: an application of psychological theory and research. *International Journal of Consumer Studies*, Vol.31, No.1, pp.95-101.
- Evans, P. 2002. Collective capabilities, culture, and Amartya Sen's Development as Freedom. *Studies in Comparative International Development*, Vol. 37 No. 2, pp. 54-60.

- Field, A. 2009. *Discovering statistics using SPSS*, Sage publications.
- Finscope, (2013), "Unlocking Barriers to Financial Inclusion: Finscope III Survey Findings," Economic Policy and Research Centre, Kampala, Uganda.
- Fischer, C. S. 1982. *To dwell among friends: Personal networks in town and city*, University of Chicago Press.
- Fishbein, M. and Ajzen, I. 1975. *Belief, attitude, intention and behavior: An introduction to theory and research*.
- Gong, Y., Huang, J.-C. and Farh, J.-L. 2009. Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy. *Academy of Management Journal*, Vol.52, pp.765-778.
- Gopi, M. and Ramayah, T. 2007. Applicability of theory of planned behavior in predicting intention to trade online: some evidence from a developing country. *International Journal of Emerging Markets*, Vol.2, No. 4, pp. 348-360.
- Granovetter, M., 1985. Economic action and social structure: The problem of embeddedness. *American Journal of sociology*, Vol.91, No.3, pp.481-510.
- Granovetter, M. 1990. The old and the new economic sociology: A history and an agenda. *Beyond the marketplace: Rethinking economy and society*, pp. 89-112.
- Gupte, R., Venkataramani, B. And Gupta, D. 2012. Computation of Financial Inclusion Index for India. *Procedia - Social and Behavioral Sciences*, Vol.37, pp. 133-149.
- Hair, J., Black, W., Babin, B. And Anderson, R. 2010a. *Multivariate data analysis: a global perspective: Pearson Education. Inc., Upper Saddle River, NJ.*
- Hair, J. F. J., Black, W. C., Babin, B. J. And Anderson, R. E. 2010b. *Multivariate Data Analysis: A global perspective*, Upper Saddle River, NJ, Pearson Prentice-Hall.
- Hallen, B. L. 2008. The causes and consequences of the initial network positions of new organizations: From whom do entrepreneurs receive investments? *Administrative Science Quarterly*, Vol.53, No.4, pp. 685-718.
- Hannig, A. And Jansen, S. 2010. Financial inclusion and financial stability: current policy issues.
- Hill, M. 2003. Development as empowerment. *Feminist Economics*, Vol. 9, No.3, pp. 117-135.
- Jones, C. And Volpe, E. H. 2011. Organizational identification: Extending our understanding of social identities through social networks. *Journal of Organizational Behavior*, Vol. 32, 4pp. 13-434.
- Kasekende & Brownbridge, 2011 Kasekende, L., & Brownbridge, M. (2011). Post-crisis Monetary Policy Frameworks in Sub-Saharan Africa. *African Development Review*, Vol. 23, No.2, pp.190-201.
- Katoroogo, R.M, 2009. *Behavioural Determinants of Financial Inclusion in Uganda*, PhD Thesis, University of the Witswatersrand, Johannesburg, South Africa
- Kempson and Whyley (1999): Kempson, E., & Whyley, C. (1999). 'Kept out or opted out: Understanding and Combating Financial Inclusion' Joseph Rowntree Foundation Policy Press, Bristol, UK
- Kilduff, M., Tsai, W., & Hanke, R. (2006). A paradigm too far? A dynamic stability reconsideration of the social network research program. *Academy of Management Review*, Vol.31, No.4, pp.1031-1048.

- Kinard, B. R., & Webster, C. (2010). The Effects of Advertising, Social Influences, and Self-Efficacy on Adolescent Tobacco Use and Alcohol Consumption. *Journal of Consumer Affairs*, Vol.44, No.1, pp24-43.
- Kumar, B. And Mohanty, B. 2011. Financial Inclusion and Inclusive Development in SAARC Countries with Special Reference to India. *Vilakshan: The XIMB Journal of Management*, Vol 8.
- Ladin, K. And Hanto, D. W. 2010. Understanding Disparities in Transplantation: Do Social Networks Provide the Missing Clue? *American Journal of Transplantation*, Vol.10, No.3, pp. 472-476.
- Latimer, A. E. And Martin Ginis, K. A. 2005. The Importance of Subjective Norms for People who Care What Others Think of Them. *Psychology and Health*, Vol. 20, No. 1, pp. 53-62.
- Lean, O. K., Zailani, S., Ramayah, T. And Fernando, Y. 2009. Factors influencing intention to use e-government services among citizens in Malaysia. *International Journal of Information Management*, Vol.29, No.6, pp.458-475.
- Liu, Y., Lu, H. And Veenstra, K. 2014. Is sin always a sin? The interaction effect of social norms and financial incentives on market participants' behavior. *Accounting, Organizations and Society*, Vol. 39, pp. 289-307.
- Locke, E. A., & Baum, J. R. (2007). Entrepreneurial Motivation. In: J. R. Baum, M. Frese and R.A. Baron (Eds). *The Psychology of Entrepreneurship*. SIOP Organizational Frontiers Series. Mahwah, NJ: Lawrence Erlbaum, 93-112.
- Lown (2012): Lown, J. M. (2011). 2011 Outstanding AFCPE® Conference Paper: Development and Validation of a Financial Self-Efficacy Scale. *Journal of Financial Counseling & Planning*, 22(2), 54-63.
- Maciejewski, P. K., Prigerson, H. G. And Mazure, C. M. 2000. Self-efficacy as a mediator between stressful life events and depressive symptoms Differences based on history of prior depression. *The British Journal of Psychiatry*, Vol. 176, No.4, pp. 373-378.
- Massara, M. A. And Mialou, A. 2014. *Assessing Countries' Financial Inclusion Standing-A New Composite Index*, International Monetary Fund.
- Martínez-López, B., Perez, A., And Sánchez-Vizcaíno, J.2009. Social network analysis. Review of general concepts and use in preventive veterinary medicine. *Transboundary and emerging diseases*, Vol. 56, No.4, pp.109-120.
- Nussbaum, M. And Sen, A. 1993. *The quality of life*, Oxford University Press.
- Okten, C. And Osili, U. O. 2004. Social Networks and Credit Access in Indonesia. *World Development*, Vol.32, No.7, pp.1225-1246.
- Ozmete, E., & Hira, T. (2011). Conceptual analysis of behavioral theories/models: Application to financial behavior. *European Journal of Social Sciences*, Vol.18, No.3, pp386-404.
- Pallant, J. 2010. *SPSS survival manual: A step by step guide to data analysis using SPSS*, McGraw-Hill International.
- Pande, R., And Burgess, R. 2005. Do rural banks matter? Evidence from the Indian social banking experience. *American Economic Review*, Vol. 95, No.3, pp.780-795.
- Park, H. S., Klein, K. A., Smith, S. And Martell, D. 2009. Separating subjective norms, university descriptive and injunctive norms, and US descriptive and injunctive norms for drinking behavior intentions. *Health communication*, Vol. 24, No.8, pp. 746-751.

-
- Phelps, C., Heidl, R. And Wadhwa, A. 2012. Knowledge, networks, and knowledge networks a review and research agenda. *Journal of Management*, Vol.38, No.4, pp.1115-1166.
- Pintrich, P.r. And Garcia, T., 1991. Student goal orientation and self-regulation in the college classroom. *Advances in motivation and achievement: Goals and self-regulatory processes*, Vol.7, pp.371-402
- Preacher, K. J. And Hayes, A. F. 2008. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, Vol.40, pp. 879-891.
- Preacher, K. J., Rucker, D. D. And Hayes, A. F. 2007. Addressing Moderated Mediation Hypotheses: Theory, Methods, and Prescriptions. *Multivariate Behavioral Research*, Vol. 42, No.1 pp. 185-227.
- Rice, S., Trafimow, D., Keller, D. And Hunt, G. 2010. Should I Stay or Should I Run?: Attitudes and Subjective Norms About Disaster Alarms. *International Journal of Technology, Knowledge and Society*, Vol. 6, No.1, pp. 81-91.
- Roberto, M. S., Mearns, K. And Silva, S. A. 2012. Social and moral norm differences among Portuguese 1st and 6th year medical students towards their intention to comply with hand hygiene. *Psychology, Health and Medicine*, Vol.17, pp. 408-416.
- Robeyns, I. 2003. Sen's capability approach and gender inequality: selecting relevant capabilities. *Feminist economics*, Vol. 9, NO.2-3, pp. 61-92.
- Rowley, T. J. 1997. Moving beyond Dyadic Ties: A Network Theory of Stakeholder Influences. *The Academy of Management Review*, Vol.22 No.4, pp. 887-910.
- Sandler, M. E. (2000). Career decision-making self-efficacy, perceived stress, and an integrated model of student persistence: A structural model of finances, attitudes, behavior, and career development. *Research in Higher Education*, Vol.41, No.5, pp.537-580.
- Sarantakos, S. 2005. Social Research. 3rd. *Hampshire: Palgrave Macmillan*.
- Saunders, M. N., Saunders, M., Lewis, P. And Thornhill, A. 2011. *Research methods for business students*, Vol. 4, pp. 106-135. Pearson Education India.
- Schindler, K. 2010. Credit for what? Informal credit as a coping strategy of market women in Northern Ghana. *The Journal of Development Studies*, Vol.46, No.2, pp. 234-253.
- Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A. And King, J. 2006. Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of Educational Research*, Vol.99, No.6, pp.323-338.
- Sekaran, U. (2003). *Research Methods for Business*. New York: John Milley and Sons: Inc.
- Sen A. *Collective Choice and Social Welfare*. San Francisco: Holden Day; 1970.
- Serrao, M., Sequeira, A., & Hans, B. (2012). Designing a Methodology to Investigate Accessibility and Impact of Financial Inclusion. In Gangadharan, K. (Ed.) *Financial Inclusion and Inclusive Growth* (pp. 180-199), New Delhi; Reference Press
- Sharma, M. 2005. Reifying capability theory in disability and rehabilitation research. *Asia Pacific Disability Rehabilitation Journal*, Vol.16, No. 2, pp. 123-131.
- Sserwanga, A. (2011). *Enterprenurial Quality in Uganda*. Unpublished PhD thesis, Makerere University, Kampala, Uganda.
-

- Ssonko, G.w., 2010. *The role of mobile money services in enhancing financial inclusion in Uganda*. Bank of Uganda Working Paper 08/10.
- Stajkovic, A. D. And Luthans, F. 1998. Self-efficacy and work-related performance: A meta-analysis. *Psychological bulletin*, Vol.124, No.2, p.240.
- Taib, F. M., Ramayah, T. And Razak, D. A. 2008. Factors influencing intention to use diminishing partnership home financing. *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 1, No.3, pp. 235-248.
- Tokunaga, H. (1993). The use and abuse of consumer credit: Application of psychological theory and research. *Journal of Economic Psychology*, Vol. 14 No.2, pp 285-316.
- UBOS, 2014. National Population and Housing Census, Uganda Bureau of Statistics, *Government of Uganda*, Kampala, Uganda
- Ullman, J. 2001. Structural equation modeling. BG Tabachnick and LS Fidell (Eds.), *Using multivariate statistics*. 4 ed.: Needham Heights, MA: Allyn and Bacon.
- Venkatesh, V. And Morris, M. G. 2000. Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior. *MIS quarterly*, pp. 115-139.
- Weiser, D. A. And Riggio, H. R. 2010. Family background and academic achievement: does self-efficacy mediate outcomes? *Social Psychology of Education*, Vol. 13, No.3, pp. 367-383.
- Wood, R. E., Mento, A. J. And Locke, E. A. 1987. Task complexity as a moderator of goal effects: A meta-analysis. *Journal of applied psychology*, Vol. 72, No.3, pp.416.
- World Bank. 2014. *Global Financial Development Report 2014: Financial Inclusion*. Washington, DC: World Bank.
- Yamane, T. 1973. *Statistics: An Introduction Analysis*, (3rd ed.), Harper and Row, New York
- Zhang, Y., Lin, N. And Li, T. 2012. Markets or networks: Households' choice of financial intermediary in Western China. *Social Networks*, Vol.34, pp.670-681.
- Zhao, H., Seibert, S. E., & Hills, G. E. (2005a). The Mediating Role of Self-Efficacy in the Development of Entrepreneurial Intentions. *Journal of applied psychology*, Vol.90, No.6, pp1265-1272.
- Zhou, J., Shin, S. J., Brass, D. J., Choi, J. And Zhang, Z.-X. 2009. Social networks, personal values, and creativity: evidence for curvilinear and interaction effects. *Journal of Applied Psychology*, Vol.94, No.6, p.1544.
- Zimmerman, B. J. 2000. Self-efficacy: An essential motive to learn. *Contemporary educational psychology*, Vol. 25, No.1, pp. 82-91.
- Zimmerman, B. J. 2000b. Self-Efficacy: An Essential Motive to Learn. *Contemp Educ Psychol*, Vol. 25, pp. 82-91.
- Zimmerman, B. J., Bandura, A. And Martinez-Pons, M. 1992. Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. *American Educational Research Journal*, Vol. 29, No.3, pp.663-676.