Asian Research Consortium

Asian Journal of Research in Business Economics and Management
Vol. 8, No. 1, January 2018, pp. 90-100.

Asian Journal of Research in Business Economics and Management

www.aijsh.com

ISSN 2249-7307
A Journal Indexed in Indian Citation Index
DOI NUMBER: 10.5958/2249-7307.2018.00008.7
UGC APPROVED JOURNAL
SJIF IMPACT FACTOR :5.444(2017)

Scrutinizing Status of Financial Inclusion using Structural Equation Modeling

Taufeeque Ahmad Sidddiqui*; Kashif Iqbal Sidddiqui**

*Assistant Professor,
Centre for Management Studies,
Jamia Millia Islamia,
New Delhi, India.
taufeeque@gmail.com

**Research Scholar,
Centre for Management Studies,
Jamia Millia Islamia,
New Delhi, India.

Abstract

This paper attempts to examine the role of telecom and socio economic variable to achieve financial inclusion. Awareness, Usability and Ability of using services are the three constructs related with financial inclusion and telecom variables. Community, Infrastructure and Education are the three constructs of socio economic variable. Thus there are 6 independent and 3 dependent constructs. The constructs comprise 62 indicators. A sample of 200 is collected randomly through schedule from the residents of vadacherry and solur village of Vellore district of Tamilnadu. The data is analyzed using Structural Equation Modelling(SEM) software SmartPLS. The results confirm that there is a positive impact of several constructs of Telecom and Socioeconomic dimensions on Financial Inclusion. Hence, Telecom and financial institutions should work together to achieve financial inclusion and help each other to generate revenue from their mutual customers.

Keywords: Bihar, Financial Inclusion, Socioeconomic dimension, Structural Equation Modelling, Telecom, Smart PLS.

1. Introduction

Financial inclusion may be defined as “the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost” (The Committee on Financial Inclusion (2008), Chairman: Dr. C. Rangarajan). Major constraints for the poor is lack of financial services which is exorbitant to the Individuals and society. Financial Inclusion is not only limited to opening a bank account but also providing other financial services like insurance, pension, loan etc. to vulnerable section of the society to accumulate them in the mainstream economy.

The world best known initiatives for financial inclusion are Grameen Bank, Bangladesh by Mohammad Yunus and M-PESA in Africa to reach the unbanked. Various steps are taken towards Financial Inclusion in India such as no frills account, ease in KYC norms, adoption of business correspondence model, technology based instruments, direct benefit transfer, financial literacy program etc. to reach the unbanked population. National Mission on Financial Inclusion named as Pradhan Mantri Jan DhanYojna to ensure at least one bank account per household.

Telecommunication with a large base of customers has reach in all regions of the country. It plays an important role in socio economic development in technology driven world. India has the second largest telecom network in the world after China. As on 30th November 2016, the Urban tele-density is 164.13% whereas rural tele-density is 52.97% (Annual Report, DoT, 2016 - 2017). The telecom growth in rural area is comparatively less, there is need to bridge the digital gap between rural and urban population. Financial Sector and Telecom sector have opportunities to work together.

The purpose of this paper is to shed light on the role of telecommunication and socio economic conditions to achieve the financial Inclusion in India.

2. Literature Review

Roller and waverman (2001) in their paper examined the effects of telecommunication infrastructure on economic development. The data were gathered using data from 21 OECD countries from 1970 to 1990 based on general economic variables and characteristics of country as well as of telecommunication development. The results confirm the evidence of a significant positive causal link, especially when a critical mass of telecommunications infrastructure is present.

Kempson et al. (2004) analyzed and identified the six common obstacles for financial exclusion although would vary from country to country. The study is based on Australia, Canada, Belgium, France, Great Britain and the United States. The major obstacle identified for financial inclusion are identity requirements, problems related with physical access, requirements related to opening of bank accounts, bank charges and cultural barriers. The results reveal that the financial exclusion fluctuates across the developed world but the people with history of debt and low income are common affected people among the developed world.

Kumbhar (2011) in his paper analyzed the scope and problems associated with financial inclusion through m-banking in India. In rural India, Innovative communication technology like mobile banking can be effective mode to reach unbanked population. The rise in number of cellular service consumers in rural provides a great platform to expand financial services in India. Network coverage, security, low cost effectiveness, inconvenience in using mobile phones, computer literacy etc. are the major drawbacks of m-banking. He suggested that there is need to develop m-banking service through availability of better network coverage and security alertness among the rural Indians.

Bhanotet al. (2012) in their paper determine the factor associated with the extent of financial inclusion in remote areas. The Primary data were collected from 411 households of Assam and Meghalaya. The data were analyzed using Logistic regression model. The results disclose that the degree of financial inclusion in north-east India is very low and education is an important factor leading to inclusion in these areas. The respondents receiving government benefits in plain areas show better inclusion in comparison with respondents of terrain area.

Garani&ghosh (2015) in their paper discussed the key components related to financial inclusion and the related progressive ICT which contribute to the financial inclusion. The primary data were collected from the southern part of the Assam. It was observed that 100% of the beneficiaries in the study were using the ATM services and 60% were using SMS alert (Mobile). They have examined the relationship between the banks ICT service and the customers' satisfactions, the ICT parameters ATM service and SMS. It is clear from findings that the activity by the banks for financial inclusion is rising since penetration of internet.

CRISIL (2015) measured the degree of financial inclusion in India in the form of an index across 652 district of India. All India CRISIL Inclusix registered the score of 50.1 at the end of 2013 due to constant development and progress of banking services and addition of MFIs for the computation of index. Number of bank branches crossed one lakh figure and 11.7 crore new saving bank accounts were opened. Nine districts with Inclusix score of 100 are Pathanamthitta, Alapuzha, Ernakulam, Kottayam, Thiruvananthapuram, Thrissur, Karaikal, Mahe and Coimbatore. Six district are from Kerala, two are from Pondicherry and one from Tamil Nadu.

Allen et al. (2016) analyzed the characteristics of Individual and Country related with the usage of formal accounts based on data of 123 countries and 124,000 individuals. The outcomes reveal that ownership and use of accounts is associated with atmosphere for accessing financial facilities i.e. lesser account costs and closeness to financial intermediaries. They recommended that the policies to diminish obstacles to financial inclusion may increase the eligible account users and motivate existing account owners to save and use their accounts with greater frequency.

3. Objectives

- To investigate the influence of telecom and socioeconomic conditions on financial inclusion
- To verify the model using SmartPLS.

4. Hypothesis

H1: Awareness, Usability, Ability of using telecom services significantly affect Awareness, Usability, Ability of using financial services.

H2: Community, Education, Infrastructure significantly affect Awareness, Usability, Ability of using financial services.

5. Research Methodology

Data is collected randomly through schedule from the residents of vadacherry and solur village of Vellore district of Tamil Nadu. A sample of 100 each is collected from these two villages. There are three dimensions used in study i.e. Financial Inclusion, Telecom, Socioeconomic. The research instrument consists of statements related to awareness, usability, ability of using financial and telecom services. It also consists of statements based on community, infrastructure, education representing socio economic status. There are 9 constructs and 62 indicators related to these constructs. List of the indicators is depicted in appendix.

The research model is examined through software package SmartPLS, which is a Partial Least Square Structural Equation Modelling (PLS-SEM) tool ((Ringleet al. 2015). Structural Equation Model consist of two sub models namely, inner model and outer model. Inner Model describes the relationships between independent and dependent constructs, whereas the Outer Model describes the relationships between constructs and their indicators. In current study, Financial Inclusion is dependent construct whereas Telecom and Socio-Economic are independent constructs.

Even though SEM with PLS can manage with small sample sizes, the conventional estimation being that the minimum pre-requisite is "at least 10 times the largest number of formative indicators used to measure a single construct" (Hair et al., 2014). Thus the sample size of 200 is more than said limit.

6. Analysis

6.1. Indicator Reliability

Indicator reliability is examined from the value of outer loading so that the variance shared between the indicator and its construct is greater than measurement error variance. The outer loading value should be ≥ 0.70. Loading of 0.40 is also acceptable in exploratory research if the indicator is important for the study (Hulland, 1999). Table 1 illustrates the corresponding values of outer loading of indicators of original as well as revised model. The indicators dropped from original model due to low outer loading are AI, FT, CCU, ACU, FMFT, RL and OFED with their corresponding values are 0.349, 0.160, 0.118, 0.485, 0.385, -0.179 and 0.360 respectively.

Table 1: Outer Loadings

Indicators	Original	Revised	Indicators	Original	Revised	Indicators	Original	Revised
	AWBS			AUMP			UBS	
KAC	0.743	0.743	FMC	0.519	0.520	ACU	0.485	
KACC	0.807	0.808	FMRC	0.500	0.546	CCU	0.118	
KACQ	0.875	0.876	FMRS	0.951		DBB	0.788	0.793
KAMF	0.700	0.699	FMSS	0.903	0.890	DBO	0.548	0.609
KAMS	0.734	0.734	FMUI	0.881	0.898	DBS	0.659	0.682
KARD	0.826	0.826		AWTT		FMFT	0.385	
KASA	0.834	0.835	K2G	0.897	0.920	FUAC	0.826	0.808
KI	0.756	0.754	KISD	0.902	0.906	WMA	0.855	0.851
KIB	0.820	0.820	KMB	0.877	0.899	WMC	0.534	0.508
	INFRA		KMMS	0.865	0.872	WMS	0.768	0.789
AI	0.349		KMNP	0.735	0.741		AUBS	
BR	0.904	0.905	KMOB	0.877	0.860	NFAC	0.878	0.875
CF	0.797	0.794	KOTP	0.885		NFCC	0.615	0.619
EL	0.478	0.494	KROM	0.802	0.800	NFDM	0.950	0.949
FLRT	0.827	0.803	KSMS	0.781		NFUC	0.905	0.906
FT	0.160		KSTD	0.749	0.718		COMU	
HA	0.767	0.747		UMP		CA	0.349	0.434
KCHN	0.769	0.778	UMFE	0.860	0.860	OC	0.964	0.969
NR	0.703	0.710	UMFG	0.722	0.725	RL	-0.179	
SDW	0.737	0.777	UMFI	0.889	0.888		EDU	
TLT	0.826	0.845	UMSA	0.640	0.639	HE	0.853	0.903
WAT	0.840		UMWA	0.792	0.792	OE	0.627	0.630
						OFED	0.360	

6.2. Internal Consistency Reliability

Table 2 encapsulates the value of composite reliability for dependent as well as independent indicators. The Internal consistency reliability is inspected from the value of composite reliability and the value should be ≥ 0.70. In exploratory research, 0.60 is considered acceptable(Bagozzi&Yi,1988). The outcomes demonstrate that the measures are robust. The composite reliabilities for AUBS, AUMP, AWBS, AWTT, COMU, EDU, INFRA, UBS and UMP are 0.908, 0.816, 0.937, 0.951, 0.693, 0.749, 0.922, 0.886 and 0.889 respectively which lies within the specified range.

Table 2: Composite Reliability & AVE

Constructs	Composite Reliability		Average Variance Extracted (AVE)	
	Original	Revised	Original	Revised
AUBS	0.908	0.908	0.717	0.717
AUMP	0.876	0.816	0.603	0.541
AWBS	0.937	0.937	0.624	0.625
AWTT	0.960	0.951	0.704	0.710
COMU	0.402	0.693	0.361	0.564
EDU	0.659	0.749	0.417	0.606
INFRA	0.926	0.922	0.514	0.537
UBS	0.857	0.886	0.404	0.532
UMP	0.889	0.889	0.618	0.618

6.3. Convergent Validity

AVE is used to evaluate the convergent validity. Table 2 presents the AVE value for different constructs of original as well as revised model. According to Bagozzi and Yi (1988), the threshold value for Average Variance Extracted should be ≥ 0.50so that the construct explains more than half of the variance of its indicators. All the AVE values of revised model are within its stated limit. The AVE values for AUBS, AUMP, AWBS, AWTT, COMU, EDU, INFRA, UBS and UMP are 0.717, 0.541, 0.625, 0.710, 0.564, 0.606, 0.537, 0.532 and 0.618 respectively. The values of AVE have improved by dropping indicators with lower loading in the revised model.

6.4. Discriminant Validity

Discriminant Validity narrates the latent constructs being unique and different from the other constructs. Each construct's AVE should be higher than the squared correlation with any other construct (Fornell and Larcker, 1981). Table 3 displays the value of discriminant validity of the scales. The diagonal elements in bold represent the square root value of AVEs. These values are greater than off diagonal elements in almost all the cases.

Table 3: Discriminant Validity

	AUBS	AUMP	AWBS	AWTT	COMU	EDU	INFRA	UBS	UMP
AUBS	**0.847**								
AUMP	0.869	**0.736**							
AWBS	0.884	0.788	**0.790**						
AWTT	0.882	0.874	0.854	**0.843**					
COMU	0.596	0.510	0.610	0.550	**0.751**				
EDU	0.555	0.530	0.536	0.549	0.467	**0.778**			
INFRA	0.757	0.731	0.766	0.665	0.620	0.557	**0.733**		
UBS	0.822	0.738	0.874	0.752	0.627	0.411	0.791	**0.729**	
UMP	0.738	0.674	0.792	0.746	0.558	0.441	0.697	0.772	**0.786**

6.5. Collinearity

Table 4(a): Outer VIF

	Outer VIF			Outer VIF			Outer VIF	
	Original	Revised		Original	Revised		Original	Revised
ACU	1.383		K2G	13.309	8.270	KSTD	12.322	2.641
AI	2.179		KAC	2.560	2.560	NFAC	4.527	4.527
BR	6.640	5.747	KACC	3.702	3.702	NFCC	1.374	1.374
CA	1.209	1.041	KACQ	4.209	4.209	NFDM	7.419	7.419
CCU	1.080		KAMF	2.325	2.325	NFUC	3.413	3.413
CF	2.571	2.473	KAMS	2.226	2.226	NR	2.118	2.009
DBB	3.581	3.009	KARD	4.414	4.414	OC	1.057	1.041
DBO	3.842	2.728	KASA	4.196	4.196	OE	1.063	1.058
DBS	2.601	2.423	KCHN	2.985	2.864	OFED	1.008	
EL	1.728	1.700	KI	3.254	3.254	RL	1.164	
FLRT	13.655	6.110	KIB	3.145	3.145	SDW	5.755	3.215
FMC	5.402	2.472	KISD	6.110	4.940	TLT	8.352	6.136
FMFT	3.691		KMB	12.082	8.684	UMFE	2.278	2.278
FMRC	3.757	2.577	KMMS	4.502	4.223	UMFG	1.590	1.590
FMRS	11.326	2.998	KMNP	2.884	2.372	UMFI	2.462	2.462
FMSS	10.792		KMOB	11.190	3.418	UMSA	1.410	1.410
FMUI	2.936	2.861	KOTP	15.155		UMWA	1.823	1.823
FT	1.325	1.313	KROM	3.820	3.693	WAT	15.488	
FUAC	4.441	4.038	KSMS	14.740		WMA	5.072	5.055
HA	4.769	2.984				WMC	3.508	1.691
HE	1.060	1.058				WMS	2.492	2.407

Multicollinearity among the variables is examined from the value of VIF (Variance Inflation Factor). The recommended maximum level of VIF is 10 (Hair et al. 1995). Table 4(a) shows the Outer VIF value of indicators. The Indicators dropped due to high VIF value are FMSS, KOTP, KSMS and WAT with the values of 10.792, 15.155, 14.740 and 15.488 respectively. The remaining VIF value of different indicators are retained as they are within the threshold limit.

Similarly, Table 4(b) exhibits the inner VIF value of independent constructs with their dependent constructs. All the values are within the given range of 10.

Table 4(b): Inner VIF

	Inner VIF	
	All dependent Construct	
	Original	Revised
AUMP	4.663	**5.251**
AWTT	4.653	**5.688**
COMU	**1.895**	**1.797**
EDU	**1.675**	**1.623**
INFRA	3.354	3.145
UMP	**2.852**	**2.790**

6.6. Coefficient of Determination

Coefficient of determination is measured from the value of Adjusted R Square value which is shown in table 5. Coefficient of determination explains the degree of variance in dependent variable caused by the independent variables. Adjusted R Square values of 0.75, 0.5 and 0.25 can be described as strong, moderate or weak (Hair, Ringle&Sarstedt, 2011). The Adjusted R square value of revised model for dependent constructs AUBS, AWBS and UBS are 0.844, 0.816 and 0.765 respectively. As all the values are greater than 0.75, the results reveal strong coefficient of determination for current model.

Table 5: Adjusted R Square

	R Square Adjusted
AUBS	0.844
AWBS	0.816
UBS	0.765

6.7. Predictive Relevance

Stone-Geisser Q^2 value is used to measure the predictive relevance of a construct on a target construct. The value is obtained through blindfolding procedure in SmartPLS. Table 6 encapsulates the values of current model. “Values of 0.02, 0.15, and 0.35 respectively indicate that an exogenous construct has a small, medium, or large predictive relevance for a selected endogenous construct”

(Stone &Geisser, 1974). Model predictive relevance is large for all the three dependent constructs namely, AUBS (0.569), AWBS (0.476) and UBS (0.363).

Table 7: Predictive Relevance

	Q^2
AUBS	0.569
AWBS	0.476
UBS	0.363

6.8. Path Analysis

Table 8: Path Coefficient

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
AUMP -> AUBS	0.291	0.293	0.076	3.842	0.000
AUMP -> AWBS	-0.016	-0.014	0.058	0.272	0.786
AUMP -> UBS	0.085	0.080	0.087	0.969	0.333
AWTT -> AUBS	0.421	0.419	0.074	5.702	0.000
AWTT -> AWBS	0.504	0.502	0.078	6.477	0.000
AWTT -> UBS	0.233	0.234	0.078	2.985	0.003
COMU -> AUBS	0.068	0.067	0.035	1.967	0.050
COMU -> AWBS	0.064	0.064	0.032	2.031	0.043
COMU -> UBS	0.143	0.141	0.044	3.258	0.001
EDU -> AUBS	0.015	0.018	0.033	0.441	0.659
EDU -> AWBS	0.002	0.007	0.058	0.038	0.970
EDU -> UBS	-0.163	-0.158	0.041	3.926	0.000
INFRA -> AUBS	0.167	0.173	0.074	2.266	0.024
INFRA -> AWBS	0.251	0.250	0.056	4.461	0.000
INFRA -> UBS	0.398	0.398	0.061	6.496	0.000
UMP -> AUBS	0.066	0.060	0.052	1.267	0.206
UMP -> AWBS	0.215	0.216	0.036	6.010	0.000
UMP -> UBS	0.255	0.259	0.054	4.702	0.000

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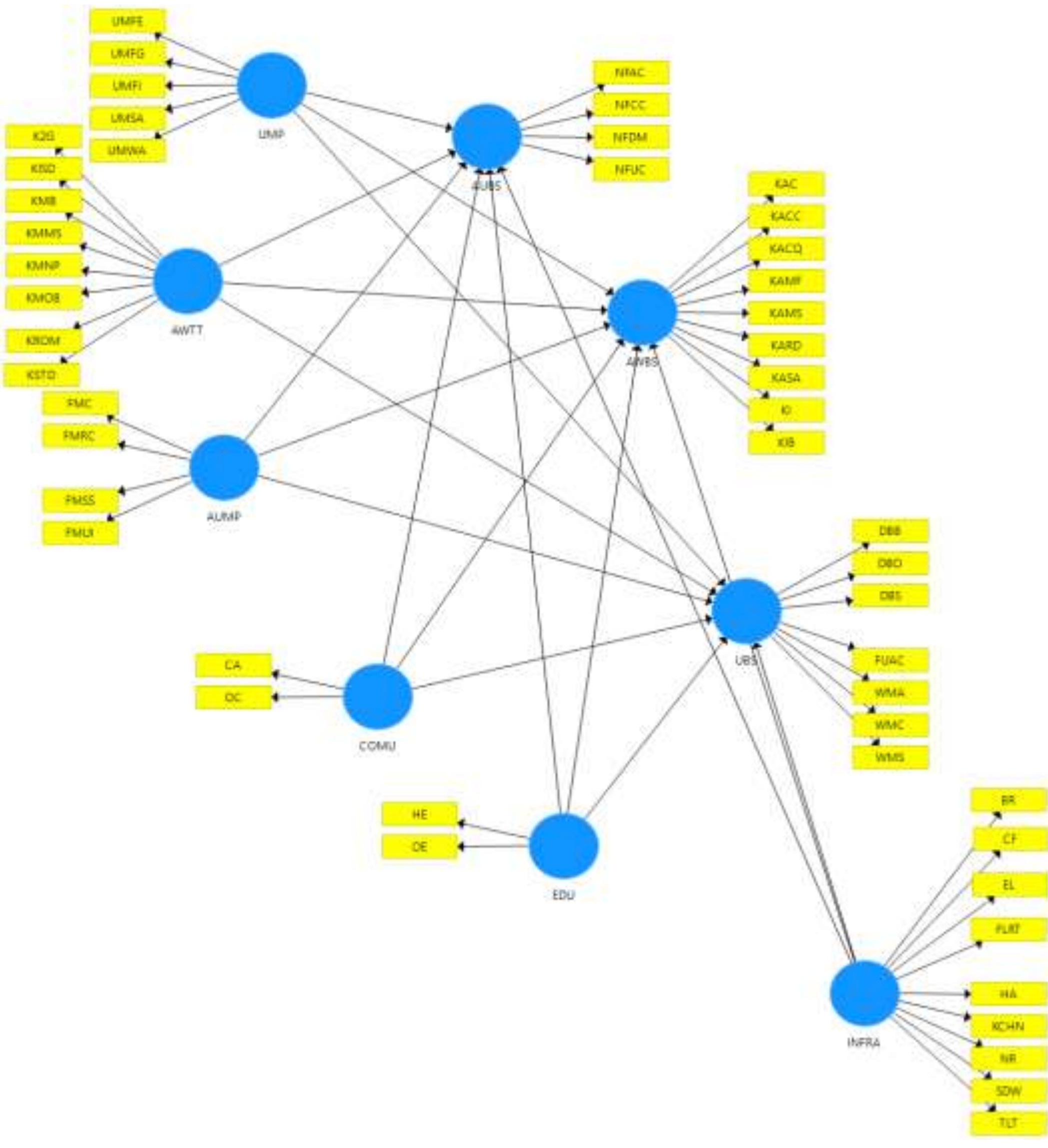
Vol. 8, No.1, pp. 90-100.

The robustness of the model is tested through bootstrapping procedure in SmartPLS. Out of 18 paths, 13 paths are significant in structural model at 95% confidence level. The Significant paths are AUMP on AUBS, AWTT on AUBS, AWTT on AWBS, AWTT on UBS, COMU on AWBS, COMU on UBS, EDU on UBS, INFRA on AUBS, INFRA on AWBS, INFRA on UBS, UMP on AWBS, UMP on UBS and COMU on AUBS. The P values for the paths are 0.00, 0.00, 0.00, 0.003, 0.043, 0.001, 0.00, 0.024, 0.00, 0.00, 0.00, 0.00 and 0.05 respectively. The study found that all significant paths are positively related except EDU on UBS with original sample of -0.163. Table 8 show the path coefficient, T statistics, P values for all the paths. Figure 1 depicts the path diagram of the model.

Figure 1: Path Diagram



7. Conclusion

The present study attempts to scrutinize the impact of telecom and socio economic constructs on financial inclusion. Awareness, Usability and Ability of using services are the constructs related with financial inclusion and telecom. Community, Infrastructure and Education are the constructs for socio economic dimension. Hence, there are 6 independent and 3 dependent constructs. The constructs consist of 62 indicators. The study is based on sample of 200 households. The framework is validated using software SmartPLS. The results reveals that out of 18 paths, 13 are significant. there is positive impact of most of the constructs of Telecom and Socioeconomic dimensions on Financial Inclusion. Education has negative impact on Usability of banking services. It can be inferred that the Higher is the Education, lower is the difficulty in usability of banking services. Telecom being largest customer base sector will be a good channel for delivering financial services at an affordable cost. The strategy would help poor and generate revenue for both telecom and financial institutions.

8. References

Allen, F., Demirguc-Kunt, A., Klapper, L., &Peria, M. S. M. (2016). The foundations of financial inclusion: Understanding ownership and use of formal accounts. Journal of Financial Intermediation, 27, 1-30.

Bagozzi, R. P., & Yi, Y. (1988), on the evaluation of structural equation models, Journal of the Academy of Marketing Science, 16(1), 74-94.

Bhanot, D., Bapat, V., &Bera, S. (2012). Studying financial inclusion in north-east India. International Journal of Bank Marketing, 30(6), 465-484.

Garani, P. &Ghosh, D. (2015). Information and Communication Technology (ICT) an easy apparatus for Financial Inclusion / International Journal of Scientific Research, 4(11).

Geisser, S. (1974). A predictive approach to the random effect model. Biometrika, 61(1), 101-107.

Hair, J. F., Black, B., Anderson, R., & Tatham, R. (1995). Multivariate Data Analysis: Text and Readings.

Hair, J. F., Ringle, C. M., &Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. Journal of Marketing theory and Practice, 19(2), 139-152.

Hulland, J., & Richard Ivey School of Business. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. Strategic management journal, 20(2), 195-204.

Inclusix, C. R. I. S. I. L. (2015). Volume-III (January).

Kempson, E., Atkinson, A., &Pilley, O. (2004). Policy level response to financial exclusion in developed economies: lessons for developing countries. Report of Personal Finance Research Centre, University of Bristol.

Kumbhar, V. M. (2011). Financial inclusion through M-banking: Scope and Problems in India. Dept. of Economics, Shivaji University, Kolhapur. MPRA paper téléchargeable on http://econpapers. repec. org/RePEc: pra: mprapa, 28724.

Röller, L. H., &Waverman, L. (2001). Telecommunications infrastructure and economic development: A simultaneous approach. American economic review, 909-923.

Stone, M. (1974). Cross-validatory choice and assessment of statistical predictions. Journal of the Royal Statistical Society. Series B (Methodological), 111-147.

Appendix

awareness about telecom terms(AWTT)	**awareness about banking services (AWBS)**
member having knowledge of 2G/3G (K2G)	knowledge about cheque (KACQ)
member having knowledge of mobile banking (KMOB)	knowledge about credit card (KACC)
member having knowledge of MB/GB(KMB)	knowledge about mutual fund (KAMF)
member having knowledge of MMS (KMMS)	knowledge about RD&FD (KARD)
member having knowledge of SMS (KSMS)	knowledge about saving account (KASA)
member having knowledge of STD (KSTD)	knowledge about ATM/debit card (KAC)
member having knowledge of MNP (KMNP)	knowledge about Insurance (KI)
member having knowledge of OTP (KOTP)	knowledge about internet banking (KIB)
member having knowledge of roaming (KROM)	**ability of using banking services (AUBS)**
ability of using mobile phone (AUMP)	number of family can use cheque (NFUC)
number of family member able to call (FMC)	number of family member can use ATM/debit card (NFAC)
number of family member able to receive SMS (FMRS)	number of family member can use credit card (NFCC)
number of family member able to receive call(FMRC)	number of family can deposit money (NFDM)
number of family member able to send SMS(FMSS)	**usability of banking services (UBS)**
number of family member able to use internet (FMUI)	ATM card users (ACU)
usability of mobile phone(UMP)	deposited by business or employment (DBB)
work related use of mobile phone(UMWA)	Deposited by others (DBO)
use of mobile phone for entertainment (UMFE)	deposited by self (DBS)
use of mobile phone for internet(UMFI)	frequency of using ATM card (FUAC)
use of mobile phone for social activities(UMSA)	withdraw money by ATM (WMA)
use of mobile phone for games (UMFG)	withdraw money by cheque (WMC)
Infrastructure	withdraw money by self (WMS)
Bathroom (BR)	Credit Card Users (CCU)
Cooking Fuel (CF)	**Education**
Floor Type (FLRT)	Head Education (HE)
Household Appliance (HA)	Others Education (OE)
Kitchen (KCHN)	Outside for Education (OFED)
No. of Room (NR)	**Community**
Roof Type (FT)	Religion (RL)
Sources of Drinking water (SDW)	Caste (CA)
Toilet (TLT)	Occupation (OC)
Wall Type (WAT)	
Electricity (EL)	
Agriculture Instruments (AI)	