Exploring the Influence of Financial Inclusion on Financial Well-being of Low-income Households

M. Stella and T. Ramachandran*

SRM Institute of Science and Technology, Kattankulathur – 603203, Chengalpattu district, Tamilnadu, India.

Abstract: Financial inclusion has become a policy agenda for the governments and central banks in emerging economies, in which India is not an exception. Also, it has captured the significant attention of researchers, policymakers, and socio-economists around the globe. The study examines the determinants (accessibility, usage, and quality of service) of financial inclusion and its impact on the financial well-being of low-income households. The demand-side analysis of measuring financial inclusion with a sample of 410 low-income households in India. The primary data collection is done by administering the structured interview schedule using purposive sampling. Confirmatory factor analysis (CFA) and structural equation modeling (SEM) is performed to describe the latent constructs and their hypothetical relationships with adequate empirical evidence. It is found that dimensions of financial inclusion significantly influence the determinants of financial inclusion and significantly impact the financial well-being of low-income households. The study outcome facilitates all the stakeholders, including policymakers and financial institutions, to enact policy guidelines to ensure the financial well-being of low-income households through financial inclusion initiatives.

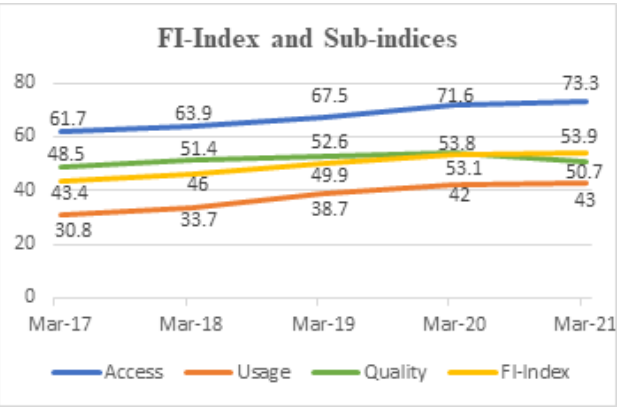
Keywords: Access, usage, financial inclusion, financial well-being, and low-income households.

INTRODUCTION

Financial inclusion is"the process of enabling affordable access to financial services, timely and enough credit for vulnerable groups such as the weaker portions and low-income groups"(Committee on Financial Inclusion - Chairman: Dr. C Rangarajan, RBI, 2008).The Reserve Bank of India initially conceived the notion of financial inclusion in India in 2005.The critical economic reason for developing financial inclusion is to ensure that excluded groups get access to the formal banking system by offering secure and efficient channels for saving, credit, insurance, and remittances. Additionally, Financial inclusion also aids in the prevention of predatory informal financial markets that prey on the vulnerable poor and the financially uneducated. The GOI introduced the National Mission for Financial Inclusion (NMFI)in August 2014, Pradhan Mantri Jan Dhan Yojana (PMJDY), to provide banking financial services for unbanked households in unserved and underserved areas. The government of India launched the scheme on a pan India Basis. PMJDY, under Mission mode, predicts providing affordable services to all citizens within a rational distance.

The Financial inclusion index has been designed as an inclusive index that contains information on the banking, investments, insurance, postal, and pension sectors after consulting with the relevant sectoral regulators and government. The index facilitates information on sub-dimensions of financial inclusion (FI) in a single value ranging from 0 to 100, with 0 representing total financial exclusion and 100 denotes complete financial inclusion. The financial inclusion index (FII) is made up of three main factors (weighted in brackets), namely access (35%), usage (45%), and quality (20%), each of which has a number of dimensions that are computed based on a number of indicators (RBI Report, 2022).

Chart 1



The Index is proportional to the affluence of access, availability and usage of services, and service quality and includes all 97 indicators. The Quality component, which reflects the quality element of financial inclusion expressed by financial literacy, consumer protection, and inequities and deficits in services, is a distinctive characteristic of the Index. The FI-Index was created without a "base year"; as a result, it represents all stakeholders' cumulative efforts throughout time to promote financial inclusion. Chart 1, as opposed to 43.4 for

*Address correspondence to this author at the SRM Institute of Science and Technology, Kattankulathur – 603203, Chengalpattu district, Tamilnadu, India; E-mail: mstellaphd4@gmail.com

the period ending March 2017, the annual FI-Index for March 2021 is 53.9.In collaboration with the relevant parties, including the government, the Reserve Bank of India created a composite Financial Inclusion Index (FI-Index) to measure the level of financial inclusion across the nation. It was then released in August 2021 for the fiscal year that ended in March 2021. Since then, the index for March 2022 has been created. The FI Index value for March 2022 is 56.4, which increased from 53.9 in March 2021, with increases seen across all sub-indices (RBI Report, 2022).

REVIEW OF LITERATURE

Financial Inclusion and Financial Well Being

Financial inclusion has emerged as a policy goal for governments and central banks in emerging economies, and India is certainly no exception. Also, it has attracted tremendous interest from academics, decision-makers, and socioeconomists worldwide. (Srinivasan, 2007; Allen et al., 2012; Gupte et al., 2012; Amidzic et al., 2014; Camara and Tuesta, 2014). A well-structured financial system is essential for supplying an overall proportion of the population with a vast array of banking services, including savings, credit, payments, and insurance products. (Demirguc-Kuntand Klapper, 2013).The World Bank has identified financial inclusion as one of the primary goals for attaining universal financial access by 2020 (Camara & Tuesta, 2014). The present prospects for financial inclusion in India and the inclusion of financial services are progressive and vastly improved, although suitable provisions are still required. (Dangi and Kumar, 2013).The cognitive and behavioral perspective on the supply and demand side factors of financial inclusion. The research indicated that a behavioral assessment enabled policymakers and markets to coordinate their approaches (Agrawal, 2008) strategically. The function and competence of commercial banks in Jharkhand. The research determined that banks were not reaching their targeted objectives and recommended that all banks provide the RBI with more regular updates on their financial inclusion progress (Mukherjee & Chakraborty, 2012).The growth rate of bank branches and debit/credit card use measures the impact of financial inclusion on economic development. Instead of access to the financial goods and services banks provide, debit cards have expanded dramatically (Joseph & Varghese, 2014).A positive correlation exists between the number of ATMs and bank branch networks and the country's gross domestic product. The effect of financial inclusion on GDP growth (Kamboj, 2014).Using a financial inclusion index to investigate macro-level factors associated with FI and examine the relationship between financial inclusion and development. The research uncovered financial isolation due to social exclusion, economic disparity, financial illiteracy, inadequate connection, and low urbanization. (Sarma and Pais 2008).The review of financial inclusion in India concluded that branch density substantially affects financial inclusion (Paramasivan & Ganesh Kumar, 2013). Toimprove the successful execution of financial inclusion programmes in India by gathering comprehensive insights into the perceived ease-of-use, utility, trust, and product compatibility that leads to continuous use of bank accounts (Thomas et al., 2020).

Financial well-being is a state of being in which a person can meet all of their current and future financial commitments, feel financially secure, and make decisions that allow them to enjoy life. Bhanot et al. (2012) observed the demand-side analysis for financial inclusion in two states of northeast India, the income levels, awareness of financial products through various sources, and information about self-help groups (SHGs) were inclined. Bhatia and Singh (2019) explored the influence of financial inclusion on women's entrepreneurship in urban slums. The study reveals that the PMJDY- financial inclusion program has a substantial outcome in the case of urban women's political, economic, and social empowerment. Nandru and Rentala (2019) attempted to find the effects of financial inclusion on the socioeconomic condition of India's primitive tribal groups (PTGs) are examined, and its results reveal that the availability, ease of access, usage, affordability, and physical proximity factors are positively influencing the determinants of financial inclusion. The impact of microfinance and financial inclusion on the well-being of poor households (Duvendack et al., 2011). Cabeza-Garcıa et al. (2019) conjectured that the involvement of women in the financial system enhances worldwide economic and social well-being. The study analyzes the factors influencing financial inclusion and its impact on financial well-being.

Research questions:

1. Does the dimension (access, usage, and quality) influence the financial inclusion of low-income households?

2. To what extent financial inclusion influences low-income households' financial well-being?

Hypothesis development

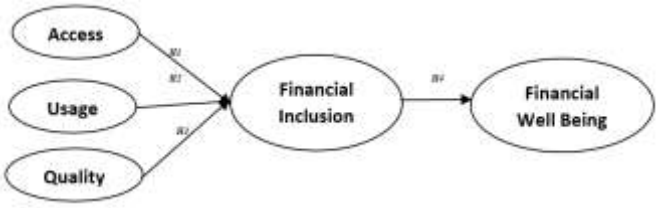
H_1: There is a significant relationship between access and financial inclusion.

H_2: There is a significant relationship between usage and financial inclusion.

H_3: There is a significant relationship between quality and financial inclusion.

H_4: There is a significant impact of financial inclusion on financial well-being.

Conceptual framework:



Source: Nandru, P., Chendragiri, M., & Velayutham, A. (2021).

RESEARCH METHODOLOGY

The descriptive research design is employed for the study to test the hypotheses. The primary data were collected through a well-structured questionnaire from 410 low-income house-

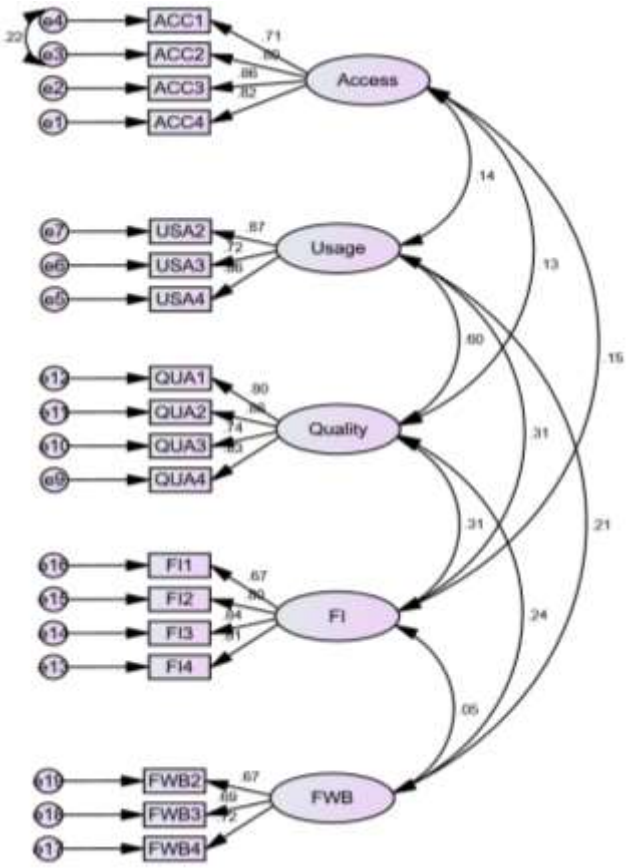


Fig. (1). Measurement Model.

holds in the Chengalpattu district using a purposive sampling technique. The sample of households earning less than three lakhs per annum is considered for this study. Michael Collins and Urban's (2020) measurement scale items were adopted for financial well-being. Access, usage, quality of service, and financial inclusion was adopted from Nandru and Rentala (2019), and items were rephrased for the study.

RESULTS AND DISCUSSIONS

Confirmatory factor analysis (CFA) and structural equation modeling (SEM) were employed to test the hypothesis. The measurement items of 20 selected under five latent constructs were confirmed through CFA. The structural model was performed to explore the extent of the relationship between latent variables and observed variables. The data are analyzed using SPSS and Amos.

Factor Analysis

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.854
Bartlett's Test of Sphericity	Approx. Chi-Square	1903.163
	Df	58
	Sig.	.000
Total Variance Explained		71.46

Confirmatory Factor Analysis

The measurement (CFA) model was established to assess the construct reliability and convergent validity of measurement items and examined the model fitness through goodness-of-fit indices (Table **1**).

The assessment of the measurement model statistical evidence that a good fit statistic generated a normed chi-square value of 1.169, which is below the threshold value level (Hair et al., 1998), i.e., <3 and found to be p-value 0.095, which is greater than 0.5. the value of absolute fit indices aregoodness of fit index (GFI=0.962), root mean square error of approximation (RMSEA=0.020); the incremental fit indices are normed fit index (NFI=0.960), comparative fit index (CFI=0.994),Tucker Lewis index (TLI=0.993), and the parsimony fit index is adjusted goodness of fit index (AGFI=0.948), all the index values are under threshold value as per MacCallum et al., 1996; Byrne, 2010; Hair et al., 2013.

The structural model has been assessed for H1, H2, H3, and H4 in this study (Fig. **2**). The hypothesis was confirmed by considering the path coefficient and "t" value(greater than $\pm$ 1.96).Table **2** reveals that access is found to be significant towards financial inclusion (*H1*: β = 0.001. t-value = 3.537), usage was significantly influencing financial inclusion (H2: β = 0.010. t-value = 2.559), quality was significant at 1% (H3: β = 0.001. t-value = 3.270) and impact of financial inclusion on financial wellbeing was found to be significant (H4: β = 0.001. t-value = 3.901). It is proven that access,

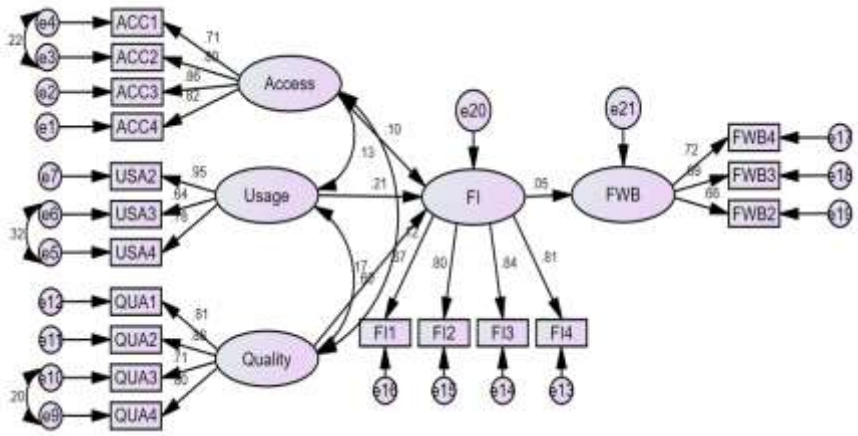


Fig. (2). Structural Equational Model.

Table 1. Goodness of Fit Statistics for Measurement Model and Structural Model.

Model	Normed Chi-square (χ2/df)	*P*-value	GFI	AGFI	CFI	NFI	RMESA
Recommended value	< 3	>0.05	≥0.90	≥0.90	≥0.90	≥0.90	<0.80
Measurement model (CFA)	1.169	0.095	0.962	0.948	0.994	0.960	0.020
Structural equation model	1.096	0.219	0.965	0.952	0.997	0.962	0.015

Table 2. Standardized Path Coefficients and t-statistics of the Structural Model.

Construct			Estimate	S.E.	C.R.	*p-value*	Decision on Hypothesis
Financial Inclusion	<---	Access	0.115	0.032	3.537	0.000	Supported
Financial Inclusion	<---	Usage	0.036	0.014	2.559	0.010	Supported
Financial Inclusion	<---	Quality	0.083	0.025	3.270	0.001	Supported
Financial Well- Being	<---	Financial Inclusion	2.420	0.620	3.901	0.000	Supported

Table 3. Rotated Component Matrix.

Construct	Component				
	1	2	3	4	5
Access1	.713				
Access2	.804				
Access3	.861				
Access4	.823				
Usage2		.872			
Usage3		.720			
Usage4		.884			
Quality1			.804		
Quality2			.863		

Quality3			.741		
Quality4			.834		
Financial Inclusion1				.671	
Financial Inclusion2				.803	
Financial Inclusion3				.842	
Financial Inclusion4				.813	
Financial wellbeing 2					.674
Financial wellbeing3					.691
Financial wellbeing4					.723

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

usage, and quality are influencing financial inclusion and the financial inclusion impact on the financial well-being of low-income households.

The assessment of the structural model statistical evidence that a good fit statistic generated a normed chi-square value of 1.096, which is below the threshold value level (Hair et al., 1998), i.e., <3 and found to be a p-value of 0.219, which is greater than 0.5. the value of absolute fit indices: GFI=0.965, RMSEA=0.015; the incremental fit indices are NFI=0.962, CFI=0.997, TLI=0.996, AGFI=0.952.The initiative of financial inclusion (financial security, accessibility, usage, and quality of service) will effectively improve the household's financial well-being and leads to poverty alleviation (Swamy, 2014; Nandru. P, et al., 2021).

CONCLUSION

A model with dimensions for financial inclusion and well-being has been established in the current study. Financial inclusion was proven to have an impact on financial well-being. Policymakers, banks, MFIs, other service providers, and academics in the field of financial inclusion all directly benefit from the findings of this study.In recent years, the Government of India has moved toward making cashless transactions mandatory, which may be accomplished through successful financial inclusion initiatives for low-income households.Financial inclusion has been demonstrated to be crucial for impoverished people's financial stability. For the financial security of low-income families, government regulators and policymakers must consider the financial inclusion programme. A well-structured formal financial system will reduce informal finance and financial exclusion. Consequently, poverty is completely eradicated in a nation.

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