Financial Inclusion and Economic Development: Role of Post Offices

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Abstract

Financial inclusion has become one of the most critical aspects in the context of inclusive growth and sustainable development in developing countries like India. Financial inclusion is a process of ensuring access to suitable financial products and services needed by susceptible groups such as weaker sections and low-income groups at an affordable cost in a fair and transparent manner by mainstream financial institutional players. Despite impressive economic growth over the last two decades, many countries in the world are experiencing inequalities leading to adverse consequences for social cohesion which in turn, could dampen growth prospects. Therefore, financial inclusion has emerged as an important topic on the global agenda for sustainable long-term economic growth. The present study is an attempt to assess the role of post offices in financial inclusion and economic development in the Jammu division of Jammu & Kashmir State. Both primary and secondary data were used for conducting the study. For primary data, 1050 questionnaire were distributed among customers of post offices of Jammu division and secondary data were collected using Internet, journals, and post offices. The most important aspect of financial inclusion is financial literacy but it was found that there is lack of awareness among rural masses about various schemes of financial inclusion. The study is limited to the perception of post office customers only and could be carried further on the perception of other stakeholders such as post office officials and business correspondents.

Keywords: Post Offices, Access, Financial Services, Financial Inclusion, Economic Development

Introduction

As the world moves towards a global economy, fast and prompt money remittances would be needed for creating efficient markets, sustainable economic relationships and economic development (Kaul, 2002). Post offices play a leading role in advancing financial inclusion. Out of 1.5 billion users of postal financial services in the world, 400 millions are holders of a postal (bank) account, 300 millions of which are located in developing or emerging countries (Anson & Toledano, 2010). Post offices as banks offered a trustworthy and extensive network that was directly accessible to scattered rural communities (Ernesto, 2009). Though it has been established for communication purposes, it has ventured into various financial services also. Indian Post has been considered to be the backbone of India's communication network for the last 150 years. Through its network of 1,54,866 post offices, it reaches every citizens by way of mail, insurance, money transfer, savings, banking or retail financial services. Around the world, there are exciting examples where the post has built on its presence to provide financial services like salary distribution, welfare and other payments from cash to electronic delivery etc., as many as 200 million people hold Post Office Savings Bank (POSB) accounts (Srinivasan, 2010). The Government of India and RBI have been, over the years, working for the better synergy between postal and banking industry for FI (financial inclusion) programme which has been visible in the National Postal Policy statement of India Post. Post will provide banking and financial transaction services to cater to the needs of the rural population and help realise the policy of financial inclusion for the "un-banked" rural masses. For deepening and broadening its financial services, suitable agreements with public/ private sector banks will be forged, so that India Post can offer its unique "last mile" connectivity to the customers (National Postal Policy India Post, 2009).

Objective of the Study

Financial inclusion has gained prominence in the past few years as national policy initiative for balanced regional & area development, policy guidelines of RBI to banking

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institutions and others in the development field. The objective of the present study is to assess and analyse the effectiveness of Indian post in enhancing financial inclusion.

Conceptual Framework

Financial Inclusion

Financial inclusion is access to finance & financial services for all in a fair, transparent and equitable manner at an affordable cost (Sarma, 2008; Solo, 2008). Murari and Didwania (2010) denote it as a delivery of financial services at a reasonable cost to the vast sections of the disadvantaged and low-income groups including households, enterprises, SMEs, and traders and bringing the weaker & vulnerable sections of society within the ambit of the organised financial system. It creates conditions for access to timely & adequate credit and other financial services by vulnerable groups at affordable cost. In other words, financial inclusion is access, usage, and availability of financial services from formal financial institutions.

- **Access:** It refers to the ability to use available financial products and services from the formal financial institutions. It provides an insight and analysis of potential barriers to opening and using of bank accounts such as cost, physical proximity of bank branches, etc.
- **Availability:** It is described as services which bank is providing. It includes services such as loan, overdraft, insurance, passbook, debit card, etc.
- **Usage:** It is related to regularity, frequency and length of time used. It focuses on the depth and extent of financial service or product.

Economic Development

Economic development is a continuous process which is extended over a long period of time so as to break the vicious circle of poverty and lead a country to a stage of self-sustaining growth or to self-generating economy. In the words of Meier & Baldwin, 'economic development is a process whereby an economy's real national income increases over a long period of time'. According to Okun and Richard (n.d.), 'it is a sustained secular improvement in well-being, which may be considered to be reflected in an increasing flow of goods & services'. Baran (n.d.) refers it as, 'as an increase over time in per capital output of material goods'. Clark (n.d.) defined as, 'an improvement in economic welfare'.

Hypotheses Development

The proposed study would examine and verify the following hypotheses formulated on the basis of literature reviewed:

Building an inclusive financial system is a complex process. A comprehensive approach to financial inclusion addresses at least three aspects: access to financial services & products, usage of financial services & products and quality of financial services & products, defined by consumer ability to benefit from new financial services & products and linked to consumer protection and financial capability (Molyneux, Carbo, & Gardener, 2005; Levine, 1997; Sarma & Pais, 2010). Through expanded access, consumers are able to adopt new financial services & products from formal institutions. Actions to expand financial access can first identify potential barriers faced by institutions to reach lower-income and underserved customers and then catalyse or implement measures to address these barriers (Beck, Demirguc-Kunt, & Martinez Peria, 2007; Kempson & Whyley, 1999a, 1999b). Financial inclusion is a tool for empowering financial users (Reyes *et al*., 2011). It lays impact on achieving economic and social empowerment (Jha, 2008; Barik, 2009). Financial inclusion increases the economic opportunities for the poor & low income people, which lead towards positive results in social progress, economic development, economic empowerment, and social/ political/ legal empowerment (Mayoux, 1999; Ali & Hatta, 2012; Mishra & Chitta, 2012). Financial inclusion is the key to empowerment of poor, underprivileged and low skilled rural households (Jha, 2008; Barik, 2009; Ranganath & Rao, 2011). Financial inclusion through micro-finance, laid the seeds for area development because an all round economic development depends upon area development (*Das*, 2008). Banking the 'unbankable' through financial inclusion is a valuable contribution to the development planning as it presents an alternative way to development (Arputhamani & Prasannakumari, 2011). Therefore, it is hypothesised that:

H1: All the dimensions namely access, usage, and availability significantly predict the financial inclusion.

H2: Financial inclusion has direct impact on economic development.

Fig. 1: Proposed Research Model

Research Methodology

In order to make study more accurate and objective, the following steps have been taken:

Sample

Data was collected from the customers of Indian Post of Jammu division of Jammu and Kashmir state, who have savings and insurance accounts with the post offices. The pretesting is done on 100 customers of Indian Post from 10 districts of Jammu division of Jammu and Kashmir state. Out of 1050 questionnaires distributed using snowball sampling technique, a total of 750 questionnaires were received and response rate came out to be 71.42 percent.

Generation of Scale Items

The items that are used in the study have been developed through review of literature and deliberations with the subject experts. The financial inclusion scale which comprises of access, usage and availability was generated from Sarma and Pais (2008), Kumar and Sharma (2011), and Gupte, Venkataramani, and Gupta (2012). Barik (2009), Kumar & Sharma (2011), Arputhamani and Prasannakumari (2011), and Cnaan, Moodithaya, and Handy (2011) were consulted for developing scale of economic development.

Initially a detailed questionnaire is prepared covering all the aspects of financial inclusion, social empowerment and economic empowerment. Finally after discussing with experts and concerned peoples a refined questionnaire is framed which consist of 80 items with 44 items of financial inclusion (17 items of access, 18 items of usage, and 9 items of availability), 25 items of social empowerment, and 11 items of economic empowerment. Hence this helped in formation of content validity.

Data Analysis

Descriptive Statistics

Before analysing the data, the response score for negative items are reserved. 24 outliers were identified and subsequently removed from the sample of 750 respondents making effective sample size of 726 respondents. The results of normal probability plots that are observed values are close to the straight diagonal line and no point is strayed outside, which further indicates that data are normally distributed. Moreover, the skewness and kurtosis tests suggest that majority of the values are within the acceptable range. This further confirms that the data is normally distributed. The data purification and finalisation is done using EFA and CFA. These stages are explained as under.

First Stage: EFA Results

Access

The suitability of raw data for factor analysis obtained from post office customers is examined through KMO value, Bartlett test of sphericity and p-value = 0.000, indicating sufficient common variance and correlation matrix (Dess *et al*., 1997; Field, 2000). The process of R-mode principal component analysis (PCA) with Varimax rotation brought the construct to the level of 9 statements out of 17 statements originally kept in the domain of access. The KMO value (0.906) and Bartlett test of sphericity (2986.617) indicate acceptable and significant values. Therefore, factor loading in the final factorial design are consistent with conservative criteria,

thereby resulting into two factor solution using Kaiser criterion (i.e. eigen value ≥ 1) with 67.60% of the total variance explained. The communality for 9 items ranges from 0.558 to 0.806 indicating moderate to high degree of linear association among the variables. The factor loading ranges from 0.633 to 0.845 and the cumulative variance extracted ranges from 35.17 to 67.60 percent. A brief description of factors emerged are as under:

Factor 1 (Information Accessibility)

This factor consists of seven items namely, 'The Post office is conveniently located', 'The employees are easily accessible when needed', 'Post office is easily approachable', 'Post office is easily approachable in case of emergencies', 'You have easy access to the information that is useful', 'Employees of post office are cooperative, friendly and knowledgeable', and 'Employees possess sufficient information'. The mean values varied between 3.44 and 3.84, factor loading between .650 and .816, and communalities from .569 to .806. This factor highlights that accessibility of post office representatives & officials, information, cooperative behaviour is must for success of financial inclusion.

Factor 2 (Approachability)

The items, 'This is the only post office in your area' and 'As compared to other banks, post office is nearest to you' are taken into consideration by this factor which supports the items with significant mean values 4.12 & 4.29, high factor loading values .845 & .811 and communalities with values .741 & .710 respectively. On the whole, all items significantly contribute towards this factor.

Availability

The suitability of raw data for factor analysis obtained from post office customers is examined through anti-image, KMO value, Bartlett test of sphericity and p-value = 0.000, indicating sufficient variance and correlation matrix (Dess *et al*., 1997; Field, 2000). The process of R-mode principal component analysis (PCA) with Varimax rotation extracted 6 statements out of 18 statements which are actually kept in the construct of availability. The KMO value (.770) and Bartlett test of sphericity (2170.576) indicates highly acceptable and significant values. Therefore, factor loadings in the final factorial design are consistent with conservative criteria, thereby resulting into two factor solution using Kaiser criterion (i.e. eigen value ≥ 1) with 72.56% of the total variance explained. The communality for 6 statements ranges from .546 to .918, indicating high degree of linear association among the variables. The factor loading ranges from .616 to 0.944 and the cumulative variance extracted ranges from 29.516 to 72.562 percent. A brief description of factors emerged are as under:

Factor 1 (Support & Assistance)

This factor comprised of four items specifically, 'Help desk/ assisting staff is available for filling withdrawal/ deposit form', 'Fieldworkers promotes various schemes of post office', 'Infrastructure is as per the requirements of the customers', and 'Post office follows quick problem solving approach'. The mean values for the items fluctuate between 2.87 to 3.52 representing moderate position. The factor loading ranges between .616 and .757, and communality between .546 and .589. The factor depicts that post offices should not only focus on making various products & services available but due consideration be given for lending helping hand to the customers.

Factor 2 (Promotion)

The two items falling under this factor consisted of 'Employees are helpful in making information available regarding new schemes' and 'New post office schemes are advertised frequently'. The two variables factor loading values are .890 & .880 and communalities .812 & .792 respectively which reveals that the variables significantly and positively contributes to the factor. Beneficiaries strongly perceive that information about the new schemes be advertised frequently.

Usage

The suitability of raw data for factor analysis obtained from post office customers is examined through anti-image, KMO value, Bartlett test of sphericity and (p-value = 0.000), indicating sufficient variance and correlation matrix (Dess *et al*., 1997; Field, 2000). The process of R-mode principal component analysis (PCA) with Varimax rotation extracted 6 statements out of 9 statements which are actually kept in the construct of usage. The KMO value (.677) and Bartlett test of sphericity (708.037) indicates acceptable and significant values. Therefore, factor loadings in the final factorial design are consistent with conservative criteria, thereby resulting into two factor solution using Kaiser criterion

(i.e. eigen value ≥ 1) with 67.78% of the total variance explained. The communality for 6 statements ranges from .522 to .739, indicating high degree of linear association among the variables. The factor loading ranges from .652 to .856 and the cumulative variance extracted ranges from 35.96 to 65.78 percent. A brief description of factors emerged are as under:

Factor 1 (General usage)

This factor envisages three items focussing upon 'You frequently use saving facilities of the post offices', 'Advance schemes of post office are frequently used by you', and 'You are using post office for the repayment of loan'. The mean value for the aforesaid items ranges between1.66 - 2.03. The factor loadings and communalities exhibited significant values. This factor emphasises on not merely opening of account but on its usage as well. Accounts opening under this scheme must be operated, used for availing credit facilities, repayment of loans, etc.

Factor 2 (Specific usage)

The three variables included in this factor are 'You are using post office for depositing money', 'You are using post office services, because interest charged by the post office on advance is economical than charged by the moneylender', and 'You are a regular visitor of the post' signifying mean values between 3.46 and 3.99, factor loadings between .652 and .831, and communalities between .522 and .692. Beneficiaries recognise that frequent visits are necessary for effective implementation of financial inclusion scheme.

Economic Development

The suitability of raw data for factor analysis obtained from post office customers is examined through Anti-image, KMO value, Bartlett test of sphericity and p-value = 0.000, indicating sufficient variance and correlation matrix (Dess *et al*., 1997; Field, 2000). The process of R-mode principal component analysis (PCA) with Varimax rotation extracted 9 statements out of 11 statements which are actually kept in the construct of economic development. The KMO value (.901) and Bartlett test of sphericity (2534.429) indicates acceptable and significant values. Therefore, factor loadings in the final factorial design are consistent with conservative criteria, thereby resulting into two-factor solution using Kaiser criterion (i.e. eigen value ≥ 1) with 67.87% of the total variance explained. The communality for 9 statements ranges from .529 to .779, indicating moderate degree of linear association among the variables. The factor loading ranges from .639 to 0.846 and the cumulative variance extracted ranges from 46.768 to 67.873 percent. A brief description of factors emerged are as under:

Factor 1 (Stability)

It comprises of seven items, 'FI has prepared you for emergencies', 'FI has increased your purchasing power', 'You have enough savings to meet any contingent situation', 'FI has raised your living standard', 'FI enabled your children to get better education', 'FI has reduced your need to borrow money or goods', and 'FI enhanced your source of income'. The items attained mean values between 3.24 and 3.79, significant factor loadings between .639 and .846, and communalities between .529 and .779. This factor indicates that preparedness for emergencies, enhanced purchasing power, raised living standard, ability to face contingent situation are main components of economic empowerment.

Factor 2 (Employability)

Two items included in this factor are 'FI created new employment opportunities' and 'FI directly affects capital formations & technological investment'. The mean values identified are 2.63 and 2.27, factor loadings as .830 and .751, and communalities as .702 and .598. This factor believes that new employment opportunities and increased technological investment make beneficiaries financially sound and empowered.

Second Stage: CFA Results

Access

The CFA results show that the factor comprising of twelve items at the stage of EFA were now compressed to nine items clubbed into two factors namely information accessibility and approachability. All the fit indices (x^2/ df = 3.787, RMR= .051, GFI = .985, AGFI = .948, NFI = .967, RFI = .919, TLI = .939, CFI = .976, RMSEA = .075) are as per the criteria. Further, SRW values for all the items are above the cut-off criterion.

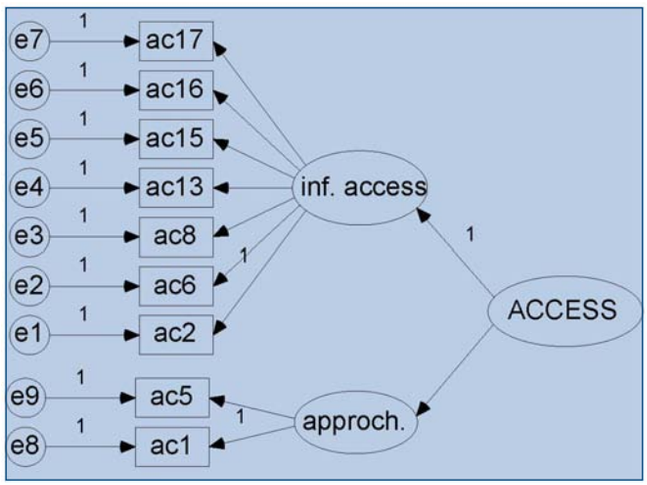

Fig. 2: Measurement Model of Access

Keywords: inf. access- information access, approach.- approachability, ac1-ac17 are the observed variables and e1-e9 are the errors terms.

Availability

Two-factor solution of availability identified after EFA was used for confirmatory factor analysis. During CFA, one factor that is, promotion consisting of two items got deleted due to low standard regression weight. The final factor retained includes four items that is, support and assistance. The model yielded good results (x^2/df = 4.373, RMR = .075, GFI = .959, AGFI = .917, NFI = .900, RFI = .945, IFI = .917, TLI = .970, CFI = .916, RMSEA = .074). Thus, all the values are as per the required criteria.

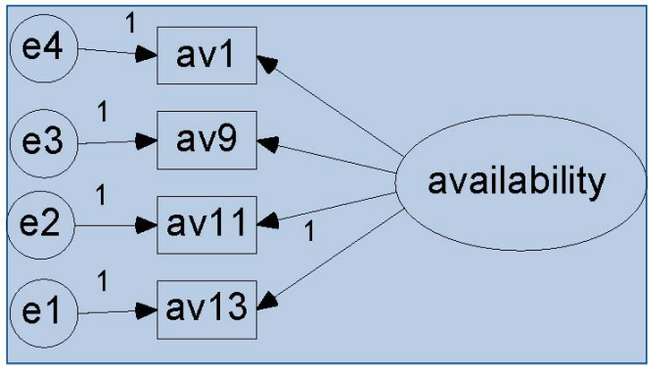

Fig. 3: Measurement Model of Availability

Keywords: av1-av4 are the observed variables and e1-e4 are the errors terms.

Usage

The CFA results show two factors comprising of nine items after EFA namely general usage and specific usage. All the fit indices (x^2/df = 2.787, RMR= .051, GFI = .985, AGFI = .948, NFI = .967, RFI = .919, TLI = .939, CFI = .976, RMSEA = .075) are as per the criteria. Further, SRW values for all the items are above the cut-off criterion.

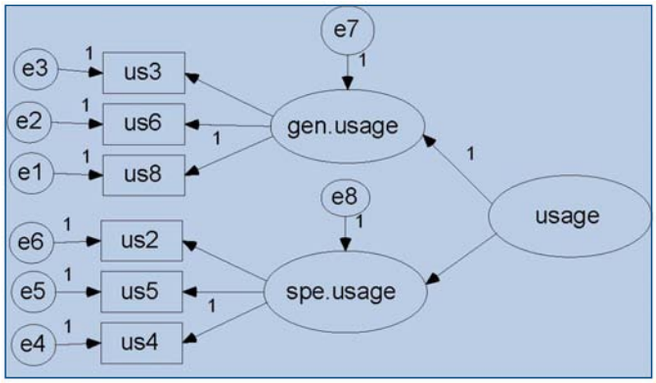

Fig. 4: Measurement Model of Usage

Keywords: gen.usage- general usage, spe.usage- specific usage, us2-us8 are the observed variables and e1-e8 are the errors terms.

Economic Development

The refined nine items of economic empowerment after deleting two items during EFA, possess good SRW ranging between .692 and .511, suggesting that the items are good measures of economic empowerment. This is further supported by CR values (that is, between 4.198 and 17.592) which are above the cutoff criteria. The model fit measures show good fit with x^2/df = 2.456, RMR = .029, GFI = .996, AGFI = .917, NFI = .900, RFI = .945, IFI = .917, TLI = .970, CFI = .916, RMSEA = .054.

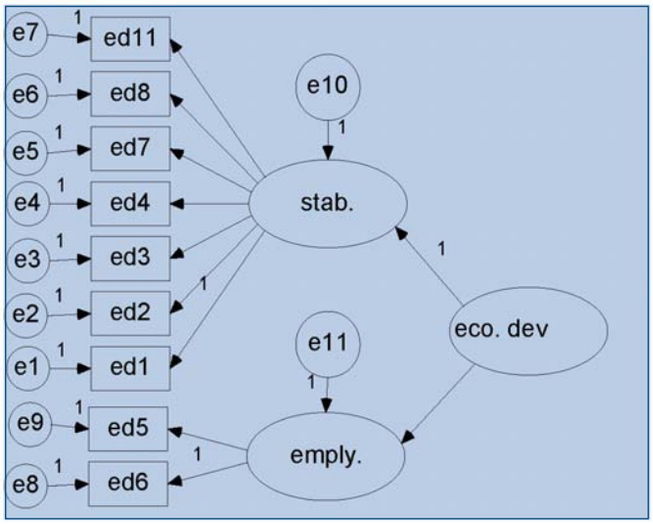

Fig. 5: Measurement Model of Economic Development

Keywords: stab. – stability, emply. – employability, ed1-ac11 are the observed variables and e1-e11 are the errors terms.

Reliability and Validity

Reliability

Reliability: Reliability of the constructs in the study is examined using Cronbach alpha and composite reliability. The study concludes that the scale items are reliable, that is, the values of cronbach alpha for access (.716), usage (.812), availability (.975) and economic development (.923) are above the usual benchmark of .70.

Composite Reliability: The composite reliability of the constructs that is .991 (access), .902 (usage), .951 (availability) and .926 (economic development) suggest acceptable reliability for all the constructs. The overall Cronbach alpha values re above .7 for all the constructs.

Validity

Convergent Validity: The results of the study suggest the existence of convergent validity as the average variance extracted values for access (.968), usage (.871), availability (.940), and economic development (.968) suggest acceptable reliability as the threshold criteria of AVE is .50.

Discriminant Validity: The study evaluated the discriminant validity of all the measurement scales, the result of which is shown in Table 1. All the values of correlation estimates are greater than square root of AVE which established discriminant validity.

Hypotheses Testing

Structural equation modelling was used to test the relationship of access, usage, and availability with financial inclusion and impact of financial inclusion on economic development (SRW = .913, p = .000). Based on the results we accept that access, usage, and availability are the significant predictors of financial inclusion and as such, H1 gets accepted. Further the relation between financial inclusion economic empowerment also came to be significant (SRW = .737, p = .000) indicating the impact of financial inclusion on economic development so we accept the hypothesis H2. The relation resulted in x^2/df = 4.901, RMSEA = .094, GFI =. 989, AGFI = .931, NFI = .961, CFI = .983.

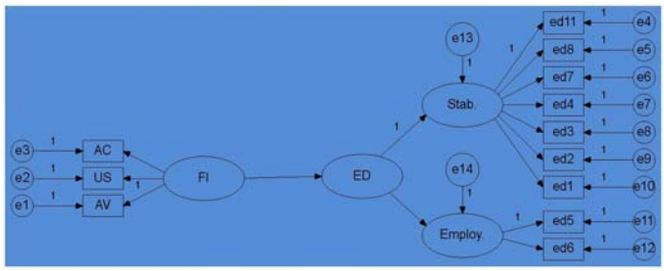

Fig. 6: Hypothesis Testing

Discussion

It was found that there exists a communication gap between post office officials and customers which is manifested from the mean score given to the statement 'The PO officials promptly redress your problem'. So, it is suggested that a suitable mechanism must exist for receiving and redressing customer grievances courteously, promptly, and satisfactorily. The most important aspect of financial inclusion is financial literacy, but it was found that there is lack of awareness among rural masses about various schemes of financial inclusion. To increase awareness and interest in financial products offered under various schemes of financial inclusion, it is recommended to enhance promotion through electronic or print media

in local language with local icons and artists as brand ambassador of the campaign. It is suggested that terms & conditions for availing loan facility should be mentioned in clear and lucid language (preferably in Hindi or in local language). Beside this, the most important terms & conditions termed as standard set of conditions should be highlighted and sent separately to the prospective customers at all the stages so that customer do not remain in doubt.

Limitations and Future Research

All feasible efforts are made to make the study more reliable, valid, and exhaustive, yet certain limitations could not be ruled out and are required to keep in the mind whenever its findings are considered for implementation. The scope of the study is limited to Jammu division only because of restricted resources and time availability. Comparison of the extent of financial inclusion between districts, divisions and states can be undertaken in future. The study is based on cross-sectional data and further be extended on longitudinal data. The information obtained from the respondents may not be free from subjectivity. The study is limited to the perception of post office customers only and could be carried further on the perception of other stakeholders such as post office officials and business correspondents. Other institutes like, banks, cooperative banks, regional rural banks, cooperative societies, SHG's besides other are excluded from the study. Comparative study between those who availed the financial inclusion scheme and those who have not availed, has not been done.

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