Usefulness of Business Correspondents in Kashmir region-a perception of customers and bankers

A Macro Research Project report submitted to Indian Institute of Banking & Finance

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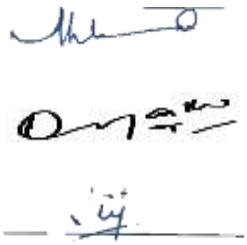

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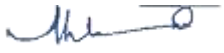
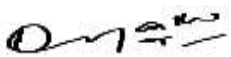


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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

ABEP	:	Annual Branch Expansion Plan
AGFI	:	Adjusted Goodness of Fit Index
ATM	:	Automated Teller Machine
AVE	:	Average Variance Extracted
BC	:	Business Correspondent
BM	:	Bank Mitr
BMB	:	Bhartiya Mahila Bank
BSBDA	:	Basic Saving Bank Deposit Account
CDM	:	Cash Depositing Machine
CFA	:	Confirmatory Factor Analysis
CSR	:	Corporate Social Responsibility
EFA	:	Exploratory Factor Analysis
FIP	:	Financial Inclusion Plan
FITF	:	Financial Inclusion Technology Fund
GCC	:	General Credit Card
GDP	:	Gross Domestic Product
GoI	:	Government of India
HDFC	:	Housing Development Finance Corporation
HDI	:	Human Development Index
ICT	:	Information and Communication Technology
IDBI	:	Industrial Development Bank of India
IFI	:	Index of Financial Inclusion
JAM	:	Jan Dhan Aadhaar Mobile
JKB	:	Jammu & Kashmir Bank
KCC	:	Kissan Credit Card
KYC	:	Know Your Customer
MFI	:	Micro Finance Institution
NBFC	:	Non- Banking Finance Company
NFA	:	No Frill Account
NREGA	:	National Rural Employment Guarantee Act
PMJDY	:	Pradhan Mantri Jan Dhan Yojana
PMMY	:	Pradhan Mantri Mudra Yojana
PNB	:	Punjab National Bank
PSB	:	Public Sector Bank
RBI	:	Reserve Bank of India
RMSEA	:	Root Mean Square Error of Approximation
RRB	:	Regional Rural Bank
SBI	:	State Bank of India
SCB	:	Scheduled Commercial Bank
SEM	:	Structural Equation Modeling
SFB	:	Small Finance Bank
SHG	:	Self-Help Group
SLBC	:	State Level Banker Committee
TLI	:	Tucker-Lewis Index
USB	:	Ultra-Small Branches

Executive Summary

Financial inclusion in India has made significant strides since the nationalization of the State Bank of India (SBI) in 1955, followed by the nationalization of other banks in 1969 and subsequently in 1980. In addition to bank nationalization, various measures implemented by the RBI and the Government of India (GoI) to promote financial inclusion include expanding the branch network of banks, establishing and enhancing cooperative and Regional Rural Banks (RRBs), introducing priority sector lending, implementing the lead bank scheme, fostering the formation of Self-Help Groups (SHGs), and issuing Kissan/General credit cards. However, more concerted efforts were undertaken when the RBI introduced the concept of No Frill Accounts (NFAs) in 2005.

India's financial inclusion policies facilitate the opening of zero-deposit bank accounts for economically disadvantaged individuals and aim to make banking services more accessible by bringing them directly to customers' doorsteps. This involves relaxing regulations for the establishment of bank branches, installing ATMs, and enabling banking transactions through local agents known as Business Correspondents (BCs). Both the Government of India (GoI) and the Reserve Bank of India (RBI) have introduced various policies and programs over time to integrate socially and financially marginalized individuals into the formal financial system. One notable initiative in this regard was the introduction of No-Frills Accounts (NFAs), later renamed Basic Savings Bank Deposit Accounts (BSBDAs). The goal has been to extend the reach of the banking system to every village and household, a process initiated over a decade ago with the introduction of BSBDAs. BSBDAs serve as basic, cost-effective bank accounts for conducting transactions and saving money. These accounts typically do not require a minimum balance or incur fees for not maintaining one, making them particularly suitable for individuals without formal bank accounts who seek secure and reliable options for payments and savings.

The present research is a humble attempt to analyse the effectiveness of BCs who were introduced by RBI and Government of India through banks to take the banking services to the unserved customers. As BCs have a direct interaction with customers and bankers, BCs effectiveness has been assessed through these two stakeholders only i.e.; customers and bankers. Accordingly, this study has set the objectives to assess

usefulness of Business Correspondents (BCs) through BSBDA customers to see their impact. Further this study tried to measure the impact of BCs awareness creation and technology adoption to check the economic empowerment of customers and that has been assessed from the perception of bankers. This study has been restricted to Kashmir only which consist of ten districts. The survey covers the bank employees working in different bank branches and BSBDA customers residing in the Kashmir region of the Union Territory of Jammu & Kashmir. Further the data are collected from the stakeholders i.e., bankers and customers of four banks which are State Bank of India (SBI), Punjab National Bank (PNB), Jammu & Kashmir Bank (JKB) and Housing Development Finance Corporation (HDFC). The data has been collected through three different structured questionnaires from the stakeholders.

The data collected from secondary sources (PMJDY, Ministry of Finance, RBI) and with the help of survey method has been coded and analysed through trend analysis, descriptive statistics and panel regression and path analysis in order to bring out relevant results using the appropriate statistical techniques with the help of the Statistical Package for Social Sciences (SPSS), Microsoft Excel, Analysis of Moment Structures- Structural Equation Modelling (AMOS-SEM) and STATA.

The study uses analysis tools of regressions, paired tests and AMOS SEM to answer its research questions. The findings indicates that the BC-model has been beneficial for both the customers and the bank. Customer being able to access the banking facilities with the BSBDAs, has led to their economic empowerment. The study also confirmed that the customers usage level of these accounts was very much affected by how easily the banking facilities are accessible and available. From the bankers' perspective, banks' awareness creation programmes through BCs affects the transaction pattern significantly. The awareness creation programmes have been helpful in increasing the number of active accounts. The technology adoption has been able to improve the transaction patterns and the savings of the customers.

Chapter – 1

INTRODUCTION

1.1 Background of the Study

1.2 Statement of the Problem

1.3 Scope and Nature of the Study

1.4 Significance of the Study

1.5 Structure of the Report

INTRODUCTION

1.1. Background of the Study

To reach to every unbanked area, the Government of India (GoI) along with the Reserve Bank of India have implemented a number of initiatives to provide banking services to all individuals. Starting with bank nationalisation and the establishment of brick-and-mortar type branches in each and every viable region, banks were unable to bring every individual under the scope of financial services. The cause could be trust on banks, the bank's location, the strength of the local money lenders, and so on. However, the most crucial factor for people remaining unbanked has been identified as the difficulties for banks to construct brick-and-mortar branches in each and every region of the country. To solve this limitation, the RBI has developed a new concept known as a Business Correspondents (BC), Business Facilitators (BF), or Bank Mitrs (BM). The BCs were given the necessary facilities and authorization by the government to provide basic banking services to rural consumers. The number of accounts opened has undoubtedly increased since the introduction of BCs, however concerns have been expressed about the quality of those accounts. To resolve the difficulty, the current study is being conducted in Jammu & Kashmir to assess the use of BCs from the perception of customers and bankers, who are the program's ultimate beneficiaries.

1.1.1. Financial Inclusion: Overview

In India, the history of financial inclusion dates back much earlier than the adoption of formal financial inclusion objectives. Efforts to integrate the financially excluded sections and segments of the society into the formal financial system are not new ones. The journey of formal financial inclusion in India began significantly with the nationalization of the State Bank of India in 1955, followed by the nationalization of 14 other banks in 1969 and an additional 6 banks in 1980. This nationalization brought about substantial positive changes, shifting the focus from class banking, which served the financially well-off, to mass banking, which aimed to provide banking services to the poor. In addition to bank nationalization, the Reserve Bank of India and the Government of India undertook various initiatives to promote financial inclusion. These initiatives included expanding the branch network of banks, establishing and growing cooperative banks and Regional Rural Banks (RRBs),

introducing priority sector lending, the lead bank scheme, forming Self-Help Groups (SHGs), and launching Kisan/General Credit Cards. However, concentrated efforts gained momentum when the RBI introduced the concept in the year 2005 with the launch of No-Frills Account (NFA).

In developing countries, the lack of access to financing for disadvantaged and weaker segments of society is widely acknowledged as a key hindrance to economic progress and development. The degree of financial inclusion varies among countries depending on their stage of development. Individuals who are financially included and participate in formal financial system can invest in education, start and expand their businesses, and absorb the financial shocks in an efficient way, which contributes in a positive manner to the reduction in poverty and economic growth (*Beck, Demirguc-Kunt, and Levine, 2007*). Financial inclusion is described as a universal access to wide range of financial products and services at an affordable cost, comprising not only banking goods but insurance and equity products too (*Raghuram Rajan Committee, 2007*). The utilization of formal financial services is crucial for determining economic development. Broad access to banking and financial services, or financial inclusion, is characterized by the absence of price or non-price barriers to using these services (*World Bank, 2008*). The financial inclusion program of the Government of India aims to integrate excluded individuals into mainstream banking. Financial inclusion is giving vulnerable groups, such as weaker parts and low-income groups, access to financial services and timely, adequate credit at a reasonable cost (*Rangarajan Committee,2008*). It extends beyond simply offering financial services to the excluded, encompassing a range of services, including basic no-frills accounts with an overdraft facility, entrepreneurial credit like General Credit Cards (GCC), Kisan Credit Cards (KCC), insurance, and remittance products for electronic benefit transfers and other remittances (*Chakrabarthy, 2011*). The policy approach to financial inclusion in India can be divided into two categories: the minimalist and the expanded approach. The minimalist approach focuses on providing a basic set of financial services, whereas the expanded approach includes not only basic banking products but also ancillary financial products, emphasising consumer protection and education, particularly financial literacy for new entrants into the formal financial system (*Khan, 2012*).

The policy of India's financial inclusion facilitates the opening of zero-deposit bank accounts for the poor and aim to bring banking services directly to customers' doorsteps. This initiative includes easing regulations for opening bank branches, establishing ATMs, and enabling banking transactions through local agents known as Business Correspondents. The Government of India along with the Reserve Bank of India (RBI) have consistently introduced new policies and programs to integrate socially and financially excluded individuals into the formal financial system. A significant policy aimed at reaching the broader population was the introduction of No-Frills Accounts (NFA), later renamed Basic Savings Bank Deposit Accounts (BSBDA). The ongoing process to include every village and household in the banking system began over a decade ago with the NFA initiative. BSBDAs are low-cost basic accounts, designed for transactions and savings, requiring no or a very low minimum balance, with banks not charging fees for not maintaining a minimum balance (*Jos, George, Shivshankar and Thomas, 2011).* These accounts are primarily designed for clients without conventional bank accounts who want greater security and dependability for payments and savings. While the RBI has issued guidelines to banks regarding minimum balances, customer charges, and transparency, banks have the autonomy to decide on other aspects, such as transaction limits. To further promote financial inclusion and the use of BSBDAs, the Government and RBI have created a liberal and supportive environment.

The branchless banking model using Business Correspondents (BCs) and Business Facilitators (BFs) was introduced to open Basic Savings Bank Deposit Accounts (BSBDAs). Additionally, an overdraft facility was extended to savings bank accounts, and the norms related to Know Your Customer were relaxed (*UNDP, 2012*). The RBI introduced the concept of BSBDAs in 2005 to ensure that clients did not incur hidden costs, making financial services more affordable. However, when client costs are set at affordable limited levels, banks may limit the number of such clients to maintain profitability. For banks, managing BSBDAs presents an additional responsibility, as they are prohibited from charging customers for these accounts, making them inherently loss-making. Despite this, the banks were encouraged by RBI to make BSBDAs widely accessible to large segments of the population.

1.1.2. Background of Basic Savings Bank Deposit Accounts

The Government is highly committed to integrating financially excluded individuals into the formal financial system. Including these excluded groups will not only empower them economically and socially but will also contribute to the overall economic development of the country. Financial inclusion is essential for achieving inclusive growth for both the masses and the nation. To advance true financial inclusion, Basic Savings Bank Deposit Accounts (BSBDAs) were introduced. The Government of India and the RBI initiated BSBDAs and instructed banks to open these accounts for rural populations with no or low minimum balances and minimal charges. Banks were advised to prioritize unbanked villages, and KYC norms were simplified for those accounts with balances not exceeding 50,000 rupees to ensure customers could easily open accounts (*D. Subbarao, 2012*).

The Government introduced new initiatives alongside existing schemes to achieve complete financial inclusion. One such initiative was the multi-media campaign "SWABHIMAAN," launched by the Government of India on February 10, 2011, aimed at informing, educating, and motivating people to open bank accounts. This campaign promised to bring basic banking services to unbanked villages with populations over 2000. Additionally, the Aadhaar program, which enrolled people with the Unique Identification Authority of India (UIDAI), facilitated banks by allowing them to use the Aadhaar card as the sole KYC document. The Swabhimaan campaign aimed to increase credit demand among small and marginal farmers, helping them access the formal banking system with UID assistance. To support the establishment of new branches, the RBI advised banks to ensure that at least 25 percent of the branches in their Annual Branch Expansion Plan (ABEP) were located in unbanked rural areas. In August 2012, the RBI instructed banks to rename No Frill Accounts to Basic Savings Bank Deposit Accounts (BSBDAs), maintaining the same features. To expedite financial inclusion, the government announced Pradhan Mantri Jan Dhan Yojana (PMJDY) on the August of 28, 2014, as a national mission to connect and bring every household to the formal financial system. This project aimed to provide universal banking access, bank accounts with a ₹5000 overdraft, debit cards with ₹1 lakh accidental insurance coverage, and financial literacy programmes for the general public. Since then, financial inclusion has made considerable strides, bringing broad sectors of the population into the official financial sector.

1.1.3. Background of Business Correspondents

In January 2006, the RBI launched the Business Correspondent (BC) model as a crucial initiative following the introduction of BSBDAs. Recognizing that it was impractical for banks to establish physical branches in every village, the BC model was developed to meet the needs of unbanked populations. This approach extended the bank's reach through external arrangements, providing banking services directly to people's doorsteps. Business correspondents were authorized by their respective banks to offer basic financial services in unbanked areas, such as opening accounts, handling small transactions, assisting with loans, and providing remittance services. These BCs, appointed as bank agents on a commission basis, served rural areas. Banks were able to use a variety of institutions as BCs, including Self-Help Groups (SHGs), Micro Finance Institutions (MFIs), NGOs, public service organisations, corporations incorporated under Section 25 of the corporations Act of 1956, retired government or bank personnel, and former service members. To accelerate financial inclusion, on September 28, 2010, the RBI further relaxed regulations, allowing banks to appoint 'for-profit' companies, excluding Non-Banking Finance Companies (NBFCs), as BCs. Consequently, several major banks signed Memorandums of Understanding (MoUs) with private firms to act as their BCs. However, the focus on achieving quantitative targets often overlooked the quality of the bank-BC partnership. Banks recognized the need for technology in rural areas to simplify and make transactions more transparent for customers, BCs, and banks. In October 2008, the RBI responded by issuing instructions on technology, security requirements, and customer protection. Subsequently, BCs began employing biometric identification devices, and clients were provided smart cards such as GCC/KCC to improve technology-based financial inclusion.

1.1.4. Interventions towards inclusive finance by Government and RBI

The Government of India has undertaken multiple rounds of initiatives to encourage inclusive financial growth during the last few decades. The RBI has already taken many measures to enhance access to the banking services, credit markets, and financial education for the unbanked people, with the goal of achieving sustainable and equitable growth. These programmes include:

Swabhimaan Scheme: To promote financial inclusion, the Government of India along with the RBI launched the Swabhimaan scheme on February 10, 2011. The aim of the initiative was to bring banking services/products to larger rural areas, especially in villages with populations over 2000. Managed by the Ministry of Finance and the Indian Banking Association (IBA), the scheme sought to integrate rural populations into the formal banking system.

Opening Bank Branches: In October 2011, the Government and RBI jointly established specific guidelines and a financial inclusion strategy. Banks were urged to open branches in all habitations with populations of 5000 or more in underserved regions and 10,000 or more in other districts in order to increase access to banking services.

No Frills Account (BSBDA)/ Basic Savings Bank Deposit Account (BSBDA): In the 2005-06 mid-term review policy, the banks were encouraged by RBI to make BSBDAs widely accessible. All banks were directed to offer BSBDAs at all branches to anyone wishing to open such an account. BSBDAs are basic, low-cost accounts for transactions and savings, requiring no or very low minimum balance and typically charging no fees. Banks were also advised to provide small overdrafts for these accounts.

Simplification of Know Your Customer (KYC) Norms: The RBI introduced KYC norms for customer identification, account monitoring, and reporting suspicious transactions. Customer identification was a significant challenge for financial inclusion, as many excluded individuals lacked identity or address documents. To address this, the government simplified documentation requirements, suggesting uniform KYC guidelines and a common list of acceptable documents for public sector banks to use.

Aadhaar- Unique Identification Authority of India (UIDAI): The Government of India established the UIDAI in 2009 to provide unique identification numbers (Aadhaar) to every Indian citizen. This number serves as proof of identity and address nationwide, facilitating access to services such as banking and mobile phone connections. The UIDAI also enabled unbanked individuals to open bank accounts

during Aadhaar enrollment and access them through a widespread micro-ATM network.

Ensuring Prudent Bank Charges: The RBI received numerous complaints about imprudent service charges levied by banks, which deterred people from opening accounts. To ensure fair banking practices, the RBI issued instructions requiring banks to display and regularly update information on service charges at their branches and on their websites in a prescribed format.

Business Facilitators (BFs)/ Business Correspondents (BCs) Model: To enhance financial inclusion and expand banking services, the RBI permitted banks in 2006 to use intermediaries such as Business Correspondents (BCs) and Business Facilitators (BFs). BCs act as bank agents providing banking services in locations without bank branches or ATMs, fostering a closer relationship between poor communities and the formal financial system.

Setting up of Ultra Small Branches (USBs): Recognising the necessity for constant supervision of BCs, USBs are being formed in all BC-served communities as part of financial inclusion activities. These modest branches ensure that residents have access to a full range of banking services and help BCs run efficiently.

Expansion of ATM Network: In collaboration with the Department of Financial Services, public sector banks worked on deploying ATMs/cash dispensers based on an area-based model. This approach leveraged the power of aggregation, with one public sector bank issuing a common request for proposal (RFP) for a geographical cluster on behalf of all participating banks.

Issuance of Kissan/General Credit card (KCC/GCC): To assist the poor and disadvantaged in accessing easy credit, banks were asked to introduce General-purpose Credit Cards (GCC) and Kissan Credit Cards (KCC) at rural and semi-urban branches. These schemes aim to provide hassle-free credit based on cash flow assessments without requiring collateral.

Introduction of Pradhan Mantri Jan Dhan Yojana (PMJDY): Launched on August 28, 2014, PMJDY is a national mission for financial inclusion focused on bringing individual households into the formal financial system. The scheme provides banking,

insurance, and pension services, aiming to offer dignity, financial freedom, and stability to weaker sections of the society.

Trinity of Jan Dhan-Aadhaar-Mobile (JAM): Proposed in the 2014-15 economic survey, the JAM trinity aims to link Jan Dhan accounts with Aadhaar cards and mobile numbers. This integration seeks to prevent leakages in subsidies provided by the Government and enhance the delivery of services.

New Banks Licensing: In 2015, the RBI issued licenses for a new set of Small Finance Banks (SFBs) and Payment Banks. This move aimed to further financial inclusion efforts in India, with the selection process for new bank licenses emphasizing innovative business.

Additional efforts by the Government of India, RBI, and NABARD to promote financial inclusion include opening customer service centers, credit counseling centers, the national agricultural insurance scheme, microfinance development fund, micro pension model, project financial literacy, national rural financial inclusion plan, financial inclusion fund, financial inclusion technology fund, and financial literacy initiatives through audio-visual media such as Doordarshan and the farmers' club program.

1.1.5. Basic Savings Bank Deposit Accounts in India: Growth and Development

Prior to the introduction of BSBDAs, the RBI and the Government of India had implemented various initiatives. However, the launch of BSBDAs significantly transformed the landscape of financial inclusion. Penetration of accounts in India rose by 18 percent from just 35 percent in 2011 to 53 percent in 2014, and further to 78 percent in 2021 which is an overall increase of 60 percent (*Demirguc-Kunt and Klapper, 2022, Global Findex Database, 2011*).

The Financial Inclusion Plan (FIP) created by scheduled commercial banks, with the encouragement from the RBI, offers a structured and strategic approach to financial inclusion. The RBI uses these FIPs to assess the performance of banks in implementing financial inclusion initiatives. These plans outline targets for banks on various parameters, including the number of banking outlets (branches as well as BCs), transactions via the BC-ICT channel, and the number of BSBDAs opened by

branches and BCs. The central bank monitors and reports the banks' progress on these metrics monthly, with the latest update as of December 2023 is as:

Table 1.1 Progress under Financial Inclusion Plans- All Banks Including RRBs
(Status as on 31st December, 2023)

Particulars	2018-19	2019-20	2020-21	2021-22	2022-23	CAGR
Banking Outlets in Villages – Branches (in number and percentages)	52,489 (9)	54,561 (9)	55,073 (4)	53,249 (3)	53,159 (3)	0.32
Banking Outlets in Villages – Branchless Mode/BCs (in number and percentages)	5,44,666 (91)	5,44,656 (91)	12,40,249 (96)	18,47,274 (97)	16,81,499 (97)	32.55
Banking Outlets in Villages –Total (in number and percentages)	**5,97,155** (100)	**5,99,217** (100)	**12,95,322** (100)	**19,00,523** (100)	**17,34,658** (100)	30.55
Urban Locations covered through BCs	**4,47,170**	**6,35,046**	**3,24,345**	**14,12,529**	**4,38,333**	-0.50

Source: Annual Report Publications of RBI

The table above indicates that the number of banking outlets has risen to nearly 17,34,658, reflecting an annual growth rate of 30.55 percent. Up to the end of December 2023, approximately 53,000 rural branches have been established, showing a minimal annual increase of only 0.32 percent, which is quite low given the number of villages and the rural population in India. In contrast, more than 16,80,000 branchless banking outlets (BCs) have been set up, with an annual growth rate of 32.55 percent. The percentages in parentheses reveal that most new outlets in villages are branchless and operated by BCs. Additionally, the table shows that BCs are not limited to rural areas; urban areas are also being covered by BCs, although the compound annual growth rate (CAGR) is negative and the growth is highly inconsistent.

The table below illustrates a significant increase in the number of Basic Savings Bank Deposit Accounts (BSBDAs), with over 15 million new accounts opened in the last fiscal year alone. This brings the total number of BSBDAs to 679 million, with a collective balance of 2404 billion. The data indicates a consistent upward trend in both the opening of BSBDAs and the balance held in these accounts over the years.

Table 1.2 Progress of BSBDAs under FIPs- All Banks Including RRBs
(Status as on 31st December, 2023)

Particulars	2018-19	2019-20	2020-21	2021-22	2022-23	CAGR
Basic Savings Bank Deposit A/c through branches (No. in million)	255 (44.43)	262 (43.57)	289 (44.53)	271 (40.90)	270 (39.85)	1.48
Basic Savings Bank Deposit A/c through branches (Amt. in billion)	878 (62.27)	958 (56.90)	1,259 (62.31)	1,186 (55.52)	1,237 (51.43)	8.94
Basic Savings Bank Deposit A/c through BCs (No. in million)	319 (55.57)	339 (56.43)	360 (55.47)	392 (59.10)	408 (60.15)	6.36
Basic Savings Bank Deposit A/c through BCs (Amt. in billion)	532 (37.73)	726 (43.10)	772 (38.19)	950 (44.48)	1,168 (48.57)	21.72
BSBDAs Total (No. in million)	**574 (100)**	**600 (100)**	**649 (100)**	**663 (100)**	**679 (100)**	4.27
BSBDAs Total (Amt. in billion)	**1,410 (100)**	**1,684 (100)**	**2,021 (100)**	**2,136 (100)**	**2,404 (100)**	14.27

Source: RBI Annual Report Publications

The below provided table details the distribution of BSBDAs across rural, urban, and semi-urban areas. Notably, the beneficiaries in the Union Territory of Jammu and Kashmir have exceeded 2.7 million, with the total amount in these BSBDA accounts surpassing 1700 crores. Additionally, the cumulative number of RuPay debit cards issued to BSBDAs holders is nearing 2 million.

Table 1.3 Progress of BSBDAs in Jammu & Kashmir
(Status as on 31st December, 2023)

Particulars	
Beneficiaries at rural/semi-urban centre bank branches	22,95,766
Beneficiaries at urban/metro centre bank branches	4,53,277
Total Beneficiaries	27,49,043
Balance in beneficiary accounts (in crore)	1,781.84
No. of RuPay cards issued to beneficiaries	19,53,419

Source: PMJDY Progress Report

1.1.6. Financial Inclusion –Challenges and Barriers

The Government along with RBI have implemented various measures and directed banks to enhance access to affordable financial products and services through initiatives like financial education and technological advancements, as well as the launch of multiple schemes aimed at benefiting the weaker and underprivileged segments of society. Despite these efforts, several barriers and challenges persist, affecting the accessibility and availability of banking services for the unbanked population. These obstacles can be categorized into demand-side and supply-side constraints. Demand-side challenges include lack of awareness, low income and asset base, social exclusion, and poor literacy. On the supply side, barriers include distance from bank branches, limited branch hours, complex banking procedures and KYC documentation, inadequate banking products and services, language barriers, high transaction costs, and the attitude of bank employees. Addressing these challenges is crucial to providing seamless formal banking services to the unbanked population, ensuring their social and economic well-being, and fostering the country's development. Some of the key hurdles to financial inclusion from the financial institutions' and users' perspectives have been described in detail, including:

Financial Institutions Perspective

High Cost: The high costs associated with both providing and utilizing financial services have become a significant barrier to financial inclusion. Establishing branches in rural areas is often not economically viable for banks due to high costs and low business potential, creating a major obstacle *(Sayyad, MS & Jadhav, Babasaheb, 2023)*.

Increasing Dormant Accounts: Many BSBDAs are opened primarily to meet targets imposed on banks, resulting in numerous accounts becoming inactive. The lack of funds with account holders reduces the frequency of transactions, posing a challenge for banks in terms of monitoring low balance accounts and implementing technological advancements. This trend threatens the financial health of banks *(Moin Qazi, 2021, Chhetri & Das, 2022)*.

Large Volume of Accounts: With over 300 million BSBDAs opened in India, there is a significant need for technical and institutional infrastructure to manage these

accounts, leading to additional cost burdens for banks *(Sayyad, MS & Jadhav, Babasaheb, 2023)*.

Manpower Planning: Managing a large number of accounts requires substantial manpower. To cover millions of people not yet included in BSBDAs, banks need sufficient technical skill development and training for staff. Additionally, the high attrition rate of BCs due to low commissions and job insecurity poses another challenge *(Discussion Paper RBI, 2015).*

Secure Environment: Approximately 210 million new accounts have been opened, primarily for first-time users (PMJDY, 2021). There is a high risk of monetary loss, data theft, and privacy breaches, necessitating increased expenditure on IT infrastructure to ensure transaction security. Banks must be vigilant about these risks and provide a secure environment for their vast customer base *(IMF Working Paper, 2020).*

Products and Services Factors: India's diverse cultural, demographic, and financial landscape requires tailored banking products and services. Uniform banking products often fail to meet the needs of different segments, creating challenges for banks. Factors such as low income, lack of awareness, perceived unaffordability, high transaction costs, inconvenience, and inflexibility of products hinder access to the financial system *(Kumar,2013).*

Malpractices: Due to pressure to keep BSBDAs active, some banks and locations have resorted to unethical practices. People were sometimes asked to pay between ₹1,000-3,000 to open accounts under PMJDY, and some banks made minimum deposits ranging from ₹1-10 in these accounts *(RTI Indian Express, 2016).*

Ease of Transaction: Traditional moneylenders remain popular in villages due to their ease of use. The cumbersome transaction processes in banks discourage rural households from using formal banking services, leading them to prefer moneylenders *(Babar, 2016).*

Low level of Credit Extended: As of March 2014, rural areas accounted for only 8.4 percent of total credit. Banks often focus on urban areas for business development, neglecting rural and semi-urban populations.

Need for Greater use of Technology: Managing a large number of accounts necessitates technological support. Despite the convenience offered by ATMs, debit card penetration remains low, with only 30 percent of deposit account holders possessing a debit card, posing a significant challenge for banks.

User Perspective

High Cost: Users are often reluctant to utilize banking services due to high costs, such as minimum balance requirements, charges on debit and credit cards, processing fees, and transportation costs to reach distant branches. These factors pose significant challenges for financial inclusion *(Discussion Paper RBI).*

Financial Illiteracy: Nearly one-fourth of India's population is illiterate and below the poverty line. Ensuring financial inclusion for all requires extensive efforts by the RBI, GoI, and financial institutions to raise awareness about available banking services. Currently, limited financial literacy is a major hurdle in including the unbanked population in the formal financial system *(Bakhshi, Priti & Vijayvargy, Lokesh, 2018).*

Geographical Barrier: Factors such as timings of the branch, location of the bank, the remoteness of residences, and restricted mobility create geographical divides between service providers and users. In some areas, distant banking outlets make it difficult for people to access formal financial services *(Sayyad, MS & Jadhav, Babasaheb, 2023).*

KYC Barrier: Accessing financial services requires proof of identity, postal address, income, and permanent address. Many poor individuals lack these documents, excluding them from financial services. Migrant and unorganized workers face additional difficulties proving their KYC documents. Moreover, the behavior of staff and unsuitable products and services also act as non-price barriers to financial inclusion *(Manta, 2020).*

Technological Hindrances: Many banking products and services are digital, but rural populations often hesitate to use these due to unfamiliarity and fear of technology, thus remaining excluded from the financial system. This is a significant barrier to financial inclusion *(Parvin & Panakaje, 2020).*

Social and Religious Barriers: According to the World Bank Findex, about 1.1 billion of the 2 billion unbanked individuals globally are women. Factors like age, gender, and religion can act as barriers to financial inclusion. Financial service providers often limit credit to women and older individuals due to perceived repayment risks. Additionally, some religions prohibit followers from opening bank accounts or engaging in transactions involving interest, further hindering financial inclusion.

1.2. Statement of the Problem

In a diverse country like India, characterized by significant regional, social, and economic disparities, banking has traditionally been associated with urban and affluent societies. To address this, the RBI introduced the "Basic Savings Bank Deposit Account" (BSBDA), a significant step towards genuine financial inclusion. The primary challenge in India is the poor reach and penetration of banks, as it is impractical to establish brick-and-mortar branches in every village. To tackle this issue, the RBI introduced BSBDAs and the Business Correspondent (BC) model in 2006. BSBDA customers mainly use their accounts to receive government payments such as NREGA wages and subsidies, often neglecting other products and services linked to these accounts. This lack of engagement is due to BCs failing to inform customers about the benefits of BSBDAs. Additionally, bankers are often hesitant to promote awareness and provide services like overdrafts, KCC, GCC, etc., to the unbanked population. As a result, financial inclusion faces significant hurdles, contributing to poverty, unemployment, and unequal income distribution among the poor, and failing to benefit banks as well. Studies indicate that banks incur a cost of approximately ₹100 to ₹125 for opening and maintaining each account, whether through branches or BCs. This data casts doubt on the government's and banks' claims of achieving financial inclusion.

There has been notable growth in the number of branches and accounts opened by Business Correspondents (BCs) in recent years. However, merely focusing on numbers and providing access to credit and banking products does not fulfill the objective of financial inclusion. The RBI has cautioned banks about the risks of emphasizing quantity over quality, highlighting the importance of account activity, average balance maintained, and transaction volume. The aim is universal access, not

just rapid expansion. If customers open BSBDAs but do not use them or use them infrequently, these accounts can become uneconomical or dormant, negatively impacting the banks' profitability. To address this, customers must utilize BSBDAs effectively. Banks are under significant competitive pressure, and their financial margins are stressed. Therefore, it is crucial for banks to achieve a break-even level of business from BSBDAs. As economic entities, banks need to generate revenue through their products and services, recovering costs through customer transactions. Active accounts that generate sufficient revenue are necessary to contribute to profitability and avoid losses. Despite the increase in account openings, the quality and activity of BSBDAs have been questioned by independent researchers. The rise in dormant accounts over the years also raises concerns about the effectiveness of BSBDAs in India. Thus, it is essential to examine the usefulness and economic viability of BSBDAs opened through BCs in Indian commercial banks. Additionally, the focus should be on BSBDA customers, as the goal of financial inclusion is to integrate financially excluded individuals into the mainstream financial system, thereby promoting their social and economic development. This can be achieved only if account holders actively engage with banking and financial institutions and effectively use the products and services offered. Frequent use of financial services is expected to significantly aid BSBDA customers in achieving economic empowerment. However, questions remain about the reliability of the data and the claims made by banks regarding the benefits of BSBDAs to customers. Researchers aim to explore whether BSBDAs provided through BCs positively impact the economic empowerment of customers.

Hence, this research proposes to study empirically the usefulness of BCs from bankers' perspective. Further the study attempts to measure the usefulness of BCs from the perspective of the customers.

1.3. Scope and Nature of the Study

This study is both descriptive and causal in nature and aims to analyze the impact of Basic Savings Bank Deposit Accounts (BSBDAs) opened through business correspondents on bank performance and the socio-economic development of customers. The study is limited to the Kashmir division of the Union Territory of Jammu & Kashmir, comprising ten districts. The study covers bank staff from various

branches as well as chosen banks' BSBDA customers. Data for this study were gathered from the Kashmir division's two primary stakeholders: bankers and clients.

1.4. Significance of the Study

This report offers a comprehensive analysis of the work on Basic Savings Bank Deposit Accounts (BSBDAs) by capturing the perspectives of key stakeholders in financial inclusion, namely customers and bankers. The findings of the study provide valuable insights into the progress of BSBDAs opened by business correspondents (BCs). It also assesses the impact of BCs on bank performance and the socio-economic development of customers. This research enriches the existing literature by presenting detailed knowledge on stakeholders' perceptions regarding the usefulness of BCs for both banks and customers, based on original data. The study's findings are expected to offer practical insights for various stakeholders, including commercial banks to improve program implementation, regulators for policy enhancements, the Government of India for better planning and development, and researchers and financial analysts to deepen their understanding.

1.5. Structure of the report

This study is structured into five chapters, supplemented by tables, figures, charts, and annexures to reinforce the analysis and findings. The outline and content of each chapter are as follows:

Chapter One: Introduction provides a concise overview of financial inclusion, business correspondents, and basic savings bank deposit accounts. It delves into the objectives of financial inclusion, the current status of financial inclusion, measures implemented by the RBI and Government of India, challenges encountered in achieving financial inclusion, the statement of the problem, the nature and scope of the study, and its significance.

Chapter Two: Review of Existing Literature delves into the existing body of literature relevant to the topic. This review encompasses various dimensions of the study and serves as the basis for identifying variables and framing the methodology.

Chapter Three: Methodology elaborates on the research methods and procedures utilized in conducting the study. It provides a detailed description of the research design from the perspectives of both bankers and BSBDA customers.

Chapter Four: Analysis and Discussion presents an analysis and discussion on the impact of BSBDAs opened through business correspondents on banks and customers.

Chapter Five: Summary of Findings, Strategic Implications, and Conclusion offers a summary of the key findings of the study and provides recommendations for enhancing the effectiveness of BCs in positively influencing the banking system and customers. Additionally, it discusses the limitations of the study and outlines potential areas for future research in this field.

Chapter – 2

REVIEW OF LITERATURE

2.1 Introduction

2.2 Financial Inclusion in India

2.3 Agent Model – a Solution to Financial Exclusion

2.4 Agent Model (Business Correspondent) in India

2.5 Financial Inclusion in Jammu & Kashmir

2.6 Research Gap and Question

REVIEW OF LITERATURE

2.1. Introduction

As specified by the World Bank, in 2014, approximately 2 billion people (adults) did not had access to a financial account (transaction account) (*Global Findex, 2014*), leaving them excluded from the formal financial system. Financial exclusion refers to the scenario where a significant portion of impoverished and marginalized social groups are unable to access formal financial institutions due to inherent structural and procedural issues within a country's financial systems (*Dhar and Sarkar, 2016*). The ramifications of such exclusion are manifold. Dhar and Shankar suggest that it may lead individuals to depend on alternative sources of credit and informal lenders, such as moneylenders, relatives, or friends (*Dhar and Sarkar, 2016*). This limited access to credit facilities, coupled with constraints on the amount of resources available for credit, restricts individuals' opportunities for growth, constraining their ability to invest in small business enterprises (*Ellis, 2007; Beck & Patrick, 2009*). Financially excluded individuals may struggle to access affordable credit, face challenges in budgeting and managing money, lack home insurance, and may find it difficult to plan for unexpected expenses, thus limiting their financial well-being (*Afande and Mbugua, 2015*). The consequences of financial exclusion can exacerbate poverty and entrap individuals in a cycle of deprivation (*Mahmoud, Iqbal & Xiaochen, 2011; Joshi, 2011*).

There is a unanimous agreement amongst academicians, policy makers at both national and global level that given the effect of financial exclusion, financial inclusion is one of a key element that can be used to fight against poverty (*(Afande and Mbugua 2015); (Dhar and Sarkar 2016); (Uzma and Pratihari 2019)*). Financial inclusion as an instrument towards higher economic growth giving access to a better lifestyle to the poor household has been shown by empirical studies (*Mondol, 2022*). Financial inclusion helps in bringing out the deprived households from socioeconomic disadvantage, aids in the economic growth, reduces poverty and improves the standard of living. Financial inclusion programmes are being followed by many countries, and it has also been the target of World Bank Group to achieve Universal Financial Access by 2020, with Financial Inclusion Global Initiative, a three- year

programme. Understanding the importance of financial inclusion, it has been positioned prominently as an enabler of Sustainable Development Goals, where in it has been featured as target in 8 out of the 17 SDG.

The Asian Development Bank (2000) defines financial inclusion as providing a wide range of banking and financial services, including deposits, loans, payment services, money transfers, and insurance, to underprivileged and low-income households and their micro-enterprises. Financial inclusion implies the ability of individuals, households, or groups to access a full range of formal financial services that are responsibly delivered, affordable, and reasonably convenient. Without this ability, people are often considered financially excluded (*Afande and Mbugua, 2015*). The Rangarajan Committee (2008) defines financial inclusion as "*ensuring access to financial services and timely and adequate credit for vulnerable groups, such as the weaker sections and low-income groups, at an affordable cost*".

The benefits of financial inclusion have been unquestionably agreeable to all. Many researchers, policy makers have equally agreed with empirical evidences pointing towards same direction. Goel et al. (2011) explored that lower level of financial inclusion leads to poverty, unemployment and unequal income distribution. Verma and Singh (2014) state that financial inclusion, has a vital role in the nation aiding it to eliminate poverty in the country. Further, Mondol (2022) mentions many empirical studies that show that financial inclusion allows economic growth of the country, raising the quality of life and also bringing equality (*Mondol, 2022*). Moreover, an inclusive financial system helps in reducing poverty and income inequality (*Mukhopadhyay, 2016*). The Committee on Comprehensive Financial Services for Small Businesses and Low-Income Households puts forth in its report that complete financial inclusion can happen not only by merely having access to a financial account but by having access to a group of appropriate products and services for covering all the financial needs of households or enterprise (*RBI Report, 2016; Uzma and Pratihari 2019*).

According to Kaur and Abrol (2018), several scholars have conducted comparative studies to examine financial inclusion. The gist of those studies was that countries with high income are the ones who have higher levels of financial inclusion. Across countries studies have shown that financial inclusion over the world is low with less

proportion of people having savings account with formal institutions and lesser branches serving the rural areas.

Comprehending the importance of financial inclusion and its role in economic growth of the country along with improving the living standard in the poor population, many countries have made effort towards financial inclusion. Fungacova and Weill (2015) conducted a study by using the World Bank Findex database to analyse financial inclusion in China and made a comparison with other BRICS countries. The study traced that among any other BRICS nations, China had a high level of financial inclusion which was due to maximum use of the formal account and formal savings. But the use of formal credit is less frequent in case of China than other BRICS nations. It was also found that obtaining credit from informal money lenders and family and friends is very common in BRICS nations. In a study by Afande and Mbugua (*Afande and Mbugua, 2015*), they noted that Kenya has made impressive strides in financial inclusion. The rise was so high that within a span of 3 years from 2006 to 2009, the percentage of formally included population increased from 189 per cent to 22.6 per cent. The World Bank data of 2015 also shows that in Kenya, among the people of age 15 years and above, 42 per cent had account at a formal institution (*Afande and Mbugua, 2015*).

2.2. Financial Inclusion in India

Financial exclusion remains a significant challenge in India, with data from the NSSO indicating that as large as 45.9 million farmer households, comprising 51.4 per cent of the total, do not access credit from either institutional or non-institutional sources. In spite of the country having an extensive network of bank branches, only about 27 per cent of total farm households are under debt to the formal financial sources, and a considerable proportion of these households also resort to borrowing from informal sources. The proportion of farm households who do not have access to credit from formal sources is especially high at 95.91 per cent, 81.26 per cent and 77.59 per cent in the North Eastern, Eastern and Central Regions of the country respectively. Thus, this exclusion varies widely across regions, social groups, and asset holdings, with the poorest groups experiencing the highest levels of exclusion (*Rangarajan. 2008*).

India's journey towards financial inclusion can be traced back to the nationalization of banks in 1968, driven by the goal of inclusive growth to uplift the impoverished masses. At the time of independence, the ideology of nation and political leaders was to have an inclusive growth bringing the huge mass of poor and desolate out of poverty. In this light, the step of nationalization of banks can thus be viewed as an attempt to financial inclusion. Many steps were taken to include the larger section of the population in formal financial institution over the years. The Reserve Bank of India established the Khan Commission in 2004 to address financial inclusion, and its recommendations were integrated into the Mid-term review of policy (2005-06). In the report of this Commission, in order to achieve a greater target of financial inclusion, RBI encouraged the banks to make available a basic "no-frills" banking account. The concept of financial inclusion gained prominence in 2005 with a pilot project in the Union Territory of Pondicherry, where Mangalam Village became the first village in India to provide banking facilities to all households (*Paramasivan and Ganeshkumar, 2013*).

To tackle financial inclusion issues, the Government of India formed a 'Committee on Financial Inclusion' chaired by Dr. C. Rangarajan. The committee emphasized that in order to gain reduction in poverty and also social cohesion, it is essential that the poor and vulnerable section of the population have access to finance for poverty reduction and social cohesion (*Joshi, 2011*). The following table shows the progress of Financial Inclusion in India

In fact, according to Dhar and Sarkar, (*Dhar and Sarkar 2016*) the recent drives towards financial inclusion are not new and such initiatives have been taken for financial inclusion in India since decades. Numerous initiatives have been undertaken over the years, including the establishment of rural cooperatives in 1904, bank nationalization in 1969, Regional Rural Banks in 1975, microfinance schemes administered by NABARD since 1992, and the Swabhimaan financial inclusion campaign was initiated by the Government in February 2011. In the August 2014, the Prime Minister announced the Jan-Dhan project which aimed to open 7.5 crore bank accounts within a year, further highlighting the ongoing efforts for financial inclusion (*Dhar and Sarkar, 2016*).

Table 2.1. The Progress of Financial Inclusion in India

2005	Reserve Bank of India (RBI) advised the banks to provide 'no frills' accounts and expand banking outreach to larger section of population.
2006	Banks allowed to use services of NGOs, self-help groups (SHG), microfinancing institutions (MFI) as business correspondents to extend banking services. One district in each state identified by State Level Bankers' Committee (SLBC) or 100 per cent financial inclusion (FI).
2007	Six million new accounts added and 2.6 million SHGs linked to banks touching 40 million HHs.
2007–2008	Two funds created by the Government of India: (a) Financial Inclusion Fund, (b) Financial Inclusion Technology Fund worth US$125 million each.
2010	Unique Identification Development Authority of India (UIDAI)-based Aaadhar project initiated to provide 'identity infrastructure' for FI. RBI allowed for profit companies, excluding non-banking financial companies (NBFC) to act as BC.
2011	Swabhimaan scheme launched to cover more than 74,000 villages with population over 2,000 with banking facilities. Number of bank accounts increased by approximately 100 million in 2011–2013.
2013	The committee on Comprehensive Financial Services for Small Businesses and Low Income Households (Chaired by Dr Nachiket Mor) submitted its final report.
2014	RBI released draft guideline for licencing of 'payment banks' or 'differentiated banks'. Pradhan Mantri Jan Dhan Yojana (PMJDY[1]) launched with the aim of linking every HH with banking facilities. The Phase II of PMJDY launched in 2015.
2015	183 million new accounts opened under PMJDY in the Phase II of PMJDY.

Source: (Uzma and Pratihari 2019)

Despite these initiatives, financial exclusion remains prevalent in India, with only 35.2% of respondents reporting account ownership at a bank or another financial institution in 2011 (age 15+). Addressing this challenge requires collaborative efforts from formal financial institutions, microfinance institutions, government agencies, and NGOs. Ranganatham G (2010) suggests that formal financial institutions should partner with microfinance institutions to accelerate financial inclusion and develop new financial literacy programs. Suresh Chandra Bihari (2011) highlights the role of financial literacy in addressing the challenge of financial exclusion, emphasizing the need for educational initiatives and mobile-based business models. Vigneshwar P.M (2011) underscores the importance of coordinated efforts to include marginalized sections into the formal financial system, involving the RBI, banks, government, and NGOs in this endeavor.

2.2.1. International Comparison

Comparative international studies on financial inclusion shed light on India's progress and challenges in this domain. Arun and Kamath (2015) analyzed financial inclusion policies and practices in India, South Africa, and Australia. They found that in India, financial inclusion cannot be assumed as financial institutions prioritize profitable market segments. Despite the entry of MFIs, NGOs, and SHGs in rural credit, interest rates remain high, and there is a lack of transparency regarding charges by MFIs. Sustainable financial inclusion requires increased access to financial services which also needs to be accompanied by trust, adherence to standards, and sound financial regulation (*Arun and Kamath, 2015*).

Oveis and Mariappan (2016) compared financial inclusion in India with China using World Bank Global Findex database and World Bank Little Data Book 2015. While India has made progress in opening millions of bank accounts, the use of formal accounts and savings is more developed in China. Policy makers and financial service providers in India need to understand the needs and behaviors of different unbanked population segments. China lags behind India in credit use, but Indians tend to borrow more from informal sources than formal financial institutions (*Oveis and Mariappan, 2016*). The following table shows the progress of India in terms of financial inclusion in comparison to the world data

Table 2.2. Financial Inclusion Progression of India and World

	2011	**2014**	**2017**	**2021**
Account (% age 15+)				
India	35.2	53.1	79.9	77.5
World	50.6	61.9	68.5	76.2
Account, income, poorest 40% (% ages 15+)				
India	27	43.6	77.1	78.3
World	41.4	54.6	60.9	71.9

Source: Global Financial Inclusion; The World Bank

Although India has made progress in the area of financial inclusion, empirical studies highlight the challenges of financial inclusion in India. Dev (2006) argued that existing formal institutions may suffice for promoting financial inclusion, despite facing challenges such as manpower shortages and infrastructure issues in rural areas. He emphasized the need for suitable financial products and mechanisms to address

risks faced by farmers and the poor. Financial instruments need to be developed that they promote economically viable activities. (*Dev, 2006*). Ananth and Oncu (2014) identified reasons for the low impact of financial inclusion attempts in Andhra Pradesh, including banks perceiving financial inclusion as charitable, reluctance to invest in new markets, and concerns about viability and recovery in rural areas. Lack of financial literacy and tools to measure financial exclusion were also highlighted (*Ananth and Oncu, 2014*). The eight reasons identified by them are as follows:

"*1. Banks view financial inclusion as charitable activity.*

2. Banks are unwilling to spend time and resources to create and nurture new market.

3. Sizes of financial inclusion portfolios of banks are minuscule.

4. Banks perceive 'perpetual viability gap' due to perceived high costs of servicing this market segment.

5. Banks perceive recovery in the rural areas is difficult. .

6. Banks are concerned about the lack of basic financial literacy and the associated information asymmetries.

7. Lack of tools or metrics to measure financial exclusion- banks cannot quantify the market and the attendant risks.

8. The geographic distance and accessibility of sub-districts from district headquarters"

(*Ananth and Oncu, 2014*).

Recognizing the challenges in reaching every corner of the country with traditional bank branches, recent initiatives have focused on leveraging business correspondents and facilitators to bring financial services to people's doorsteps (*Dhar and Sarkar, 2016*).

2.3. Agent Model- A Solution to Financial Exclusion

2.3.1. Theoretical Framework

One of the fundamental theories governing the relationship between a principal and an agent is the agency theory; this section discusses this theory in the light of financial sector and banking services. An agency relationship emerges when one or more principals, such as owners, engage another individual as their agent to carry out a

service on their behalf. Each party anticipates receiving some net benefit from this relationship, expecting it to lead to an efficient division of labour. Consequently, the principal delegates decision-making authority to the agent, fostering efficiency and productivity in the economy. However, this delegation necessitates that the principal places trust in the agent to act in their best interests (*Walker, 2003; Schuler, 2002; Green, 2012*).

Agency theory holds relevance in the context of this study as it acknowledges the pivotal role of the agent in achieving overarching objectives of financial inclusion. By delegating responsibilities, principals can foster efficiency and productivity in the economy, particularly in extending financial services from the walls of the banks to where people reside and work, thereby enhancing financial inclusion. Agent banking entails providing banking and financial services with some limit, through engaging the agents, to the populations that is underserved due to accessibility. "*Banking agents can be pharmacies, supermarkets, convenience stores, lottery outlets, post offices, and more*" (*Saheel, 2020, p 2*) . These agents are contracted by financial institutions or mobile network operators to process client transactions. Rather than the traditional branch tellers, these agents facilitate various transactions, including deposits, withdrawals, transfers, bill payments, and inquiries. Banking agents serve as essential distribution channels for financial institutions, particularly in reaching rural and remote areas where establishing branches may be cost-prohibitive. By leveraging banking agents, financial institutions can extend services to low-income individuals, often offering their first-time access to financial products and services. Banking agents also play a crucial role in mobile banking, enabling clients to convert cash into electronic money and facilitating transactions, especially in rural regions where transaction through cash still remains prevalent (*Saheel, 2020).*

2.3.2. Empirical Evidence- Agent Model

As already discussed above, there is a huge section of the population globally which is still out of the financial system with no access to credit etc. Thus, financial inclusion has become an important target for the World Bank Group, also becoming an integrate part in the G20 SDGs. It is the developing countries who are falling behind in the financial inclusion index relative to the developed nations. In order to achieve financial inclusion, various methods have been applied by counties. Agent

banking model is one among the many paths taken to achieve financial inclusion and has been used by many countries around the world for the purpose of financial inclusion.

Dhar and Sarkar (2016) highlight the success of the agent banking model in Brazil, which boasts the largest agent network globally, with nearly 400,000 banking correspondents as of November 2013. This extensive network has facilitated financial access for a majority of Brazilians, with approximately 67% of the population paying at least one bill at an agent. Additionally, a case study in Autazes, a county in the Amazon region of Brazil, showcased positive socio-economic impacts resulting from financial inclusion through correspondent banking services (*Diniz, Birochi, & Pozzebon, 2012*).

Kenya's experience with the agent banking model, as studied by Afande and Mbugua (2015), demonstrates the effectiveness of regulatory measures introduced by the Central Bank of Kenya in 2009. These measures aided banks to deliver financial services through the use of agents, services that included cash deposits and withdrawals, fund transfers, bill payments, and loan payments. Similarly, Colombia's success with agent banking led to its recognition as a model country for financial inclusion, with Kenya taking lessons on agent banking guidelines from Brazil and Colombia (*Afande and Mbugua, 2015*).

Brazil's achievements in expanding financial services through agents have been attributed to coordinated efforts among regulators, private institutions, and governmental entities. However, challenges such as addressing labor rights for agents and enhancing security requirements remain areas for further attention (*Fadel & Dias, 2009*).

Data from Brazil and Peru illustrate the significant volume and value of transactions conducted through banking agents, underscoring their pivotal role in facilitating financial services. While Brazil's agents primarily handle bill payments, withdrawals, and deposits, Peru sees agents carrying out millions of transactions monthly (*Saheel, 2020*).

Bangladesh's experience with agent banking during the COVID-19 pandemic underscores the resilience and growth of this model. Despite challenging circumstances, agent banking operations continued to expand, with a notable increase in accounts opened, loan disbursements, and inward remittances distributed through agents (*Saheel, 2020*).

Overall, empirical evidence from various countries highlights the instrumental role of the agent banking model in advancing financial inclusion and socio-economic development, albeit with challenges that require ongoing attention and resolution.

2.4. Agent Model (Business Correspondent) in India

2.4.1. Introduction

India's journey towards financial inclusion can be tracked down back to the nationalization of banks, with a significant emphasis on extending financial services to each and every individual starting from the introduction of "no frills account" (now referred to as Basic Savings Bank Deposit Account- BSBDA). The Rangarajan Committee, constituted by the Reserve Bank of India (RBI), was tasked with formulating the Financial Inclusion Plan to address challenges and propose solutions for ensuring universal access to banking, particularly for marginalized sections of society. One of the primary challenges identified was the vast geographical expanse of India, with a substantial population residing in rural areas [(*Kaur & Abrol, 2018); (Syamali & Parameswari, 2016); (Rangarajan, 2008)]*. The traditional banking network struggled to reach these rural areas due to the significant associated costs. In response, India adopted the Agent banking model (Business Correspondent model) to tackle this challenge. In January 2006, the RBI issued guidelines allowing the banking sector to penetrate rural areas extensively through the Business Facilitator Mode and Business Correspondent Model, supplementing the government's financial inclusion initiative.

2.4.2. Functioning of BCs

These guidelines empowered commercial banks, including Regional Rural Banks (RRBs), to utilize the services of Non-Governmental Organizations (NGOs), Self-Help Groups (SHGs), Microfinance Institutions (MFIs), and Civil Society

Organizations as intermediaries to deliver financial and banking services through the Business Facilitator and Correspondent Models. Under the Business Facilitator Model, intermediaries provided services such as borrower identification, loan application processing, awareness creation about savings and other products, education on financial management, and debt counselling. Additionally, the Business Correspondent Model expanded the scope of activities to include small-value credit disbursal, principal and interest collection, small-value deposit collection, sale of financial products, and remittance services *(Syamali & Parameswari*, 2016). While initially, only specific entities like NGOs, MFIs, Cooperative Societies, registered NBFCs, and Post Offices were permitted to function as BCs, later, based on the recommendations of the Rangarajan Committee, the RBI allowed banks to appoint both entities and individuals as agents (*Rangarajan, 2008, Sarika & Kumar, 2017*).

The objective of the BC model is to establish and maintain a connection between the unbanked population and the formal financial system. Khan (2012) highlights the role of BCs in bridging the gap between service providers (banks) and under-served or unbanked clients. This model evolved to address the shortage of manpower required to reach all segments of the population within the existing banking system *(Dhar & Sarkar, 2016).* Leveraging appropriate technology, Business Facilitator/Business Correspondent (BF/BC) models can significantly enhance financial outreach and should form the cornerstone of strategies aimed at extending financial inclusion. One of the recommendations of the Rangarajan Committee was relaxing norms to expand the coverage of BF/BC, ultimately aiming for a BC touchpoint in each of the 600,000 villages across the country (*Rangarajan, 2008*).

2.4.3. Empirical Works done

Ananth and Sabri (2014) investigated the role of BCs in Chottir, Kurnool, and Mahabubnagar of Andhra Pradesh, focusing on enhancing financial inclusion and extending banking sector outreach through the BC model. Their findings suggested that effectiveness of individual BCs, in expanding the financial inclusion target, would be higher than other types in expanding financial inclusion, particularly in Andhra Pradesh. Despite the widespread use of the BC model for delivering financial services to the poor nationwide, it gained renewed emphasis following the introduction of a direct cash transfer subsidy scheme by the central government on

January 1, 2013. The researchers noted that in many areas, BCs initiated the expansion of the formal banking sector at the expense of the informal sector, despite their business practices largely resembling those of the informal sector (*Ananth & Sabri, 2014*).

Goel et al. (2011) explored the relationship between lower levels of financial inclusion and socioeconomic issues such as poverty, unemployment, and unequal income distribution. They found that a lack of financial literacy among the rural population was a significant hindrance to the implementation of the BC model. Syamali and Parameswar (2016) assessed the awareness levels among customers regarding savings products and other services provided by financial institutions through BCs in Trichy district, Tamil Nadu, served by State Bank of India BCs. They identified various challenges faced by SBI BC agents, including network issues and lack of inclusion of certain banking products in the BC model (*Syamali & Parameswari, 2016*).

Kapoor et al. (2012) investigated various supply-side issues of the BC model by interviewing Business Correspondent Network Managers responsible for operating the model in India. They recommended increased support from banks in terms of higher commissions, marketing assistance, prompt commission payments, and an expansion of the range of offered products to achieve sustainability in the BC model (*Abrol, 2018*). The Grameen Foundation (2013) highlighted operational challenges faced by BC agents and suggested diversifying the portfolio offered by BCs to address high service charges and lack of awareness among people (*Grameen Foundation, 2013*). Additionally, Abrol (2018) mentions that SIDBI (2014) reported issues with basic infrastructure and high attrition rates among BC agents due to dissatisfaction arising from delayed commission payments and lack of support from banks (*Abrol, 2018*).

2.4.4. Challenges

The challenges identified in the BC model included issues with basic infrastructure that facilitates them, like not able to access a high-speed internet and higher frequency of power cuts, leading to difficulty in effective service delivery. Additionally, a decrease in the appointed agents due to dissatisfaction arising from delayed

commission payments, lack of support from banks, and operational constraints were observed (*Grameen Foundation, 2013*). The prevalence of no-frills accounts, which fail to attract customers due to the necessity of visiting bank branches for other services, further complicates the situation (*Abrol, 2018*).

Several studies have identified challenges associated with the Business Correspondent (BC) model in India. As Abrol (2018) cites the SIDBI, 2014 report on BCs in Bihar which highlights the limitations of infrastructure, noting that a lack of high-speed internet and frequent power cuts hindered effective service delivery. Additionally, the report identified a high attrition rate among BC agents due to dissatisfaction with compensation. Agents reported issues with non-payment or delayed commissions from partner banks, coupled with a lack of adequate support (*Abrol, 2018*). The Grameen Foundation (2013) also addressed challenges faced by BC agents in a working paper. Their research identified limitations in the product portfolio offered by BCs. Since the primary product is often a basic savings account with limited features, it may not be sufficiently attractive to customers who still need to visit traditional bank branches for most other financial services. The Grameen Foundation suggests diversification of the product portfolio offered by BCs to enhance their appeal (*Grameen Foundation, 2013*).

Goel et al. (2011) highlighted that lack of financial literacy among the rural population, a target audience for BCs, can be a significant obstacle to the model's effectiveness. Syamali and Parameswar (2016) suggest that many customers lacked awareness about available savings products and other services. The Syamali and Parameswar (2016) study also identified operational challenges faced by SBI BC agents. These included network issues and fingerprint mismatches, which can hinder smooth service delivery. This limited product portfolio may restrict the appeal and usefulness of BC services for customers. Finally, Abrol (2018) emphasizes the constraints imposed by high service charges and lack of public awareness. These factors hinder the ability of the BC model to bridge the gap between demand and supply of financial services in underserved areas.

In conclusion, while BCs play a crucial role in expanding access to banking services, addressing infrastructure limitations, agent compensation practices, product

diversification, service charges, and public awareness campaigns are critical for the continued success of the BC model in India.

2.5. Financial Inclusion in Jammu & Kashmir

Jammu and Kashmir, encompassing an area of 42,241 square kilometers, holds significant geographical importance within India, constituting 1.285% of the country's total territory. Positioned strategically, it shares borders with Pakistan to the west, Ladakh to the north and east, and the states of Punjab and Himachal Pradesh to the south. The region comprises diverse valleys and is divided administratively into two divisions: Jammu and Kashmir, further segmented into 20 districts, evenly split between the Kashmir and Jammu regions. Characterized by rugged terrain, challenging weather conditions, and an underdeveloped economy, the territory faces obstacles in providing widespread banking access due to its challenging topography and remote locations. Therefore, the Business Correspondent (BC) model holds immense significance in ensuring financial inclusion across the territory.

In 1977, State/Union Territory Level Bankers' Committees (SLBCs/UTLBCs) were established nationwide as apex-level forums to facilitate coordinated implementation of development programs and policies by financial institutions. In Jammu and Kashmir, the State Level Banking Committee (JKSLBC), chaired by J&K Bank, serves as the apex body for the Union Territory. Operating under the Lead Bank Scheme initiated by the RBI in December 1969, J&K Bank assumes Lead Bank responsibility in 12 districts, including Srinagar, Ganderbal, Budgam, Anantnag, Kulgam, Pulwama, Shopian, Baramulla, Kupwara, Bandipora, Poonch, and Rajouri. Meanwhile, SBI takes on the lead bank role in the remaining 8 districts, comprising Jammu, Samba, Udhampur, Reasi, Kathua, Doda, Ramban, and Kishtwar. (*J&K UTLBC, 2022*)

Table 2.3. J&K Banking Network as on December 31, 2020

	Public Sector	**Private Sector**	**RRBs**	**Coop. Banks**	**FIs & PBs**	**Total**
Banks	12	11	2	10	2	**37**
Branches	453	949	332	267	13	**2014**

Source: JKSLBC

Abrol (*Abrol 2018*) did an empirical work in the four districts of Jammu province in order to understand how the BC model works in the said area and to investigate the demand and supply gaps in the model. They interviewed the BCs of J&K bank and SBI bank in order to find out the problems faced by these BCs while delivering the service. Using the regression estimates, Abrol found a significant pay-off of BC model especially on the socio-economic welfare of the people.

A detailed study by Kaur and Abrol (*Kaur and Abrol 2018*) in the Jammu and Kashmir region, tries to compute financial inclusion across districts. They have considered three variables of financial inclusion, namely- Penetration of banking services, Availability of financial services and usage of financial services have been taken into consideration. The findings revealed a significant gap in access to adequate financial services for the rural population, highlighting the inequities in banking service distribution. While commercial banks tend to prioritize areas with higher population density for branch openings, this approach has left rural districts underserved. One significant initiative to address this issue has been the appointment of business correspondents by banks to provide financial services in rural areas. However, the study identified limitations associated with this model, such as the reliance on ICT mode, which requires a strong internet connection and precise communication devices. The lack of good connectivity of internet facilities in the rural areas and limited awareness among the population about the benefits they can get from the banking services further hinder the delivery of financial services effectively and efficiently. To address these challenges and promote financial inclusion, the study suggested the organization of more financial literacy camps to raise awareness about available services and cultivate a culture of savings among the people. This aligns with the broader goal of not only increasing the presence of banking outlets in rural areas, but also enhancing the utilization of bank accounts to truly achieve financial inclusion. (*Kaur and Abrol 2018*)

2.6. Research Gap and Questions

While there's been considerable research on financial inclusion with the Business Correspondent (BC) model, much of it has focused on the effects on targeted groups' livelihoods and the challenges faced at the state level. However, Kashmir's unique topography and geopolitical structure present distinct challenges, and existing studies

have primarily concentrated on districts in the Jammu region. Therefore, there's a need for deeper research specifically focusing on the Kashmir region. Additionally, there's a dearth of empirical works on the benefits of the BC model for both banks and customers.

This research aims to address these gaps by answering the following research questions:

1. How far are BCs utilised in rendering financial services in Kashmir region by banks?

2. What are the perceptions of consumers about the utility of BCs?

Keeping in view the different stake holders of FI, following objectives have been undertaken in the present study accordingly:

- To analyse the effectiveness of BCs from the perspective of customers
- To analyse the effectiveness of BCs from the perspective of bankers.

In order to analyse the above, hypotheses have been developed pertaining to each of the two objectives. These hypotheses for the first objective are intended to link the various aspects of customers' well-being with the effectiveness of BCs. They are as follows:

1.1. Access and Availability has a significant positive impact on the level of usage.

1.2. There will be a significant positive impact of Usage on economic empowerment of customers.

In similar fashion, two hypotheses have been constructed for the second objective. These hypotheses are targeted to get the perspectives of bankers on the impact of BCs. The hypotheses are as follows:

2.1. Awareness creation has a significant positive impact on change in transaction pattern and savings.

2.2. Technology adoption has a significant positive impact on change in transaction pattern and savings.

The study focuses on the Kashmir region and proposes to use a survey methodology for data collection and analysis, as detailed in the subsequent chapter. This research aims to contribute to a better understanding of the BC model's effectiveness in promoting financial inclusion in the unique context of Kashmir.

Chapter – 3

METHODOLOGY

3.1 Introduction

3.2 Sampling

3.3 Usefulness of BCs: Customer's Perception

3.4 Usefulness of BCs: Banker's Perception

3.5 Methods of Data Analysis

METHODOLOGY

3.1. Introduction

The adopted methodology for this research has been discussed in this chapter. This chapter deals with the methods of sampling, development of instrument, collection of data and analysis techniques. This research is a humble attempt to analyse the usefulness of BCs for the implementation of financial inclusion in the Kashmir region. Accordingly, this study has set its objectives to assess the usefulness from the perspective of bankers and BSBDA customers.

The analysis chapter is based on primary data. The researchers have used two separate questionnaires for capturing the perception of the main stakeholders of BSBDAs i.e.; bankers and customers. The financial inclusion provides a platform to the people to park their idle money into savings and those savings could further be used for the investment purpose. BCs play a great role to make these things happen, so that customers as well as banks could get benefitted from it. BCs are responsible for the proper implementation of BSBDAs; BCs provide services to customers and act as mediators between banks and customers and customers are the end users of the service so, the usefulness has been seen from customers perspective and banker's perspective.

This study is illustrative and analytical in nature. It is illustrative in the sense as it aims to investigate and answer the research questions which address the research gap. Further, it is an analytical study as it gathered data to observe the usefulness of BCs.

3.2. Sampling

The present study is mostly organised on the basis of primary source of information. The primary data was collected through a survey method by administering two structured questionnaires from bankers and customers who have opened an account with the bank through BCs. Consequently, the targeted population under this study falls in two separate sets. The questionnaire used in the study has been developed based on the theoretical context, earlier studies findings and RBI's guidelines on BCs.

To analyse the research objectives mentioned above, we have used two separate questionnaires targeting the above mentioned two different sets of population groups. The first set of population comprises the customers. The questionnaire has targeted to collect the primary source of data from the customers of the commercial banks of public and private banks residing in the region. These customers were the ones who have opened their accounts through BCs. The sample has been collected by visiting the BC offices/Common Service Centres and talking to the customers. A multi-stage cluster sampling technique has been used to define the sampling frame for the customers. In order to cover the entire region of Kashmir, samples have been collected from each of the ten districts. The first stage of clusters was, listing all the tehsils in each district in the region. Random selection of tehsils in each district has been done. After random selection of tehsils, the second stage cluster was to select various areas in these tehsils. In this stage, the tehsils were divided into three different types of regions: urban, semi-urban and rural. Random samples of each of these types of areas were taken from the selected tehsils. From the selected areas, a list of BC offices was taken and after randomly selecting the BCs offices, investigators visited the BC offices and collected the data from the customers who visit these offices.

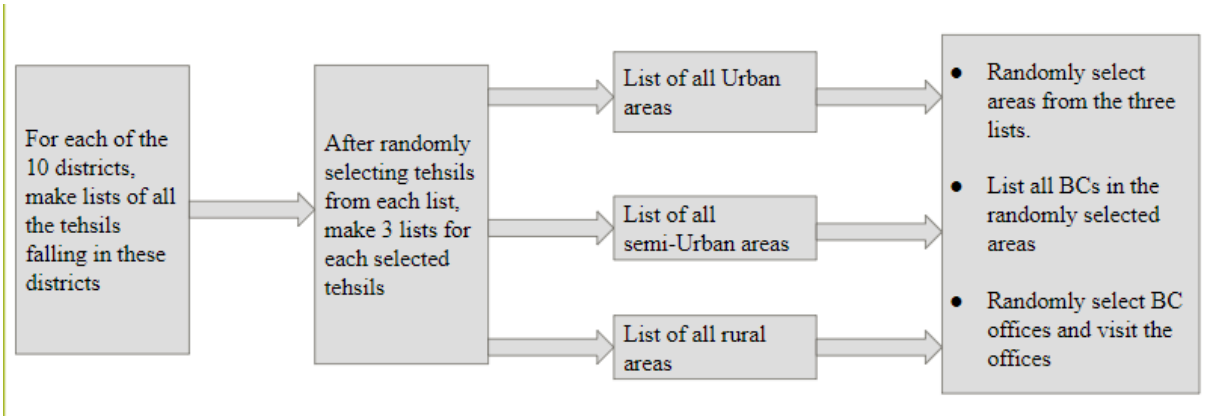


Figure 3.1 Sample selection process/stages for Customers

In addition to customers, the second group consists of bankers who work in the front office and are responsible for account opening, customer interactions, and customer service. The sample from this population has been collected by visiting the bank branches and interacting with the bankers working in the banks in the region. Similar to customers' sampling technique, here too a multistage cluster sampling method has been used. The first stage of clusters was listing all the tehsils in each of the 10

districts in the region. After randomly selecting tehsils in each district, the second stage cluster was to select a list of branches of all banks in these tehsils. In this stage, the tehsils were divided into three different types of regions, urban, semi-urban and rural. Random selections of bank branches from each of these three types of regions was done for each tehsil. Finally, the investigators interacted with bankers in these selected branches.

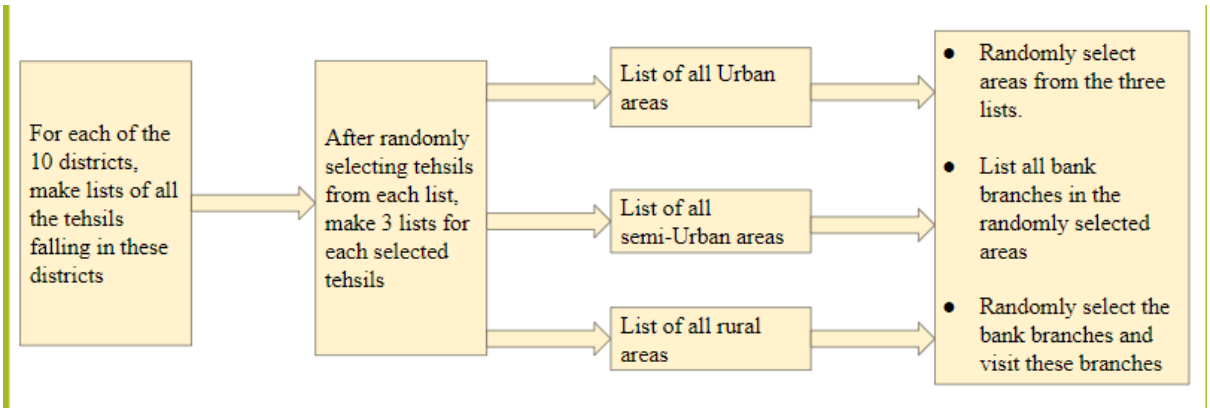


Figure 3.2. Sample selection process/stages for Bankers

To complement the primary analysis, secondary data sources have also been used. The main source for secondary data for analysis were various reports published by the Government website of Pradhan Mantri Jan Dhan Yojana (PMJDY), the J&K UT State Level Bankers Committee (SLBC). In addition, other secondary sources were also looked into throughout the study.

As for any primary data survey, there are constraints or limitations faced while collecting the sample. The constraints that one could foresee for this particular study were conflicts in certain areas and weather conditions. Kashmir is one of the states that see many conflicts during year round. There are cases in the past where certain regions or areas of the State face conflicts. Also with changes in weather conditions over the years throughout India, some areas of Kashmir have also witnessed a fair share of flood. Such occurring restricted and become a hurdle in data collection in certain cases.

3.3. Usefulness of BCs: Customer's Perception

3.3.1. Source of Data

The present study is based on the primary data collected from the NFA customers of the commercial banks of public and private banks residing in Kashmir region. The target population is BSBDA holders of the sample banks. The data has been collected from State Bank of India (SBI) and Punjab National Bank (PNB) under public sector category and Jammu & Kashmir Bank (JKB) and HDFC Bank under private sector category, located in each district of Kashmir region.

3.3.2. Sampling Plan

The sampling frame and the sampling technique used for selection of the BSBDA customers have gone through different stages which have been explained in the sampling section. As the total population of the BSBDA customers was unknown, the minimum sample required for this study from the unknown population has been fixed as 385 persons at 95% confidence level and at 0.05 Confidence Interval *(Cochran, 1977)*. Convenience sampling method has been adopted to select the sample from the districts of Kashmir region. The final sample for the study comprised of 431 BSBDA customers of the selected banks.

3.3.3. Data Collection Tool

The primary data was gathered through a survey method using a structured questionnaire administered to BSBDA customers with accounts at the bank or with a BC. The questionnaires were distributed in person. To collect data from illiterate customers, an interview schedule was used. The questionnaire included demographic questions and open-ended statements. Suggestions were also kept in an open-ended format to elicit specific responses. The questionnaire was developed based on the theoretical framework, findings from previous studies, and RBI guidelines on NFAs. The "Questionnaire for BSBDA Customers" is enclosed in the annexure- I. The questionnaire is structured as follows:

1. *Customer profile* – It consists of District, region, age, gender, residence, qualification, occupation, monthly income etc.

2. *Access, availability and level of usage of BSBDAs to customers* – A total of twenty-two open and close ended questions have been taken to know the access and availability of different products and services for BSBDA customers. The questions

asked were regarding location, products & services, employee access and information access to know the access and availability of different products and services provided by banks and BCs to their BSBDA customers. The statements asked in this section are based on the facilities associated with BSBDA customers and RBI's regulatory guidelines on BSBDAs through its circulars.

Moreover, level of usage questions has also been asked in this section which were related to the usage of deposit products, loan products, technological services and other services etc.

3. *Benefits in relation to economic empowerment* – In this section, questions have been asked related to the benefits which have been derived for the customers in terms of economic empowerment.

The content validity of the questionnaire was verified by experts from both academia and the banking industry. The validity was assessed based on the experts' feedback regarding the relevance of the questionnaire items to the study's objectives.

3.4. Usefulness of BCs: Banker's Perception

3.4.1. Source of Data

This study is organized around primary information collected from employees of four scheduled commercial banks, including both public and private banks, located in the Kashmir region. The data has been collected from branches of State Bank of India (SBI) and Punjab National Bank (PNB) under public sector category and Jammu & Kashmir Bank (JKB) and HDFC Bank under private sector category, located in each district of Kashmir region. The target population consists of bankers working in the front office who are involved in account opening, customer interaction, and customer service.

3.4.2. Sampling Plan

The data was collected from 227 bank employees of 227 branches. We have arrived at this sample size through *(Cochran, 1977)* formulae for known population. As the total number of public and private sector bank branches in Kashmir region were 639 *(SLBC Data)*, the total sample size we arrived at was 240, we have received few respondents' questionnaires which were incomplete in nature, so 227 has been taken as the final sample size.

3.4.3. Data Collection Tool

A structured questionnaire was administered to collect primary data from the bankers. This method was chosen due to the sample size, allowing respondents to answer questions or statements at their convenience. The questionnaires were distributed in person to the study participants. The questionnaire targeting the bankers has questions divided into sections relating with the various dependent and independent variables of the hypothesis. The second objective consists of two hypotheses for which the variables of interest are awareness creation among customers by BCs, technology adoption by BCs and change in transaction pattern and savings. Taking these variables into account, the questionnaire has four sections. The questionnaire comprised of demographic questions, few open-ended questions as well as close-ended statements on a five-point Likert scale where 5 denotes strongly agree and 1 denotes strongly disagree. Suggestions were kept in open ended form only to get specific response. The questionnaire was developed based on the theoretical framework, findings from previous studies, and RBI guidelines on NFAs. The "Questionnaire for Bankers" is enclosed in annexure – II. The questionnaire is structured as follows:

1. *Brief profile of the respondents and the bank* - This mainly consist of type of bank, branch location, employee designation, years of service, average number of customers connected to BCs etc.

2. *Awareness creation by BCs among customers* - A total of fourteen statements are purported to know awareness creation by BCs like awareness about products and services, filling of applications, overdraft facilities, loan products like KCC and GCC etc. The statements asked in this section are based on the facilities associated with BSBDAs and RBI's regulatory guidelines on BSBDAs through its circulars.

3. *Technology adoption by BCs* – In this variable a total of six questions have been constructed to capture employee's perception regarding the technology devices adopted by the BCs like ICT devices, Kiosk devices, hand held ATMs etc.

4. *Change in transaction pattern and savings* – A total of nine statements have been taken for this variable to know the perception of bankers regarding the impact of awareness creation and technology adoption by BCs in changing the transaction pattern (frequency) and savings habits among customers.

Experts from both academia and the banking industry have verified the content validity of the questionnaire. The validity has been checked by the feedback

given by the experts on whether the items in the questionnaire are relevant to the objective of the study. The clarity of questions and length of questionnaire has also been assessed. Some items and constructs have been modified after the content validity, to ensure content validity of the instrument.

3.5. Methods of Data Analysis

The data collected with the help of survey method has been coded and analysed in order to bring out meaningful results using the appropriate statistical tools like Statistical Package for Social Sciences (SPSS), Microsoft Excel, Analysis of Moment Structures- Structural Equation Modelling (AMOS-SEM) and Stata. Adequate care was taken to recode negatively worded statements to ensure all scale item scores were in the same direction. Missing value analysis confirmed that all cases had complete data. The following methods were used to analyze the data.

3.5.1. Factor Structure of the Instrument

In this study, Confirmatory Factor Analysis (CFA) using the Maximum Likelihood Method was conducted to investigate the fit of the factors. CFA was used to estimate model fit, which was assessed using the following goodness-of-fit indices: Chi-square ($\chi 2$)/degrees of freedom (CMIN/DF), Goodness-of-Fit Index (GFI), Adjusted GFI (AGFI), Comparative Fit Index (CFI), Normed Fit Index (NFI), and Non-Normed Fit Index (NNFI, also known as TLI). The GFI, AGFI, NFI, and CFI indices range between 0 and 1, with higher values (GFI>0.90, AGFI>0.80, CFI>0.90, NFI, and TLI>0.90) indicating a good model fit. For badness-of-fit indices, the Root Mean Square Error of Approximation (RMSEA) was used, with values also ranging between 0 and 1; a value less than 0.50 indicates a close fit, while values from 0.50 to 0.10 represent acceptable errors of approximation (*Stat Wiki*).

3.5.2. Assessment of Construct Validity

For assessing the validity of the constructs Average Variance Extracted (AVE), Composite Reliability (CR), Maximum Shared squared variance (MSV) and Average Shared squared Variance (ASV) are computed. AVE is a measure to assess the convergent validity of the construct and CR is a measure of scale reliability. A latent construct is deemed to have acceptable convergent validity if it has an AVE value greater than 0.5 and composite reliability greater than 0.7. The AVE computed for

each construct is evaluated against its correlation with the other constructs. Where AVE is larger than the constructs correlation with other constructs, convergent validity is considered to be confirmed.

To evaluate discriminant validity, MSv and ASV is computed. When these two are lower than the square root of AVE of the constructs (latent variables), discriminant validity is established.

3.5.3. Assessment of Instrument's Reliability

Internal consistency of the participants' responses was measured using Cronbach's alpha method, a reliability estimates of the questionnaire. This method indicates the correlation among the items in the questionnaire, with alpha values ranging between 0 and 1. A value of 0.7 or higher is generally considered acceptable, while a reliability coefficient of 0.5-0.6 is deemed sufficient for preliminary research (*Nunnally, 1978*).

3.5.4. Evaluating Research variables

Descriptive Statistics: Mean and frequency has been used to know the value of each observation and describe the respondent's profile. Further to know the amount of deviation, standard deviation has been used.

Multivariable Regression: In order to test the first hypothesis of study, a set of 6 regression analysis has been used. Out of the 6, two are multivariable regression as the dependent variables are continuous in nature. Two ordinal logistic regressions have been used because the dependent variable has more than two categories and there is an order to the levels. And for the remaining two regression analysis, logistic regression has been used, as the dependent variables are binary in nature.

Paired t-test and Two-sample Test for proportion: In the second hypothesis of the first part, along with logistic regression, paired t-test and two sample test have also been used. The analysis was used to test the effect of a change, where the data was collected in the form of before the BSBDA and after the BSBDA was opened. Depending on whether the variable of interest is mean or proportion, the paired t-test and two-sample test for proportion has been used respectively.

Path Analysis: In order to reach the results and to see the impact of awareness creation and technology adoption on the change in transaction pattern and savings of

customers, path analysis has been used. Path analysis is like an extension of regression analysis, in which we can use multiple independent and dependent variables at a time. This analysis has been used to analyse the results of second objective of the study.

The analysed data has been presented in the tabular as well as descriptive form, and the graphical representation is provided wherever required.

Chapter – 4

ANALYSIS AND DISCUSSION

4.1 Introduction: Customer's Perspective

4.1.1 Demographic Profile of the Customers
4.1.2 Regression Analysis for the Level of Usage
4.1.3 Regression Analysis for Economic Empowerment

4.2 Introduction: Banker's Perspective

4.2.1 Profile of the Bankers
4.2.2 Dimensions of the Theoretical Model
4.2.3 Confirmatory Factor Analysis Model
4.2.4 Validity and Reliability of the Constructs
4.2.5 Hypothesis Testing/Path Analysis

4.3 Summary of Findings

ANALYSIS AND DISCUSSION

4.1. Introduction: Customer's Perspective

Financial Inclusion through BSBDAs has helped the so-called excluded masses to open bank accounts and make use of it in order to foster savings. By opening BSBDAs through financial inclusion will help the people to make a judicious use of their savings. Therefore, it will help them in gaining social and economic empowerment which thereby will result into the overall development (*Uma and Rupa, 2013*).

The next sub-section describes the demographic profile of the customers, discussing their education level, monthly income range, etc.

4.1.1. Demographic Profile of the Customers

The study surveyed a total of 430 customers of various banks. The way the customers were surveyed is already discussed in Chapter 3. The gender profile of the respondents is given in the following table (Table 4.1.). In the survey of customers, about 70 per cent of the customers were female and the rest 30 per cent were male.

Table 4.1. Distribution of Gender, Age, Area of Residence of the Customers

	Category	Freq	Percent	Cum.
Gender	**Male**	299	69.53	69.53
	Female	131	30.47	100
Age	**30 years and below**	45	10.47	10.47
	Above 30 to 40 years	248	57.67	68.14
	Above 40 to 50 years	103	23.95	92.09
	50 years and above	34	7.91	100
Area	**Semi-Urban**	138	32.09	32.09
	Rural	292	67.91	100
	Total	430	100	

Among the 430 customers surveyed, around 10 per cent were at most 30 years old. More than half of the respondents, i.e., about 58 per cent, were of the age group above 30 years to 40 years, while 24 per cent belonged to the age group 50 and above. Only about 8 per cent of the customers were of the age group 50 years and above. Overall, 80 per cent of the customers were in the age group 30 to 50 years. Out of the total 430 bank customers surveyed, 32 per cent were resident of semi-urban area while, the rest 68 per cent were in rural area.

The frequency of the education level of the customers is listed in the following table (Table 4.2.). The highest percentage of the customers was not literate, 35 per cent. This is because most of the customers belonged to rural areas of the region. The next highest frequency is 22 per cent of the customers had primary school education. This is not a surprising for rural areas and semi-urban areas. About 47 per cent, that is around half of the respondents, had not done any formal schooling (not literate and literate without formal schooling). Adding to this one more category, we get about two-third (67 percent) of the customers who had at the most primary level of schooling. In such situation, the role of BCs in spreading financial literacy and increasing the financial inclusion becomes significant.

Table 4.2. Education Level of the Customers

	Category	Freq.	Percent	Cum.
Education	**Not Literate**	150	34.88	34.88
	Literate without formal schooling	51	11.86	46.74
	Primary School	94	21.86	68.61
	Middle School	68	15.81	84.41
	Secondary School	17	3.95	88.36
	Higher Secondary	17	3.95	92.32
	Graduate	33	7.67	100
Occupation	**Agriculture**	166	38.6	38.6
	Govt. Employee	16	3.72	42.33
	Household helper	69	16.05	58.37
	Casual Labour	96	22.33	80.7
	Private Employee	16	3.72	84.42
	Shopkeeper	34	7.91	92.33
	Unemployed	33	7.67	100
	Total	430	100	

In terms of the occupational distribution of the customers in the sample, about 39 per cent were engaged in agriculture. About 22 percent, near to one- fourth of the customers, were casual labour and 16 per cent were household helpers. These three occupations together make about 76 per cent of the total respondents. Only about 4 per cent were working as government employee. Another 8 per cent of the customers were unemployed.

Table 4.3. Distribution of Monthly Income of the Customers

Income	Freq.	Percent	Cum.
Upto ₹5000	114	26.51	26.51
₹5000 to ₹10000	84	19.53	46.05
₹10000 to ₹20000	197	45.81	91.86
more than ₹20000	35	8.14	100
Total	430	100	

Table 4.3. displays the monthly income of the customers. The bulk of the customers, about 46 percent, were earning monthly between ₹10,000 to ₹20,000. On the other hand, about 27 per cent of the customers were earning less than ₹5000 per month. Only about 8 per cent of the customers were earning more than ₹20,000 per month.

Table 4.4. Customers' Account- Bank Type and Years

	Category	Freq.	Percent	Cum.
Bank Type	**Public Bank**	101	23.49	23.49
	Private Bank	329	76.51	100
Years the customer had account	**1 to 2 years**	50	11.63	11.63
	2 to 5 years	169	39.3	50.93
	More than 5 years	211	49.07	100
	Total	430	100	

The table above (table 4.4.) shows that about 77 per cent of the customers had their account in a private bank and about 23 per cent had in a public bank. This interesting observation arises due to the special case of Kashmir region banking network, where J&K bank, a private bank has more reach to customers than any other banks.

About half of the customers interviewed had an account in a bank for more than 5 years, while the other half had for atmost 5 years (Table 4.4.). In the latter case, the least percentage, i.e., 12 per cent of the customers had an account for around 2 years, but certainly has had the account for more than a year. About 39 per cent of the customers had account in a bank for about 2 to 5 years till the time of survey.

4.1.2. Regression Analysis for the Level of Usage

Financial Inclusion has been one of the major factors to economically empower the population of an economy, especially belonging to marginalised section. The important element of financial exclusion are among others, accessibility and availability of the banking institution and its services to the mass of the population.

India's vast geography is a hindrance for the customers, especially belonging to rural or semi-urban areas to access the financial services through banks.

This sub-section delves into this question of the usage level of banking services and the accessibility and availability, by testing the first hypothesis of the study, which is *Hypothesis 1.1: Access and Availability has a significant positive impact on the level of usage.*

A set of variables were taken to define the three key variables (Access, Availability and Level of Usage). The following variables were used to understand the level of Usage by customers:

1. Frequency of visit to the bank branch in a month
2. Frequency of visit to the BC office
3. Average number of deposit transactions made in a month
4. Average number of withdrawal transactions made in a month
5. Average amount of maintained in the BSBDA in a month
6. Whether the customer maintains only minimum balance in the BSBDA

The following variables were used for Access

1. Distance of bank branch from the residence of the customer (in km)
2. Distance of the BC office from the residence of the customer (in km)

The following variables were used for Availability

1. Availability of BCs through phone
2. The average response time BCs take to respond to the queries

To test the hypothesis six regressions analysis were done, for each variable of the level of usage.

4.1.2.a Description of the Variables

A. Level of Usage by the Customers

The respondents in the survey were vague in answering the question related to frequency of visit to the bank branch, mostly giving a range and some gave in scale (frequently, rarely, very rare). The numbers here represent the least amount of visits they make. Thus, zero typically does not mean, they don't visit the bank branch at all, but they do visit when it is required. For respondents who mentioned rarely goes to the branch was noted as zero. This would simply mean that the customer visits the branch only when it is an absolute necessary. The following table shows that most of the customers visited rarely or only once in a month.

Table 4.5. Distribution of the Customer's Visits

Visit to the Bank Branch (in a month)								
Number	**0**	**1**	**2**	**3**	**5**	**7**	**10**	**Total**
Freq.	48	208	106	17	17	17	17	430
Percent	11.16	48.37	24.65	3.95	3.95	3.95	3.95	100
Cum.	11.16	59.53	84.19	88.14	92.09	96.05	100	
Visit to the BC Office (in a month)								
Number	**0**	**1**	**2**	**3**	**4**	**5**	**10**	**Total**
Freq.	67	62	68	97	51	68	17	430
Percent	15.58	14.42	15.81	22.56	11.86	15.81	3.95	100
Cum.	15.58	30	45.81	68.37	80.23	96.05	100	

Unlike the response for the Bank branch visit, the respondents were more specific, giving a range in giving the number of visits to the BC's office in a month. The upper limit was taken for all the range, except for the highest value 10, which is basically at least 10 times in a month. The frequency table above shows that the visit to BC office is much more than that to the bank branch. There were about 24 per cent of the people who visited the BC office for 5 times in a month, but only about 4 per cent of the respondents visited the bank branch for 5 times in a month.

Table 4.6. Number of Transactions Made

(in a month)	**Number**	**Freq.**	**Percent**	**Cum.**
Deposits	**None**	16	3.72	3.72
	at most 5 times	313	72.79	76.51
	6 to 10 times	84	19.53	96.05
	more than 10 times	17	3.95	100
Withdraw	**at most 5 times**	313	72.79	72.79
	6 to 10 times	117	27.21	100
	Total	430	100	

The above table shows the category of the number of deposit transactions made by a customer in a month. It depicts that most of the respondents, 73 per cent, had on an average at most 5 deposit transactions in a month. Also 24 per cent of all the customers made at least 6 deposit transactions in a month.

The above table shows number of withdrawal transactions made by a customer in a month. The scale was similar to that of the deposit transactions with 4 categories, but unlike deposit, the withdrawal transaction was no more than 10 times by the respondent. The table shows that most of the respondents (73 per cent) had no withdrawal transactions made in a month. On contrary, 27 per cent of all customers made at least one withdrawal transaction in a month.

Table 4.7. Distribution of Balance Maintained in the BSBDA

	Amount	Freq.	Percent	Cum.
Average Amount maintained in a month	**atmost ₹1000**	61	14.19	14.19
	₹1000 to ₹6000	188	43.72	57.91
	₹6000 to ₹10000	149	34.65	92.56
	above ₹10000	32	7.44	100
Maintains only Minimum Balance	**No**	380	88.37	88.37
	Yes	50	11.63	100
	Total	430	100	

The above table shows that the maximum number of customers (44 per cent) in the survey-maintained amount of ₹ 1000 to ₹ 6000 in their BSBDA. A large number of customers (about 34.65 per cent) also kept from ₹6000 to ₹ 10000 in their account.

As depicted in the preceding table, most of the customers maintained more than minimum balance in their account, only 12 percent said that they maintained only a minimum balance in their account.

B. Accessibility

The table given below depicts the distance of the nearest bank branch from the place of residence of the customer.

Table 4.8. Distribution of Distance from Customers' Residence

	Distance (in km)	Freq.	Percent	Cum.
Bank Branch	0.2	17	3.95	3.95
	1	66	15.35	19.3
	1.5	67	15.58	34.88
	2	82	19.07	53.95
	2.5	34	7.91	61.86
	3	102	23.72	85.58
	3.5	17	3.95	89.53
	4	17	3.95	93.49
	5	28	6.51	100
BC Office	0.2	17	3.95	3.95
	0.25	17	3.95	7.91
	0.4	17	3.95	11.86
	0.5	131	30.47	42.33
	0.7	17	3.95	46.28
	1	185	43.02	89.3
	1.5	17	3.95	93.26
	2	29	6.74	100
	Total	430	100	

About 54 per cent of the customers lived within 2 km from the nearest bank branch. Most of the customers (86 per cent) lived in around 3 km from the nearest bank branch that they use. The table also illustrates that for about 46 per cent of the customers, the distance of the BC office to their residence was less than 1 km. On the other hand, 43 per cent of the customer lived at a distance of around 1 km from the BC's office.

C. Availability

As indicated by the table below, almost all the customers agreed that the BCs were not available through telephone (96 per cent) for providing the services. There were very few, only about 4 per cent of the customers said that the BCs were available by phone. Since the response to this variable was skewed, most of the regression could not give proper results with this variable. Thus, in many instances, this variable was not used as an explanatory variable.

Table 4.9. Availability of BCs for customers through Telephone

	Category	Freq.	Percent	Cum.
Available Through Phone	**No-not available**	413	95.86	95.86
	Yes-available	17	4.14	100
Response time to Queries (in minutes)	**5**	28	6.51	6.51
	8	121	28.14	34.65
	10	33	7.67	42.33
	13	163	37.91	80.23
	18	68	15.81	96.05
	25	17	3.95	100
	Total	430	100	

The table 4.9 also illustrates the response time taken by the BCs to the queries made by the customers.

4.1.2.b. Hypothesis Testing: Access and Availability has a significant Impact on the Level of Usage

As mentioned above a set of six variables defining level of usage was taken, with set of two variables each for accessibility and availability. In order to test this hypothesis, individual regression was run on the six variables of usage with the four accessibility and availability variables.

A. Regression 1: Visit to BC Office on Access and Availability

The first regression is shown in the following table, where the dependent variable is the frequency of average visit of the customer to the BC office in a month and the independent variables are provided in the table.

Table. 4.10. Regression Result of Frequency of visit to BC Office

Constant	-0.6750** (0.3088)
Distance to BC office from residence (BCDistance1)	-0.6065* (0.204)
Distance to Bank Branch from residence (BranchDistance1)	0.6012* (0.078)
Response Time taken by BC (Response1)	0.0785* (0.017)
If BC is available through telephone (BCTelephone1)	7.4051* (0.379)
R-Square	0.53
Adjusted R- Square	0.52
No of Observation	430

Standard errors are reported in parentheses.
*, ** indicates significance at the 1%, and 5% level, respectively.

This regression results suggest that it is statistically significant and the result shows that the dependent variable, i.e., frequency of visit of the customer to the BC Office is impacted by the given independent variables by 52 per cent. Further, more the Distance to BC office from the residence of the customer, the lesser the frequency of visit to the BC office, while the further the bank branch from the residence, the higher the visit to the BC office. The more the availability of the BCs through phone and the higher the response time of the BCs, the higher the frequency of the customers visits to the BC office. The result of this analysis suggests that accessibility and availability are statistically significant predictors of frequency of monthly visit to the BC office.

B. Regression 2: Visit to the Branch on Access and Availability

Here the dependent variable that represents the usage level by customers is as the number of times the customer visit the bank branch in a month with independent variables as listed in the table.

The R-squared value indicates that approximately 26.93% of the variance in the frequency of visit to the BC office is explained by the independent variables in the model. This could mean that there are many other factors apart from the ones taken

that affect the frequency of visit to the branch. Nonetheless, the variables considered are significant in explaining the variation in frequency of visit to the bank branch. It is to be noted thought that the variable Distance of BC's office from the customer's residence is insignificant.

Table. 4.11. Regression Result of Frequency of Visit to Branch

Constant	2.0973* (0.386)
Distance to BC office from residence	-0.1378 (0.255)
Distance to Bank Branch from residence	-0.6738* (0.097)
Response Time taken by BC	0.1316* (0.021)
If BC is available through telephone	-1.3917* (0.475)
R-Square	0.27
Adjusted R-Square	0.26
No of Observation	430

Standard errors are reported in parentheses.
* Indicates significance at the 1% level.

The regression analysis suggests that accessibility (shown by distance to Bank branch from customer's residence), and availability (BC is available through telephone, Response Time taken by BC) are statistically significant predictors of frequency of monthly visit to the BC office. The further the bank branch is from the residence, the less the visit to the bank branch. The result comes as expected that the accessibility of bank branch makes more use of the bank branch. The longer the time that BCs takes to respond to the queries of the customers, the more the frequency of visit to the bank branch, while the more the BCs are available through phones, the lesser the visit to the bank branches. This too shows the easier availability of the BCs allows the customers to do transactions without the visit to the bank branches.

C. Regression 3: Number of Deposit Transaction on Access and Availability

As an ordinal logistic regression was run for this part, where the dependent variable is the number of deposit transactions made by the customers in a month and the independent variables are ones related to access and availability. The Likelihood-ratio chi-square statistic shows that the value is significant, implying that at least one predictor has a statistically significant effect.

Table. 4.12. Regression Result of Number of Deposit Transactions made by Customers in a Month

Distance to BC office from residence	1.6231 (1.13)
Distance to Bank Branch from residence	1.6002* (0.453)
Response Time taken by BC	0.0748 (0.059)
Pseudo R-Square	0.24
Probability>chi-square	0.0000
No of Observation	430

Standard errors are reported in parentheses.
* Indicates significance at the 1% level.

This ordered logistic regression model suggests that only the distance of bank branch from the customer's residence has a significant and surprisingly, a positive, effect on the number of deposit transactions made. The customers, who have less distance from the bank branch, are most probably in semi-urban region. They may have access to more than one bank and thus have multiple accounts. So, these customers make lesser number of deposit transactions to a specific account. On the other hand, the customers who live far away from branch could be the ones residing in the rural areas. They tend to make deposits of smaller amounts and thus larger number of deposit transactions.

D. Regression 4: Number of Withdrawal Transaction on Access and Availability

The number of withdrawal transactions made in a month has only two categories. Thus logistic regression has been used to analyse the effect of access and availability on it. The chi-squared statistic indicates that the model as a whole is statistically significant.

Table. 4.13. Regression Result of Average Number of Withdrawal Transactions made by Customers in a Month

Constant	-1.9955* (0.465)
Distance to BC office from residence	0.4568 (0.306)
Distance to Bank Branch from residence	-0.2667** (0.124)
Response Time taken by BC	0.0977* (0.465)
Pseudo R-Square	0.05
Probability>chi-square	0.0000
No of Observation	430

Standard errors are reported in parentheses.
* Indicates significance at the 1% level.

The withdrawal transaction is also affected by the accessibility and availability of the BCs, with a note that distance from the BC office does not have a significant impact. The further the bank branch, the lower the chance of more withdraw transactions made, while the longer time BC's takes to respond, the more is the chance of increase in withdraw transactions.

E. Regression 5: Deposit Amount on Access and Availability

In this ordered logistic regression, the dependent variable is the average deposit amount maintained by the customers in the BSBDA and the access and availability variables are the independent variables. As mentioned above the variable is in ordered scale, where increase in scale is increase in the deposit amount maintained. The likelihood ratio chi-squared test indicates that the model as a whole is statistically significant. All the independent variables, except for the response time, are significant.

The result indicates that the accessibility (viz., the distance of the BC office and the distance of bank branch from the customer's residence) and the availability (i.e., if BC is available through telephone) have significant effects on the likelihood of being in different categories of Deposit. With increase in the distance to the BC office, the odds of maintaining a higher amount increases, however the same decreases with the

increase in the distance to the branch. While the odds increases when BC are available through phone.

Table. 4.14. Regression Result of Average Amount Maintained in a Month

Distance to BC office from residence	1.0647* (0.255)
Distance to Bank Branch from residence	-0.3407* (0.106)
Response Time taken by BC	-0.0229 (0.022)
If BC is available through telephone	1.8569* (0.431)
Pseudo R-Square	0.03
Probability>chi-square	0.0000
No of Observation	430

Standard errors are reported in parentheses.
* Indicates significance at the 1% level.

F. Regression 6: Maintaining Only Minimum Balance on Access and Availability

In this logistic regression, the dependent variable is whether the customer maintains only minimum balance in their account which is a binary variable against the independent variables of access and availability.

Table. 4.15. Regression Result of Maintaining only Minimum Balance

Constant	-3.4092* (0.67)
Distance to BC office from residence	0.1003 (0.386)
Distance to Bank Branch from residence	0.5007* (0.163)
Response Time taken by BC	0.0001 (0.036)
Pseudo R-Square	0.06
Probability>chi-square	0.0006
No of Observation	430

Standard errors are reported in parentheses.
* Indicates significance at the 1% level.

In this case as well, the chi-squared statistic indicates that the model as a whole is statistically significant. Though, only one variable, the distance of branch from the residence was significant. Rests of the variables are not significant.

Thus, the accessibility represented by distance of the bank branch from the customer's residence has a significant impact on the customer using the BSBDA. The odds of customer maintaining only minimum balance in their account increases with increase in the distance. On the other hand, the availability variable does not have a significant impact on the same.

Summarizing the findings of the above analysis is the following table. Thus, to test the first hypothesis, (*Hypothesis 1.1: Access and Availability has a significant positive impact on the level of usage)* of this part, i.e., there were six regressions run with sub hypotheses, which were individually run on the variables indicating access and availability.

Table 4.16. Summary of Result of Analysis of Hypothesis 1.1:

Access and Availability has a significant positive impact on the level of usage.

Regression		**R1**	**R2**	**R3**	**R4**	**R5**	**R6**
Ha against Ho of no significant impact		Access and Availability has significant impact on Level of Usage					
		Ha: the number of visit to the BC office	Ha: on the number of visit to the bank branch	Ha: the number of deposit transactions	Ha: the number of withdrawal transaction	Ha: the amount maintained in the account	Ha: whether the customer maintains only minimum balance
Dependent Variable		Visit to the BC office in a month	Visit to the bank branch	Deposit transactions made	Withdrawal transaction made	Amount maintained	Minimum balance only
Model Used		Multivariable Regression	Multivariable Regression	Ordinal logit regression	Logit regression	Ordinal logit regression	Logit regression
Model significance		significant	significant	Significant	Significant	Significant	Significant
Access	**Distance from BC office**	As distance increases, visit declines	Insignificant	Insignificant (15%)	Insignificant (14%)	With more distance, the more likely to maintain higher amount	Insignificant
	Distance from the branch	As distance increases, visit increases	As distance increases, visit decreases	As distance increases the more likely of making more deposit	As distance increases, less likely to make more transactions	With more distance, less likely to maintain higher amount	With more distance, more likely to maintain only minimum balance

Regression		**R1**	**R2**	**R3**	**R4**	**R5**	**R6**
Ha against Ho of no significant impact		Access and Availability has significant impact on Level of Usage					
		Ha: the number of visit to the BC office	Ha: on the number of visit to the bank branch	Ha: the number of deposit transactions	Ha: the number of withdrawal transaction	Ha: the amount maintained in the account	Ha: whether the customer maintains only minimum balance
Availability	**Response time taken by the BC**	As the time increases, the visit increases (but small impact)	As the time increases, the visit increases	Insignificant	High the response time, more likely to have more transactions	Insignificant	Insignificant
	BC is available through phone	The visit is more	The visit is less	-	-	More likely to maintain higher amount	-
	Conclusion	Reject null hypothesis. They do have significant impact	They do have a significant impact. Except for distance from BC office	Only Access has significant impact	They do have significant impact, except for distance from BC office	They do have significant impact, except for response time of BC	Only Access has significant impact

4.1.3. Regression Analysis for Economic Empowerment

One of the main objectives of financial inclusion is to empower the marginalized group of the population economically. This basically would mean that giving more access to financial services and making them available to the mass would help to acquire this objective. The usage of such facilities and services would lead to economic empowerment. The second hypothesis of the study is stated below.

Hypothesis 1.2. There will be a significant positive impact of Usage on Economic empowerment of customers

In order to test this hypothesis, it has been broken down into smaller sub-hypotheses:

1. The source of income has increased after the usage of the banking facility.
2. The usage has a significant impact on the perspective of the customer that the access to bank facility has improved the skills of the customer or their family member.
3. The savings of the customers has increased after opening the BSBDA.
4. There has been a significant decline in the borrowings from friends and family after opening of the BSBDA.

Thus, various method of analysis, as discussed in the previous chapter, has been done to test the above sub-hypotheses. The next sub sections would examine the analysis of hypotheses.

A. H.1.2a. The source of income has increased after the usage of the banking facility

The following table shows the number of customers who said their source of income has widened after opening the BSBDA. It can be seen that around 85 per cent of the customers said that their source of income had widened after the use of BSBDA. Only about 15 percent of the customers felt that their source had not widened. Though many respondents did not talk about which form of sources of income had widened, there were quite a number who mentioned public casual work (MGNREGA) and agriculture.

Table 4.17. Distribution of Customers as per the Widened Income Source

After opening BSBDA	Category	Freq.	Percent	Cum.
Whether Income Source has Widened	**No (0)**	66	15.35	15.35
	Yes (1)	364	84.65	100
Sources of Income that has widened	**Agricultural**	64	14.88	14.88
	Business	18	4.19	19.07
	MGNERAGA	72	16.74	35.81
	NA	276	64.19	100
	Total	430	100	

In order to test if the increase in the source of income was significant or not, a test was run to test the hypothesis that the proportion of customers whose source of income had widened is more than 80 per cent. The value 80 per cent was taken as the null value as it is closer to the estimated proportion (sample proportion 0.85) and also 80 percent shows a very high proportion.

Table 4.18. Test of Proportion of Customers with Wider source of Income after BSBDA

Proportion of people whose Income has widen	**0.8465 (0.017)**
Null Hypothesis	p=0.80
Alternate Hypothesis	p>0.80
No. of observations	430
P(Z>z)	0.0079*

Standard errors are reported in parentheses.
* Indicates significance at the 1% level.

The above is the result of the hypothesis testing, and it shows that the alternative hypothesis that the proportion was more than 80 per cent is significant. Conclusively, it can be said that more than 80 percent of the customers perceived that their source of income widened after BSBDA.

Given that the source of income did widen after BSBDA, the following logit regression result shows how much the widened source of income is explained by the level of usage. The independent variables that explain the usage are the same that was used in the previous section, viz.,

1. Frequency of visit to the bank branch in a month.
2. Frequency of visit to the BC office.

3. Average number of deposit transactions made in a month.

4. Average number of withdrawal transactions made in a month.

5. Average amount of maintained in the BSBDA in a month.

6. If only minimum balance is maintained in the BSBDA.

As the frequency for some categories was very low, the variable average number of deposit transactions made in a month lead to perfect prediction in the regression result, consequently the variable was dropped. The variable average amount of maintained in the BSBDA in a month, also led to similar problem. The categories in this variable were clubbed to make it a dichotomous variable with (0- upto ₹ 5000 and 1- more than ₹ 5000). After making these adjustments, the logit regression was run and the following table illustrates the result.

Table 4.19. Result of Logit Regression of Widened Income Source

Constant	1.5941* (0.421)
No. of Visit to BC office	-0.0484 (0.067)
No. of Visit to Bank branch	0.7264 * (0.246)
Only minimum balance is maintained	-2.0122* (0.423)
Withdrawal transactions	-1.5248* (0.462)
Deposit maintained	0.5694 (0.472)
Balance Maintained	Insignificant
Pseudo R-square	0.20
Probability >Chi2	0.000

Standard errors are reported in parentheses.

* Indicates significance at the 1% level.

In this logit regression the Likelihood-ratio chi-square statistic shows that the value is significant, implying a statistically significant model. The result also depicts that except for the number of visits to the BC office and the average amount maintained in the account all other independent variables are significant. The increase in the number of visits to the bank branch impacts the odds of widened income source positively while keeping only minimum balance and increased withdrawal transactions implies

lower odds of widened income source. In summary, the level of usage has significant impact on whether the income source of the customers has widened after BSBDA.

A. H.1.2b. The usage has a significant impact on the improvement of skills of the customer or their family member

The following table shows the number of customers who said that their or their family member's skill has improved due to increase in access to bank facilities. The table shows that about 87 per cent of the customers believed that their skills had improved. On the other hand, only about 13 percent said that their or their family member's skill did not improve after having access to bank facilities.

Table 4.20. Skill Improvement after access to bank facility

Whether the Skills improved	Freq.	Percent	Cum.
No	56	13.02	13.02
Yes	374	86.98	100
Total	430	100	

A one-sample test of proportion was run to check if there was a significant increase in the proportion of customers whose (or family member's) skill had improved after having access to banking facilities. The following table shows the result. Since the sample mean was 0.87, the null value was taken as 0.80. That result shows that the proportion of people who perceive that their or their family member's skill improved after access to the bank facilities was more than 80 per cent.

Table 4.21. One –Sample Test of Proportion of Customers whose Skill Improved

Proportion of customers whose skill improved	**0.8698 (0.016)**
Null Hypothesis	p=0.80
Alternate Hypothesis	p>0.80
No. of observations	430
P(Z>z)	0.0001*

Standard errors are reported in parentheses.
* Indicates significance at the 1% level.

In order to test the hypothesis that the level of usage has a significant impact on the improvement in the skill of the customer (or their family member) after having access to bank facilities, a logit regression was run for this variable with the level of usage.

The following is the result of the logistic regression model run of Skill improvement due to access to bank facilities with the remaining variables.

Table 4.22. Result of Logistic Regression of Skill Improvement after Access to Bank Facilities

Constant	1.2673* (0.337)
No. of Visit to BC office	0.1045 (0.082)
No. of Visit to Bank branch	0.1946*** (0.103)
Only minimum balance is maintained	-0.7222*** (0.393)
Withdrawal transactions	-0.4945 (0.46)
Deposit maintained	0.8396*** (0.432)
Pseudo R-square	0.06
Probability >Chi2	0.0006

Standard errors are reported in parentheses.
* , ***indicates significance at the 1% and 10% level, respectively.

In this regression analysis, the chi-square test for the log likelihood ratio is very low showing a statistically significant relationship between the independent variables (level of usage) and the outcome (Skill improvement due to access to bank facilities). Except for number of visits to BC office and withdrawal transactions, the other independent variables are significant.

Customers with only the minimum balance are less likely to experience the improvement in the skills of the customer (or family member), while those who maintain higher balance in their account has a higher likelihood of improvement in skills. Visiting the bank branch frequently show trends towards a positive association with the in the skills of the customer (or family member).
Thus, it can be said that the usage has a significant impact on the perspective of the customer that the access to bank facility has improved the skills of the customer or their family member.

B. H.1.2c. The savings of the customers has increased after opening the BSBDA

The summary presented in the table below indicates that the average savings done before the opening of BSBDA was ₹3936, which was ₹6272 after BSBDA. The minimum value of the savings also increased from ₹500 to ₹1000 and the maximum savings made by the respondents was also much more after BSBDA (before ₹15000 and after ₹20000). The 95 % confidence Interval shows that the population average savings would also lie between ₹3604 to ₹ 4267 before the BSBDA, while the same was between ₹5850 to ₹ 6693 after the BSBDA.

Table 4.23. Summary of Savings Before and After BSBDA

Variable	Obs	Mean	Std. Err.	[95% Conf. Interval]		Min	Max
Savings Before	430	3936.047	168.50	3604.859	4267.234	500	15000
Savings After	430	6272.093	214.51	5850.463	6693.723	1000	20000

To test the hypothesis that there was an increase in the savings after the BSBDA, a paired t-test for the savings before and savings after has been done. The following table presents the result of the test. The p-value (0.0000) is very less, indicating a statistically significant result.

Table 4.24. Paired t-test for Savings Before and After BSBDA

Difference in the mean savings before and after BSBDA	**-2336.047 (55.303)**
Null Hypothesis	Mean difference =0
Alternate Hypothesis	Mean difference < 0
No. of observations	430
P(T>t)	0.0000*

Standard errors are reported in parentheses.
* Indicates significance at the 1% level.

It can be concluded that the savings increased after BSBDA.

C. H.1.2d. There has been a significant decline in the borrowings from friends and family after opening of the BSBDA

The following table shows the frequency of the two variables, borrowings from friends and family before BSBDA and borrowings after BSBDA. The table suggests that before BSBDA 92 per cent of the customers borrowed from their friends and family (relatives), this percentage decreased to about 57 per cent after BSBDA.

Table 4.25. Frequency Table of Borrowing Before and After BSBDA

	Borrow Before			Borrow After			
If borrowed	**No**	**Yes**	**Total**		**No**	**Yes**	**Total**
Freq.	33	397	430		187	243	430
Percent	7.67	92.33	100		43.49	56.51	100
Source	**Friends**	**NA**	**Relatives**	**Bank**	**Friends**	**NA**	**Relatives**
Freq.	195	37	198	218	117	33	62
Percent	45.35	8.6	46.05	50.7	27.21	7.67	14.42
Cum.	45.35	53.95	100	50.7	77.91	85.58	100

The table also shows the division from various sources of borrowing both before and after. It is interesting to note that the figure for sources does not exactly match the frequencies of whether borrowed or not, given in the same table, but the values are similar. This is due to the question being presented in two different forms. The NA would refer to those who did not borrow. An interesting observation from the table is that after BSBDA, not only one of the sources of borrowing is Bank but this percentage is the highest among all other source of borrowings.

To test the hypothesis that there was a decrease in the borrowing after the BSBDA, a two-sample proportion test for the borrowing before and borrowing after has been used. The following table presents the result of the test.

Table 4.26. Two-Sample Test of Proportion for Borrowing Before and After BSBDA

Difference in the proportion of customers who borrowed before and after BSBDA	0.3581 (0.027)
Null Hypothesis	Proportion difference =0
Alternate Hypothesis	Proportion difference > 0
No. of observations	430
P(T>t)	0.0000*

Standard errors are reported in parentheses.
* Indicates significance at the 1% level.

The estimated difference in proportions is 0.358, meaning the proportion of customers borrowing before BSBDA is 35.8% higher than the proportion after BSBDA. The analysis confirms a statistically significant difference between the borrowing proportions. It can be concluded that there is a statistically significant decrease in the proportions of people borrowing after BSBDA.

Concluding this section of testing the hypothesis if the level of usage has a positive impact on the economic empowerment, the following were the findings for the sub-hypotheses are as follows:

1. The source of income has increased after the usage of the banking facility: the test showed that the level of usage has significant impact on the perception of the customers that their income source has widened after BSBDA.
2. The usage has a significant positive impact on the improvement of skills of the customer or their family member.
3. The savings of the customers has increased after opening the BSBDA: the paired t test concluded that there is a significant increase in the saving of the customers after BSBDA.
4. There has been a significant decline in the borrowings from friends and family after opening of the BSBDA: The two-sample test for proportions showed a significant decrease in the borrowing from friends and relatives after opening of BSBDA. In addition, it was also observed from the survey that there was also a change in source of borrowing from friends and relatives to bank.

In totality by testing the above hypotheses, it can be concluded that there is a significant positive impact of usage of banking facility and BCs on economic empowerment.

Summarizing the findings of the above analysis is the following table. Thus to test the first hypothesis, (*Hypothesis 1.2: There will be a significant positive impact of Usage on Economic empowerment of customers)* of this part four tests were done of which two regression analysis and two paired test of mean and proportions.

Table 4.27 a. Summary of the Regression Result

		H.1.2a	H.1.2.b
Ha against Ho of no significant impact		Level of Usage has Significant impact on	
		widened source of income	Skill improved after access to bank facilities
Dependent Variable		If Income widened after BSBDA	Skill improved after access to bank facilities
Model Used		Logit Regression	Logit Regression
Model significance		Significant	Significant
Level of Usage	**No. of Visit to BC office**	Insignificant	Insignificant
	No. of Visit to Bank branch	As visits increases more likely that income source has widen	As visits increases more likely that skills improve
	Only minimum balance is maintained	Less likely that income sources widen	Less likely that skills improve
	Withdrawal transactions	More withdrawal transactions less likely for income sources to widen	Insignificant
	Balance Maintained	Insignificant	More balance maintained, more likely that skill improves
Conclusion		Reject Null hypothesis of no impact	Reject Null hypothesis of no impact

Table 4.27 b. Summary of the Results of Before and After Comparing

	H.1.2c	H.1.2d
Null Hypothesis	No difference in the Savings before and after BSBDA	No difference in the Borrowings before and after BSBDA
Alternate Hypothesis	Savings Before < Savings After	Borrowings Before > Borrowing After
Test	Paired t test	Two-sample test of proportions
Result	Null Hypothesis is Rejected	Null Hypothesis is Rejected
Conclusion	The average savings of customers has increased after opening BSBDA	The proportion of customers who borrow has decreased after opening BSBDA

4.2. Introduction: Banker's Perspective

The Reserve Bank of India (RBI) encouraged banks to make BSBDAs available to the vast sections of the society. For banks, opening and handling BSBDAs has become an additional responsibility as they are not allowed to charge customers for these types of accounts. Banks have opened these accounts on a large scale in all the states of the country, with an objective of providing formal financial service to every individual and to park their money into savings. Opening and transacting in these accounts is a win-win for both the customers as well as banks.

4.2.1. Profile of the Bankers

I. Profile:

In this part of the study, analysis of the perception regarding BCs is done through a sample survey of bankers by way of descriptive analysis and regression analysis. The population of the study was bankers working in both Public and Private sector banks in the branches located in Kashmir region of the UT of Jammu & Kashmir. The banks that were taken were State Bank of India, Jammu and Kashmir Bank, HDFC Bank and Punjab National Bank. The survey interviewed 227 employees of various bank branches. Each employee is from different bank, indicating a total of 227 bank branches have been covered in the total of ten districts of Kashmir region. A brief profile of the respondents is given in table below (Table 4.28).

Table 4.28. Profile of Bankers in the Sample Survey

Response Category		**Frequency**	**Percentage**
Bank Type	Public Sector	39	17.18
	Private Sector	188	82.82
	Total	**227**	**100**
Area	Urban	53	23.35
	Semi-urban	79	34.80
	Rural	95	41.85
	Total	**227**	**100**
Designation	Senior/Branch Manager	98	43.17
	Assistant Manager	104	45.81
	Clerk/Cashier	25	11.01
	Total	**227**	**100**

Of the bank branches covered, 83 per cent belong to private sector banks and only 17 per cent were from public sector banks. The higher percentage of private banks is due to the higher presence and penetration of J&K bank in the Kashmir region. Of these 227 branches that were contacted during the survey, about 42 per cent were in the rural area while 35 percent in the semi-urban area and 23 per cent in urban area. The higher percentage of rural and semi-urban branches was covered during the survey. The type of employee that was interviewed is given in the above table. Out of the employees interviewed, most of them were either Assistant manager or Manager of the branch. Only 11 per cent of the total interviewed people were Clerk or Cashier of the branch.

Table 4.29. Customers connected through BCs

Variable	Observations	Mean	Std. Dev.	Min	Max
BC Customer 2022-23	227	2200.176	2452.877	25	11000
BC Customer 2021-22	227	1778.762	2187.948	0	10000
BC Customer 2020-21	227	1461.802	1894.45	0	8000
BC Customer 2019-20	227	1185.656	1591.51	0	7800
BC Customer 2018-19	227	971.3172	1368.197	0	9800

The above table shows the number of customers connected through BCs over the years. The average number of customers covered has increased over the years, the maximum number of customers covered was 9800 in 2018-19, which became 11,000 in 2022-23. On a deeper analysis, there were 4 banks whose number of customers connected through BCs was 25, which is the minimum value for this variable. All the four branches are in the urban area. While on the other extreme, the 6 branches where the number of customers connected through BCs is more than 10,000 are all rural areas. This implies that the BCs intervention is more in the rural area where the Bank branches are fewer in number. This confirms to the fact that the BCs allows for more financial inclusivity in areas where the banks cannot reach through bricks and mortar. Another interesting observation is that all the 6 bank branches who have more than 10,000 customers connected through BCs are Private Sector bank; while the other 4 bank branches, whose number of customers connected through BCs was 25 is Public Sector bank. The reason for this is specific to Kashmir Region due to the presence of J&K Bank. It would be more interesting to look at the changes through the years in the number of customers connected through BCs. The increase in the customers

getting connected to banks with the help of BCs is more visible through increase in mean.

Table 4.30. No. of villages covered by bank branches through BCs

Variable	Observations	Mean	Std. Dev.	Min	Max
No. of Village 2022-23	227	6.669604	4.027681	2	21
No. of Village 2021-22	227	6.132159	3.523647	0	20
No. of Village 2020-21	227	4.792952	2.783698	0	18
No. of Village 2019-20	227	4.348018	2.616749	0	15
No. of Village 2018-19	227	4.088106	2.418803	0	13

The above table shows the number of villages covered by bank branches through BCs over the years. The average number of villages covered has increased over the years; the maximum number of villages covered was 13 in 2018-19, which became 21 in 2022-23. Similarly, there were many branches which did not connected to any villages through 2018-22, but there were no such branches in 2022-23. There were at-least two villages connected to every branch covered in 2022-23. The increase in the coverage of villages over the years suggests an improvement in the financial inclusion through the BC model.

Table 4.31. New Accounts opened through BCs

Variable	Observations	Mean	Std. Dev.	Min	Max
New Ac 2022-23	227	88.97	137.66	0	800
New Ac 2021-22	227	67.41	100.33	0	600
New Ac 2020-21	227	39.86	38.951	0	185
New Ac 2019-20	227	38.39	39.279	0	200
New Ac 2018-19	227	37.9	42.219	0	200

The new accounts opened through BCs over the years have changed, where the maximum numbers of new accounts are 800 and 600 in 2022-23 and 2021-22 respectively. The branches which have 600 in 2021-22 and 800 in 2022-23 are the same branches and interestingly these branches are the ones who got BCs in their branch only in 2021-22. Before that these branches had no BCs connected to their branch.

The average number of new accounts opened through the BCs has increased significantly over the years. From the mean it is evident that on an average a branch

had 38 new accounts in 2018-2019 to 89 new accounts opened by the bank branches in 2022-23. With the increase in the number of new accounts opened, the variability in the number of new accounts opened through BCs has also increased a lot in 2022-23, which meant that the number of new accounts opened by BCs in different branches varied a lot in 2022-23.

Table 4.32. No. of Active Accounts opened through BCs

Variable	Observations	Mean	Std. Dev.	Min	Max
Active Ac 2022-23	227	92.56388	16.85726	30	100
Active Ac 2021-22	227	89.0837	23.45995	0	100
Active Ac 2020-21	227	84.43172	30.4071	0	100
Active Ac 2019-20	227	81.14537	33.06284	0	100
Active Ac 2018-19	227	80.02203	34.14084	0	100

Opening of new accounts and having an active account gives totally different picture of the financial inclusion. It is a well-known fact that increasing the number of accounts does not lead to financial inclusion, the accounts becoming dormant is another issue faced by the bank branches because banks have to bear the cost of maintain the accounts. Thus, understanding the importance of looking into active accounts, it was seen that though the higher side of active accounts was same for all the years. The new accounts opened have been increasing yet the active accounts have been same for all the years. This could mean the dormant accounts have been increasing.

Table 4.33. No. of branches with Zero Active Accounts

Year	No. of branches with Zero Active Accounts
2022-23	0
2021-22	0
2020-21	15
2019-20	17
2018-19	17

Another important figure is the minimum value in the number of dormant accounts in the bank branches, it is seen that in this front there has been improvement in the year 2021-23 and 2022-23. There was no branch with zero active accounts among the ones opened by BCs in the year 2022-23 while that was not the case until 2020-21.

Another way of looking at the active accounts is the number of branches with zero active accounts, among the accounts opened through BCs, over the years is given in the following table. There were 17 branches which had no active accounts (among the ones opened through BCs) in 2018-19 and 2019-20. These means that all the accounts opened through BCs were dormant. But this value decreased to zero in 2021-22 and 2022-23, which implies that all the accounts opened through the BCs, were active.

Table 4.34. Workshops Organised by BCs

Variable	Observations	Mean	Std. Dev.	Min	Max
Workshop 2022-23	227	5.555066	2.481847	0	14
Workshop 2021-22	227	4.136564	2.400928	0	10
Workshop 2020-21	227	3.004405	1.94731	0	9
Workshop 2019-20	227	2.436123	1.66141	0	11
Workshop 2018-19	227	2.211454	1.40456	0	6

The average number of workshops organised by BCs of different branches was two in 2018-19 which increased to around six in 2022-23. Though it can be seen that the variance has also increased for the years, which implies more variation in the number of workshops organised in 2022-23, but yet, there are branches which had 14 workshops.

Table 4.35. Awareness Campaigns conducted by BCs

Variable	Observations	Mean	Std. Dev.	Min	Max
Awareness 2022-23	227	6.01	3.55	0	18
Awareness 2021-22	227	4.19	2.27	0	12
Awareness 2020-21	227	3.55	2.38	0	12
Awareness 2019-20	227	3.14	2.40	0	12
Awareness 2018-19	227	2.59	1.91	0	12

The awareness campaign and meetings conducted by the branches also increased over the years from about 3 to 6 in a year. The maximum number of awareness campaign was also 18 in 2022-23.

4.2.2. Dimensions of the Theoretical Model

From the review of literature, it is evident that change in transaction pattern & savings is a dependent function of the awareness creation and technology adoption by BCs

(*Raman, 2012*). The theoretical model of the overall change in transaction pattern & savings has been given in Figure 4.1 and accordingly analyses and explains the results carried out to see the impact of BSBDAs from the perception of bankers.

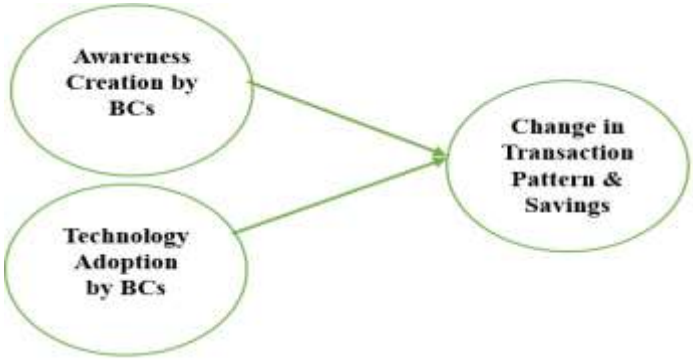


Figure 4.1. Theoretical Model

Usefulness of BCs for change in transaction pattern and savings among customers by providing financial inclusion through BSBDAs is broader concept which has been by two dimensions which are awareness creation and technology adoption from banker's perspective. An overview of the dimensions has been given under:

I. Awareness creation by BCs among customers

It refers to the creation of awareness about the products and services which bank provides to its customers such as loan, overdraft, insurance, passbook, debit card etc. and the means or opportunity to approach the services. The awareness to financial services gives an insight to customers to explore the products of their choice and need.

II. Technology adoption by BCs

The adoption of technology for providing banking services refers to the usage of technological devices by the BCs for the ease of providing banking services among the rural customers. The BCs make use of kiosk devices or any other technological device to provide the service at the customer's door step.

III. Change in transaction pattern and savings

Change in transaction pattern and savings in this study is a measure of how the change has happened by way of creating awareness by the BCs among customers and

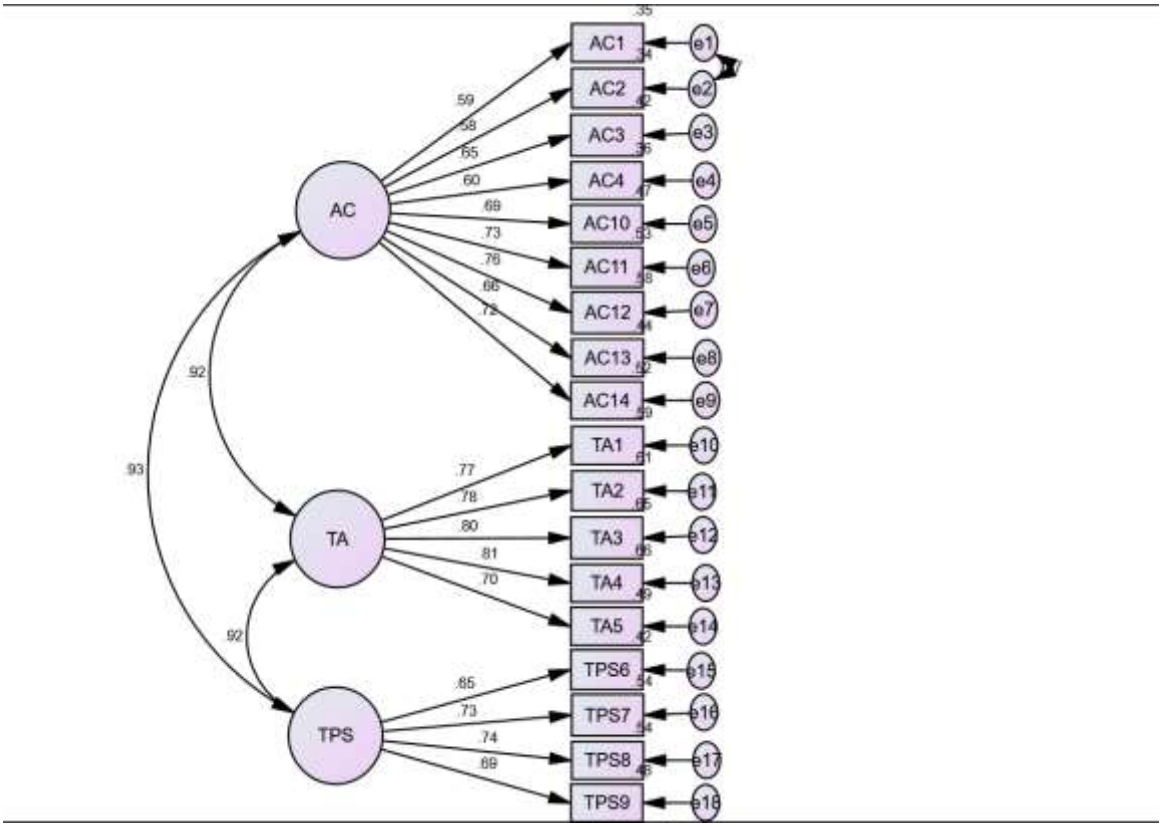
along with that by using the technological devices. The perception has been taken from bankers as they know whether there is any change happening among customers savings and the frequency of transactions by way of organizing the awareness camps and by providing technological devices to BCs.

4.2.3. Confirmatory Factor Analysis (CFA) Model

CFA is applied to assess the fitness, reliability and validity of three constructs, viz., Awareness Creation by BCs (AC), technology Adoption by BCs (TA), and Change in Transaction Pattern & Savings (TPS). The various resulting models are as under:

First order CFA (Figure 4.2) is performed on Awareness Creation by BCs (AC) which constituted fourteen items; five items have got deleted as these items were not meeting the criteria. Same way for technology Adoption by BCs (TA) constituted six items and one item has got deleted as it was not meeting the criteria. And last one i.e.; Change in Transaction Pattern & Savings (TPS) constituted nine items, of which four items have got deleted as these items were not meeting the criteria. After deleting, CFA produced good fit which is mentioned in Table 4.36.

Figure 4.2. CFA Model



AC1= BCs make NFA holders aware that opening of bank account will benefit them in making savings, AC2= BCs make NFA holders aware that borrowing from a formal financial institution is cheap and transparent source of finance, AC3= BCs make NFA holders aware of the activities related to filling up applications for deposits and withdrawals, AC4= BCs make NFA holders aware of the procedure of obtaining loan from the bank, AC10= NFA holders are being made aware by BCs of the procedure of opening and handling the accounts, AC11= The BCs sufficiently conducts awareness programme on personal finance management like savings and borrowings, AC12= BCs makes its customers aware about the disadvantages of dealing with the informal financial system (money lenders), AC13= BCs takes efforts to provide Information regarding Basic banking services of the bank through financial literacy programme to its customers, AC14= BCs provide suitable information regarding the facilities that customers can avail by opening NFAs, TA1= BCs make use of Kiosk banking technology devices to do computerized transactions, TA2= BCs make use of hand-held devices like Biometric Identifier to perform digital transactions, TA3= BCs makes emphasis on the maximum use of Information and Communication Technology (ICT) devices by customers in order to enhance technology-based services in rural and unbanked areas, TA4= BCs ensure that customers avail the GCC/KCC services from them, TA5= BCs provides access to ATMs to its rural customers, TPS6= There is an improvement in NFA customer savings, TPS7= The NFA holders are doing the transactions frequently in their NFAs, TPS8= There is a reduction in the frequent borrowing habits of customers from neighbors/ friends, TPS9= There is a reduction on the dependency of customers on local money lenders for financial needs.

Table 4.36. Model Fit of Variables using CFA

Constructs	CMIN/DF	GFI	AGFI	CFI	NFI	TLI	RMSEA
CFA Model Fit	2.260*	.897	.840	.929	.921	.917	.075

*Note: *Significant at 0.01 level*

4.2.4. Validity and Reliability of the Constructs

The convergent and discriminant validity of the constructs are determined using average variance extracted (AVE), composite reliability (CR), maximum share squared variance (MSV) and average share squared variance (ASV).

Table 5.4 presents the AVE, CR, MSV and ASV of the constructs. The AVE value above 0.5 and convergent validity above 0.7 indicates acceptable convergent validity in the items of the construct. It is also observed that the composite reliability is greater than AVE in all constructs, therefore establishing the convergent validity of the construct. The discriminant validity is established since AVE is greater than both MSV and ASV.

Table 4.37. AVE, CR, MSV and ASV of the Factors

	CR	**AVE**	**MSV**	**ASV**
Awareness Creation	0.88	0.87	0.86	0.85
Technology Adoption	0.88	0.86	0.84	0.84
Change in Transaction Pattern	0.89	0.87	0.86	0.85

Table 4.38 presents the instruments reliability using Cronbach's alpha. The Cronbach's reliability value showed an acceptable internal consistency (>0.60) in all the constructs.

Table 4.38. Construct's Reliability

Construct	**No. of Items**	**Cronbach's alpha (α)**
Awareness Creation	14	.876
Technology Adoption	6	.857
Change in Transaction Pattern	9	.804

4.2.5. Hypothesis Testing/Path Analysis

After applying confirmatory factor analysis and checking for reliability and validity, structural equation modelling is conducted by using AMOS to assess the fitness of structural model. The SEM technique is used as the main statistical tool to test the main hypothesis proposed in the study. The structural relationships between latent constructs represented by single headed arrows are specified according to the hypothesis established. In summary, the present structural model includes (a) path from AC to TPS and (b) path from TA to TPS. On the basis of SEM results, the framed hypothesis has been tested (Table 4.39) and the results are as under:

2.1: Awareness creation has a significant positive impact on change in transaction pattern and savings.

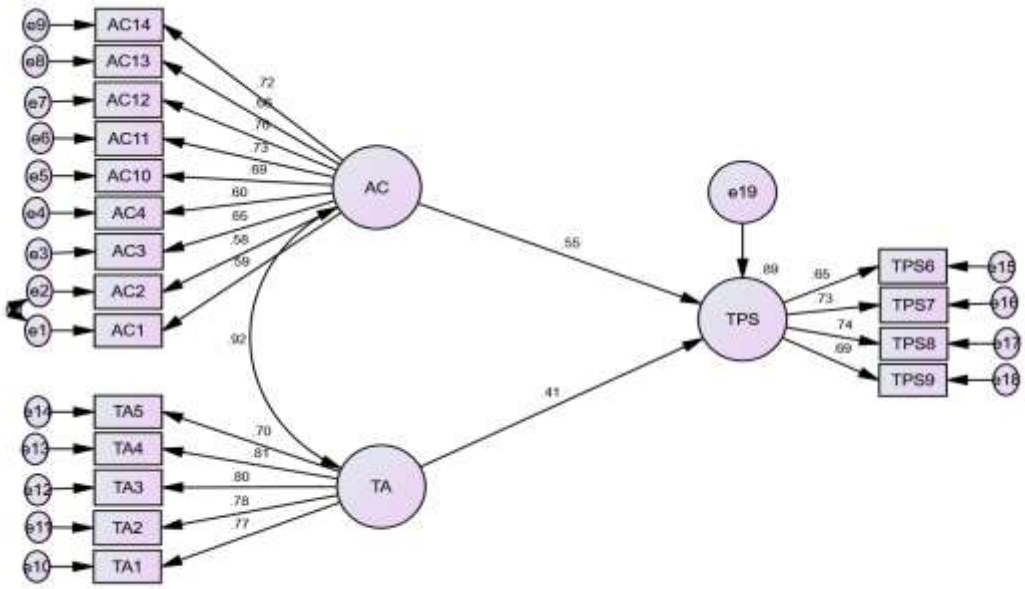
2.2: Technology adoption has a significant positive impact on change in transaction pattern and savings.

It becomes evident from the SEM results (Figure 4.3 and Table 4.39) that awareness creation has a significant positive impact on the change in transaction pattern and savings (β= 0.55, p= 0.000). It is also inferred from the SEM results that technology adoption also has a significant positive impact on the change in transaction pattern and savings (β= 0.41, p= 0.000). Therefore, both hypothesis 2.1 and 2.2 stands accepted.

Table 4.39. Results of Hypotheses Testing

Hypotheses	SRW	p-value	Accepted/ Rejected
2.1: Awareness creation has a significant positive impact on change in transaction pattern and savings.	0.55	.000	Accepted
2.2: Technology adoption has a significant positive impact on change in transaction pattern and savings.	0.41	.000	Accepted

Figure 4.3. Final Model



Note: AC= Awareness Creation, TA= Technology Adoption, TPS= Change in Transaction pattern and Savings.

4.3. Summary of Findings

In essence, the findings in this chapter indicate a positive effect of effectiveness of BCs. From the analysis to assess the effectiveness of BCs from the perspective of customers the finding suggests that there is impact of access and availability on the level of usage. The increase in the level of usage also has a positive impact on the economic empowerment of the customers after they open the BSBDA. There has been a significant increase in the savings of customers after opening the BSBDA; on the other hand there has also been decrease in the borrowings.

Moreover, from the analysis to assess the effectiveness of BCs from the perspective of banker, The SEM model depicts that both the variables i.e.; awareness creation by BCs and technology adoption by BCs have a significant positive impact on the change in transaction pattern and savings of the customers.

Chapter – 5

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

5.1 Summary of Findings

5.2 Implications and Recommendations

5.3 Study Limitations

5.4 Scope for Future Research

5.5 Conclusion

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

The present work investigates the usefulness of Business Correspondents (BCs) in rendering the banking services from the perspective of customers in the Kashmir region of the Union Territory of Jammu & Kashmir. Further it attempts to measure the effectiveness of these BCs in terms of customers economic empowerment from the perspective of bankers. Hence, this chapter provides the findings of the research work, implications and recommendations of the study to various stakeholders. It also highlights the limitations of the study and the directions for future research.

5.1. Summary of Findings

Reserve Bank of India (RBI) with the help and aid of all type of banks has tried to bring about financial inclusion, to include the larger population into the formal financial system, by implementing various programmes. Over the years different programmes have been implemented in order to accelerate the financial inclusion so that the benefit of the formal financial system reaches the common man *(RBI, 2013).* Since the nationalisation of the banks, RBI and GoI has taken measures in a planned and phased manner to include the unbanked population into the ambit of formal financial system *(Mundra, 2016).* Other initiatives taken up by RBI and GoI include, expansion of bank branch network, establishment and expansion of co-operative bank network to a larger extent and establishment of Regional Rural Banks (RRBs), introduction of priority sector lending, lead bank scheme, formation of self-help groups and introduction of Kissan/General credit card. Further relaxed Know Your Customer (KYC) norms were also introduced to widen the reach. Financial inclusion through NFAs as an innovative approach to financial inclusion was introduced in the year 2005 followed by another new concept called “BC model”. The BC model was introduced in 2006 to further facilitate the financial inclusion at the door step of the customers. However, the efforts and the new programmes aimed at financial inclusion in India were challenged by both demand and supply side issues. In the demand side, the primary obstacles to financial inclusion were lack of awareness, low income and assets, social exclusion, and illiteracy. On the supply side, the barriers included distance from bank branches, inconvenient branch timings, cumbersome and hectic

banking procedures and KYC documentation, unsuitable banking products and services, language barriers, high transaction costs, and the attitude of bank employees towards NFA customers.

Accordingly, this research attempted to understand the usefulness of the BCs which have been introduced to help India in achieving financial inclusion. So, the research examines the usefulness of Business Correspondents (BCs) in rendering the banking services from the perspective of customers in the Kashmir region of the Union Territory of Jammu & Kashmir. Further it attempts to measure the effectiveness of these BCs in terms of customers economic empowerment from the perspective of bankers.

The methodology adopted for the study is of descriptive and causal in nature. Though secondary data was used for the study, but it primarily focused on primary data to assess the impact on customers from both bankers and customers' perspective. The scope of the primary data for the study is restricted to the Kashmir region of the Union Territory of Jammu & Kashmir consisting of ten districts. This survey covered the bank employees working in bank branches of the above districts and the BSBDA customers. Further the data are collected from the different stakeholders i.e., customers and bankers of four banks which are State Bank of India, Punjab National Bank, Jammu & Kashmir Bank and Housing Development Finance Corporation. The data were collected by administering two separate questionnaires for different stakeholders. A total sample of 430 customers and 227 bankers have been taken for this study. The questionnaire was validated through convergent and discriminant validity, Cronbach's alpha, and composite reliability. The factor structure of the questionnaire is determined using confirmatory factor analysis. Trend analysis and descriptive statistics (mean and frequency) have been used to analyse the research objectives and path analysis through structural equation modelling and panel regression has been used to test the hypothesis.

I. Major Finding regarding the effectiveness of BCs from the perspective of customers

In order to analyse this objective of the study, two hypotheses were created. The summary of the findings are as below

1.1. Access and Availability has a significant positive impact on the level of usage.

The findings did suggest that Access and Availability is has an impact on the level of usage, but there were some discretions. The distance of bank branch does affect the level of usage in all fronts. Considering that it is not possible to have brick and mortar branch at every village due to the vast area expansion of the region and the terrain, the BC model makes it a great alternative to increase the level of usage of banking facilities. The easier access to BC office (distance) does not matter much to the usage but it does aid the customer, where their visit increases implying they will have more activities and also aids them to maintain a higher amount in their account.

In terms of availability of BC for level of usage was not most important, the findings are not clear-cut. Since very few BC's were available through phone, the variable could not be used in half of the regression analysis, but yet it had a significant impact on the usage level. Not only does this reduce the visit to bank branch but it also helps customers to maintain higher balance in their account. This also gives a hint towards the ICT aiding in financial inclusion and easier availability of banking facilities to customers. The findings did show that with BC being available through phone, increases the visit to BC office, this could be because with more communication with BC, give more avenues for customers to utilize BC's services, making their visit more frequent.

1.2. There will be a significant positive impact of Usage on economic empowerment of customers.

The level of usage has a significant impact on the economic empowerment after having a BSBDA. The economic empowerment was looked at through the fact that the customers' income sources had widened after the BSBDA and if their or their family member's skill had improved after the BSBDA. The problem of inactive saving accounts is prevalent in Indian banking system. Though the visit to BC office did not matter, but the visit to the bank branch, did affect these two factors of economic empowerment significantly and positively. More balance maintained in these accounts once they did led to improvement in the skill level. Customers who only maintained minimum balance in these accounts were less likely to have widened

source of income and improved skills. Higher withdrawal transactions meant less likely to have widened sources of income after BSBDA. A caution is to be taken while interpreting this finding. The cause-and-effect relation is ambiguous. One can look at this as due to widened source of income and improvement in skills, there would be more level of usage of the accounts. What has been investigated here is that once the BSBDA is opened, there are chances that they remain dormant. SO, what one is trying to look into here is that would the higher usage of these accounts lead to better economic conditions for customers who open BSBDA. It was interesting to find out that after having a BSBDA account there is a significant increase in savings and a significant decrease in the borrowings. The BSBDA account and its usage do seem to give customers more source of income and could be the reason for increase in savings and decrease in borrowings. It was also observed as mentioned in earlier chapter, that after BSBDA, one more source of borrowing was banks apart from the informal sources. This also gives an economic empowerment to the customers.

II. Major Findings regarding the effectiveness of BCs from the perspective of bankers.

The methodology used to test the hypotheses 2.1 and 2.2 for this objective was AMOS SEM. From the SEM results, it has been revealed that that awareness creation has a significant positive impact on the change in transaction pattern and savings (β= 0.55, p= 0.000). It can be inferred from the results that if BCs create more awareness among the customers, it will increase the frequency of transactions in BSBDA accounts which in turn will increase the savings also in those accounts. It is also inferred from the SEM results that technology adoption also has a significant positive impact on the change in transaction pattern and savings (β= 0.41, p= 0.000). So, if more and more advanced and innovative technological devices are being used by the BCs, it will also increase the transaction pattern and savings behavior among the BSBDA holders.

5.2. Implications and Recommendations

The increase in BCs connected over the years in the branches of the study region, indicates the banks has been progressively using the BC model to aid to their ambition of bringing the population under the ambit of financial inclusion. The banks have utilized services of the BCs to spread awareness through workshops and meeting to

the masses in the unbanked areas. These tactics have proved successful in increasing the frequency of transactions and also customers' savings, which in turn help the banks, increase their business. The banks have also positively changed their transaction pattern by training BCs in using the innovative technological devices and facilitating them with devices like, kiosk devices and hand-held ATMs. Thus, the banks in Kashmir regions have been utilizing BCs in rendering financial services successfully. Based on the findings of the study, it can be suggested that banks can bring in more BCs under their preview in order to serve more unbanked areas and step further towards total financial inclusion. The existing BCs can be empowered with the latest technologies adopted in the fintech sector.

The customers are more likely to make better usage of banking services with easy access to the branches. Given that brick and mortar branches are not feasible in every region, increasing the frequency of BC visit would make these facilities more accessible to the customers. The use of technology in the financial sector has already proved to increase the efficiency of the financial institutions. The BCs being available through phone is a very basic yet effective method to connect to the customers in far off places. It was observed that though BCs being available through phone affected usage positively, but very few BCs were available through phone. Thus, making BCs available to customers, not only physically but through such methods could further increase the efficiency of the BC-model. Additionally, BSBDA has been beneficial to the customers by helping them become economically empowered through decrease in borrowings, increase in savings, improved skills and widening the source of income. BC's role in bringing BSBDA to the financially excluded sections of the society has been phenomenal. Thus, with larger number of BCs, more financially excluded people would get covered under the BSBDA consequently leading to their economic empowerment.

5.3. Study Limitations

Efforts have been taken to make this study more reliable, valid and exhaustive, yet certain limitations could not be ruled out and are required to keep in mind whenever its findings and suggestions are considered for implementation. The limitations are as follows:

i) The scope of the study is limited to Kashmir region only because of the restricted resources and time constraint.

ii) It is perception-based study not covering the financial data with regard to economic empowerment and saving pattern of BSBDA customers due to constrains in attaining financial data.

iii) The study has covered BSBDA beneficiaries through commercial banks only. Other institutes like post office, cooperative banks, Regional Rural Banks are excluded from the study.

5.4. Scope for Future Research

The future research can be extended to analyse financial inclusion implementation and impact of other entities such as post offices, cooperative banks, Regional Rural Banks etc.

The present study covered only Kashmir. The future researchers can widen the geographical coverage and conduct for entire J&K to understand the status at the state level.

A comparative study of J&K state and some similar nature of north-eastern states or the select similar states in the rest of India can be conducted to analyse the status of effectiveness of BCs.

5.5. Conclusion

The concept of BSBDAs is one of the commendable initiatives taken by the Government to bring in financial inclusion of the vulnerable population living across the states in India. The financial inclusion involves three important stakeholders such as the customers, banks and business correspondents. It was aimed at the excluded sections to bring them under the ambit of formal financial system and thereby help them in their economic empowerment. Hence, the success of this programme lies on the whole-hearted efforts of all the stakeholders. Though from the last few years, the programme achieved some success in terms of widening the reach covering unbanked areas, opening of more than 300 million accounts, but still there are important issues such as low level of awareness, low level of usage, and high dormancy rate of accounts which are to be addressed in the coming years. The role of GoI, RBI and commercial banks is paramount in addressing the issues highlighted by the researcher

in the findings chapter. The role of BCs can also be strengthened since they are the main connecting link between the last mile stakeholders i.e., BSBDA customers and the implementing agencies i.e., banks. Given the geographical and demographic nature of India, implementing any scheme/programme is always challenging. There are many research works done on financial inclusion in the recent years and the achievements and issues & challenges are highlighted. Prompt and adequate intervention based on the recent findings by the Government, RBI and banks certainly will help the programme achieve its objectives thereby ensure economic empowerment of the people of India.

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ANNEXURE-I

USEFULNESS OF BUSINESS CORRESPONDENTS IN KASHMIR REGION-A PERCEPTION OF CUSTOMERS AND BANKERS

"QUESTIONNAIRE/SCHEDULE FOR CUSTOMER SURVEY"

Dear Respondent, we are currently running a Macro research project sponsored by the **Indian Institute of Banking & Finance** on the above subject. We earnestly request your valuable time and attention to help us fill the questionnaire/schedule. We also assure you that the responses given by you will be kept confidentially and will be used for academic research purpose only.

Abbreviations: *(1). BSBDA- Basic Savings Bank Deposit Account (2). BC- Business Correspondent (3). SHG- Self-Help Group (4). KYC- Know Your Customer (5). KCC/GCC- Kissan/General Credit Card*

I. Customer Profile:

1. Name (optional):

2. State _____ District_____ Region _____ Panchayat/ Ward ____

3. Gender: Male ☐ Female ☐ Others ☐

4. Age: Below 30 ☐ 31 to 40 ☐ 41 to 50 ☐ Above 50 ☐

5. Residence: Semi-urban ☐ Urban ☐ Rural ☐

6. Social Group: SC ☐ ST ☐ OBC ☐ Others ☐ specify_____.

7. Marital Status: Never married ☐ Currently married ☐ Divorced ☐ Widowed ☐

8. Educational Qualification: Not Literate ☐ Literate without formal schooling ☐ Literate below primary ☐ Primary ☐ Middle ☐ Secondary ☐ Higher secondary ☐ Diploma/Certificate/Degree course ☐ Graduate ☐ Postgraduate and above ☐

9. Occupation: Unemployed ☐ Agriculture/Labourer/household helper ☐ Govt./Pvt. Employee ☐ Self-employed own account worker ☐ Employer ☐ Casual labour ☐ Student ☐ Others ☐ specify_____.

7. Monthly Income: _____.

Up to 5000 ☐ 5,001 to 10,000 ☐ 10,001 to 20,000 ☐ Above 20,000 ☐

8. Type of bank where you have an account: Public Sector Bank ☐ Private Sector Bank ☐.

9. Name the bank in case you are not aware of the type of your bank_____)

10. For how many years have you had an account with the bank? _____.

Less than 1 year ☐ 1 to 2 years ☐ 2 to 5 ☐ More than 5 years ☐

11. What is your main source of income?

Salary/wages ☐ Agriculture ☐ Govt. Subsidies/Funds ☐ MNREGA Payments ☐ Others ☐

II. Access; Availability and Level of Usage of BSBDAs to customers:

1. Do you find it convenient to directly deal with the bank or through BCs? _____)
2. Why? _____)
3. How far is a. the nearest bank branch?_____)
   b. the nearest bank branch in which you have account?_____)
4. How did you opened the bank account? Why?
5. Why had you not opened the account before meeting the BCs? _____)
6. Which bank's BCs are easily accessible to you? _____)
7. Distance of BC office from your residence?
8. How often : a. do you visit bank branch?
   b. do you visit BC office?
9. In case of emergent requirement of withdrawing money, how do you meet it?
10. Are BCs readily available for such services?
11. Are BCs available to you through telephone; messages?
    If Yes, how often do you use this
12. Are the BCs cooperative
    Friendly
    Knowledgeable
13. How long does a BC take to respond to your queries
14. How long does a BC take to redress your problems
15. How do you seek information regarding your accounts
16. How many deposit transactions do you do monthly in your BSBDA? _____.
    None ☐ Up to 5 ☐ 6-10 ☐ More than 10 ☐
17. How many withdrawal transactions do you do monthly in your BSBDA? _____.
    None ☐ Up to 5 ☐ 6-10 ☐ More than 10 ☐
18. What is the average money you maintain in your BSBDA? _____.
    Less than 1,000 ☐ 1,000 to 5,000 ☐ 5,001 to 10,000 ☐ More than 10, 000 ☐
19. Do you maintain only a minimum balance in your BSBDA?
    Yes ☐ No ☐
20. How do you keep your savings?

21. Please read and answer the following

Facilities	Are you aware of these facilities provided by the bank	How did you get this information	Have you applied to avail for this facility	How did you apply for the same	How often do you use this facility
Debit Card					
Loans					
Overdrafts					
KCC/GCC					
Insurance					
Cheque book					
Passbook					
Net/Mobile banking					

22. Please refer to following question related to awareness and usage

ATM					
Kiosk at BCs					
Hand-held Biometric at BCs					

III. Benefits Derived through BCs for BSBDA holders:

1. Has opening an BSBDA been able to widen the income sources? If so, which sources? _____.
2. Has opening BSBDA allowed an increase in income? If so, how? _____.
3. What were your borrowing sources for emergency funds before BSBDA? _____.
4. What are your borrowing sources for emergency funds after BSBDA? _____.

5. Has having access to bank facilities helped you or a family member improve their skills? _____.
6. What kind of assets have you bought with the help of banks/BC? _____.
7. How do you think the access to bank/BC facilities improved your role in the community/society? _____.

A. Benefits in relation to Economic Empowerment

Kindly answer the following related to changes after opening BSBDA

	Before opening BSBDA	After opening BSBDA
Savings (monthly)		
Easy accessibility of savings		
Borrowings (neighbours/friends/relatives)		
Borrowings from money lenders		
Debt status		
Asset holding: House: Land: jewellery Other forms		
Consumption pattern of hhd: Food habits weekly meat consumption weekly dairy product consumption Weekly vegetable consumption		
Children education: expenses Institution		
Medical and health facilities expenses health cards		

B. Benefits in relation to Social Empowerment
Change in status

	Before BSBDA	After BSBDA
Participation in Community activities		
Interaction with community people		
Invitation to participate in community activities		
Participation in relative and social gatherings		
Claiming benefits from Govt schemes		
Helping others in the community		

C. Benefit Derived from BSBDAs in relation to Socio-Economic Development:

	Before ac	After BSBDA
Family Income Monthly		
Per capital Income		
Emergency requirement met		
Participation in cultural activities social activities religious activities		
Food consumption more egg/meat/paneer quality of rice amt spent on food monthly		
Avg Amt spent on health facilities monthly		
Amt spent on education of children		

If you have any suggestion that you would like to put forth regarding BSBDAs availability, access, usage, issues etc., please share:

_____
_____
_____
_____.

"Thank you very much for your co-operation"

ANNEXURE-II

USEFULNESS OF BUSINESS CORRESPONDENTS IN KASHMIR REGION-A PERCEPTION OF CUSTOMERS AND BANKERS

"QUESTIONNAIRE FOR BANKERS"

Dear Respondent, we are currently running a Macro research project sponsored by the **Indian Institute of Banking & Finance** on the above subject. We earnestly request your valuable time and attention to help us fill the questionnaire. We also assure you that the responses given by you will be kept confidentially and will be used for academic research purpose only.

Abbreviations: *(1). BSBDA- Basic Savings Bank Deposit Account (2). BC- Business Correspondent (3). SHG- Self-Help Group (4). KYC- Know Your Customer (5). KCC/GCC- Kissan/General Credit Card*

I. Brief Profile:

1. Type of the Bank you are working with: Public Sector Bank ☐ Private Sector Bank ☐

2. Place: Urban ☐ Semi- Urban ☐ Rural ☐

3. Designation: Senior/Branch Manager ☐ Assistant Manager ☐ Clerk/Cashier ☐

4. Years of Service: Less than 2 years ☐ 3- 5 years ☐ 6- 10 years ☐ More than 10 years ☐

5. How many customers in the bank are connected to BCs_____?

6. How often does a single BC visit your branch in a month?

7. In the past five years, what is the status of:

Years	2022-23	2021-22	2020-21	2019-20	2018-19
How many BCs are connected through your branch					
How many customers are connected through BCs					
How many new accounts were opened through BCs					

What amount (%) has been active accounts that came under BCs					
Number of villages covered through BCs					

8. In the last five years, the numbers of transaction/use/issue of products through BCs

Years	2022-23	2021-22	2020-21	2019=20	2018-19
Kiosk					
Loans					
KCC					
GCC					
Debit cards					

9. Awareness creation by BCs

Years	2022-23	2021-22	2020-21	2019-20	2018-19
Number of workshops organised					
Number of meetings held					
Number of Awareness campaigns done					

10. How many customers maintain an account with BCs?

a. Below 100 b. Between101 to 250

c. Between 251 to 500 d. Above 500

11. How many customers who have opened an account through BCs maintain only minimum balance?

a. Below 100 b. Between101 to 250

c. Between 251 to 500 d. Above 500

12. Are BCs serious about delivering the banking products and services to customers?

13. Do customers feel BCs are trustworthy to avail services from them.

14. Has the goal of financial inclusion achieved by banks by making use of BCs?

15. Whether the banking business in terms of number of customers increased or not after the use of BCs?

16. Whether the banking business in terms of revenue increased or not after the use of BCs?

17. Are BCs providing the products and services to the customers at their doorsteps?

18. Do customers feel convenient in dealing with BCs?

19. Do customers get all the products and services from BCs?

20. How many Basic Savings Bank Deposit Accounts (BSBDAs) are active?

a. Below 100 b. Between101 to 250

c. Between 251 to 500 d. Above 500

Instruction: Please share the correct information on the basis of your knowledge and experience. The responses are to be recorded on five-point Likert-scale namely, "Strongly Disagree (1-SD)", "Disagree (2-D)", Neutral (3-N)", "Agree (4-A)", "Strongly Agree (5-SA)" respectively.

II. Awareness creation by BCs among customers:

Please read the following statements on Awareness creation by BCs among customers and (✓) tick the appropriate column.

S.N	Statements	SD(1)	D(2)	N(3)	A(4)	SA(5)
1	BCs make BSBDA holders aware that opening of bank account will benefit them in making savings.					
2	BCs make BSBDA holders aware that borrowing from a formal financial institution is cheap and transparent source of finance.					
3	BCs provide suitable information regarding the facilities that customers can avail by opening BSBDAs.					
4	BCs make BSBDA holders aware of the activities related to filling up applications for deposits and withdrawals.					
5	BCs make BSBDA holders aware of the procedure of obtaining loan from the bank.					
6	BCs make BSBDA holders aware of various products and services which bank provides them under BSBDA.					
7	BCs make BSBDA holders aware of the overdraft facilities of the bank.					
8	BCs make BSBDA holders aware about the technology products/services such as (ATM, CDM, Internet and Mobile banking).					
9	BCs make BSBDA holders aware of the					

	support services which bank provides to them such as Insurance and Locker facilities.					
10	The BCs takes efforts to routinely conduct awareness programme on the importance of maintaining account with the bank.					
11	BSBDA holders are being made aware by BCs of the procedure of opening and handling the accounts.					
12	The BCs sufficiently conducts awareness programme on personal finance management like savings and borrowings.					
13	BCs makes its customers aware about the disadvantages of dealing with the informal financial system (money lenders).					
14	BCs takes efforts to provide Information regarding Basic banking services of the bank through financial literacy programme to its customers.					

III. Technology adoption by BCs:

Please read the following statements on the Technology adoption by BCs from the perspective of bankers and (✓) tick the appropriate column.

S.N	Statements	SD(1)	D(2)	N(3)	A(4)	SA(5)
1	BCs make use of Kiosk banking technology devices to do computerized transactions.					
2	BCs make use of hand-held devices like Biometric Identifier to perform digital transactions.					
3	BCs makes emphasis on the maximum use of Information and Communication Technology (ICT) devices by customers in order to enhance technology-based services in rural and unbanked areas.					
4	BCs assist the customers to avail the benefits of GCC/KCC facility					
5	BCs provides access to ATMs to its rural customers.					
6	BCs make use of the technological infrastructure provided at the Common Service Centres (CSC).					

IV. Change in transaction pattern and savings:

Please read the following statements and record your response [(✓) tick the appropriate column] with respect to change in transaction pattern and savings post introduction of BCs as a banking channel.

S.N	Statements	SD(1)	D(2)	N(3)	A(4)	SA(5)
1	There is an increase in the account base of banks.					
2	There is an improvement in the bank deposits made by BSBDA customers.					
3	There is an increase in the sanctioning of loan to customers.					
4	Most of the BSBDA customers are availing the overdraft facility of the bank.					
5	There is an improvement in the sale of other products and services.					
6	There is an improvement in BSBDA customer savings.					
7	The BSBDA holders are doing the transactions frequently in their BSBDAs.					
8	I see the benefit of BSBDA has financially empowered the customers due to BSBDA savings.					
9	I see most of the customers are able to repay the loans and borrowings on time.					

Any other information you want to share in relation to BSBDAs:

_____
_____
_____
_____.

"Thank you very much for your co-operation"