



## FINANCIAL INCLUSION AFTER PMJDY: A CASE STUDY OF PALAMU DISTRICT OF JHARKHAND

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*In India, providing access to formal financial services and products has been a thrust of policy measures for several decades. With this regard, various initiatives have been taken by the RBI and the government of India to enhance financial inclusion across the country. The latest move to give leverage to financial inclusion drive is the launching of 'Pradhan Mantri Jan Dhan Yojana'. The scheme launched on 15th August 2014 is arguably the largest financial inclusion drive in the world. An affirmation of this by the Guinness Book of World Records is a feather in cap of the Department of Financial Services, the implementing arm of Ministry of Finance. However, despite these initiatives, a sizeable portion of population (about 50%) particularly, rural and economically vulnerable groups, continue to remain excluded from the basic financial services in India. This paper makes an attempt to study the extent of financial inclusion after PMJDY in Palamu district of Jharkhand. A cross-sectional research on 215 PMJDY account holders in different banks in Palamu district was conducted through a structured questionnaire. Three dimensions of financial inclusion, viz., access, availability and usage were selected. Beneficiaries' perceptions related to each dimension were recorded on five point Likert Scale. Exploratory factor analysis was used to analyse and interpret the data. It is observed from the study that although there has been an improvement in access, availability and usage of banking and financial services, the impact differs among various socio-economic groups. In order to make financial inclusion more meaningful and effective, whole-hearted effort is called for from all the corners of the society, viz., banks, beneficiaries and regulators.*

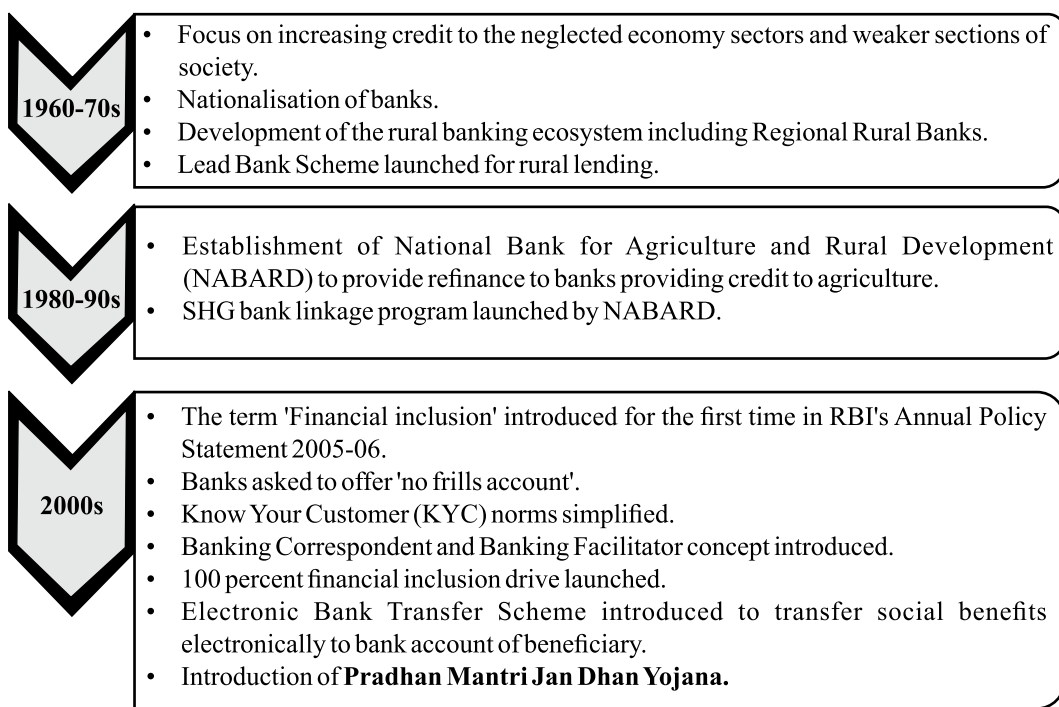
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### INTRODUCTION

Financial inclusion is described as the process of ensuring access to appropriate financial products and services needed by all sections of society in general and vulnerable groups such as weaker sections and low income groups in particular at an affordable cost in a fair and transparent manner by mainstream institutional players. These include not only banking products but also other financial services such as insurance and equity products. In India, providing access to formal financial services and products has been a thrust of policy measures for several decades. Policymakers are exploring ways and means to ensure greater inclusion of the financially excluded segments of the society. Successive Governments have made efforts to achieve this long-held goal and the apex bank RBI has undertaken various initiatives to enhance financial inclusion across the country. RBI has played the guiding role which helped commercial banks in achieving various objectives such as the introduction of MICR based cheque processing, Electronic Clearing Service (ECS), Electronic Funds Transfer (NEFT), Implementation of the electronic payment system such as RTGS (Real Time Gross Settlement), Cheque Truncation System (CTS), internet banking, Mobile Banking System etc. Figure 1 summarises the key stages in evolution of financial inclusion initiated by the government since 1960's.

The latest move towards financial inclusion in India was taken by Prime Minister of India Narendra Modi on 15 August 2014 by launching of **Pradhan Mantri Jan Dhan Yojana (PMJDY)**. It is the largest financial inclusion drive in the country since independence. This campaign aims to expand and make affordable access to financial services such as bank accounts, remittances, credit, insurance and pensions to 20 to 65 years age group.

## FIGURE 1: EVOLUTION OF FINANCIAL INCLUSION IN INDIA



### The benefits of PMJDY are:

- **Opening of no-frills accounts:** The Bank accounts opened under PMJDY do not require minimum balance. An overdraft facility up to ₹10,000 (US\$140) is also available after six months. Interest is on deposit. Free RuPay debit card for account.
- **Relaxation on know-your-customer (KYC) norms:** Persons who do not have valid identification document can also open bank account. This type of account call "Small Account", can be regularized within one year.
- **Engaging business correspondents (BCs):** Account opening and bank transactions are through business correspondent. Business correspondents are usually appointed in remote areas where banks do not have physical branches.
- **Use of technology:** Bio-metric based account opening and transaction are available through business correspondent. This eases banking operations for illiterate people.
- **Direct Benefit Transfer:** The government subsidies are directly transferred to the beneficiary's account. This reduces delay and leakage to get service.
- **Insurance:** Accidental insurance cover of ₹200,000 (US\$2,900) provides life cover of ₹30,000 (US\$430) payable on death of the beneficiary, subject to fulfillment of the eligibility condition, i.e., the Rupay card holder has performed at least one successful financial or non-financial customer induced transaction within 90 days prior to date of

accident including accident date.

The distinguishing outcome of this program is opening up of 15 million bank accounts under this scheme on inauguration day itself. The Guinness Book of World Records recognized this achievement, stating: "The most bank accounts opened in one week as a part of the financial inclusion campaign is 18,096,130 and was achieved by the Government of India from August 23 to 29, 2014". As on May 2019, 358 million bank accounts have been opened and over ₹984 billion (US\$14 billion) are deposited under the scheme. Also, 278 million RuPay Cards has been issued to beneficiaries. In this effort, the contribution of public sector banks was significantly larger than private sector and regional rural banks (Table 1).

**Table 1: Pradhan Mantri Jan-Dhan Yojana Statistics as on 29 May 2019 (in millions)**

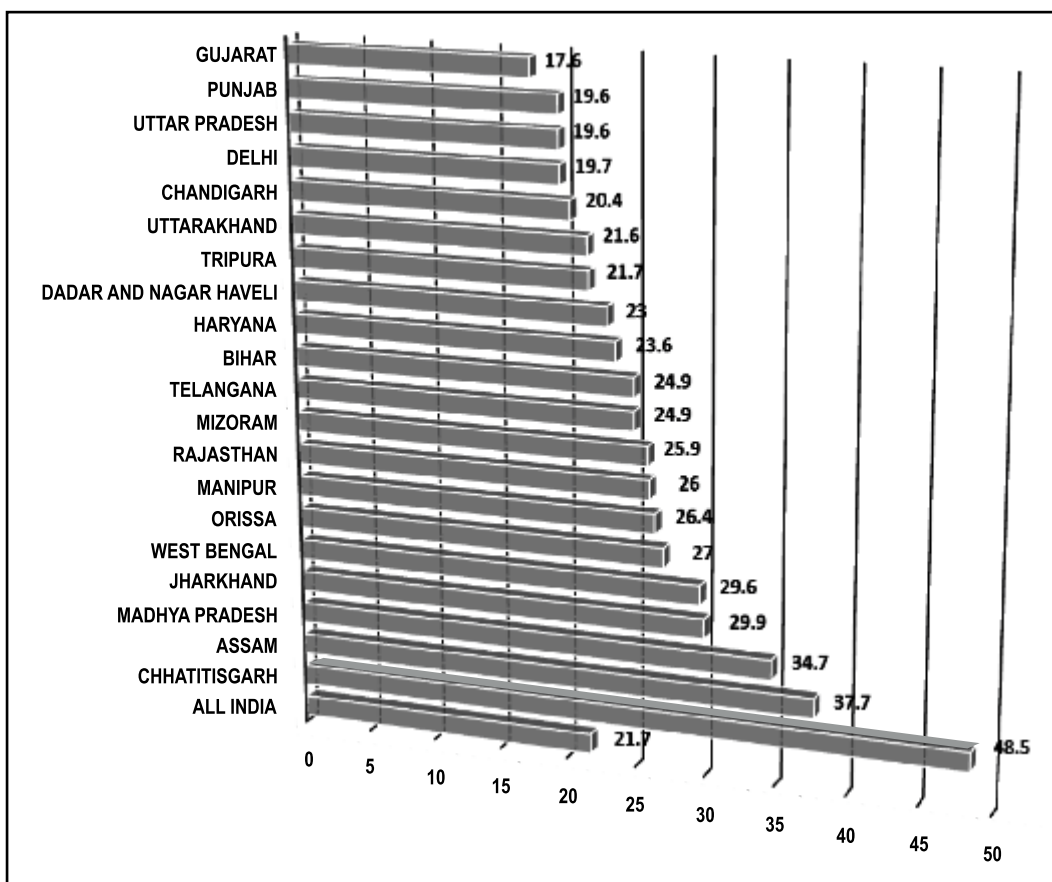
Bank Type	Number of Accounts				Balance in Accounts	Number of RuPay Cards
	Rural	Urban	Total	Female		
Public Sector Banks	154	130	284	150 (53%)	₹ 781 billion (US\$11 billion)	228
Regional Rural Banks	51	10	61	34 (56%)	₹ 172 billion (US\$2.5 billion)	39
Private Banks	6.9	5.6	12	6.7 (54%)	₹ 30 billion (US\$430 million)	12
Total	212	146	358	190 (53%)	₹ 984 billion (US\$14 billion)	278

Source: <https://pmjdy.gov.in>

### State wise Analysis

The PMJDY data for 29 states in India are provided in figure 2 and arranged in the increasing order of percentage of PMJDY accounts with respect to the state population. This measure reflects the success of the scheme in the state (higher the percentage, the better is the performance of the state in providing PMJDY accounts to the population in the state). It is evident from the chart that Jharkhand has outperformed most of the states and stands fourth after Chattisgarh, Assam and Madhya Pradesh.

**Fig 2: % of PMJDY Account Holders among the whole Population In Each State**



Source: <https://pmjdy.gov.in/statewise-statistics>

Among all the states, PMJDY scheme has been implemented most successfully in Chhattisgarh (49%) followed by Assam (37.7) and Madhya Pradesh (34.7). Jharkhand has also performed well with around 30% of PMJDY accounts with respect to the state population. However, there is wide variation among districts in Jharkhand. Delhi, Chandigarh, Mizoram have a larger number of PMJDY accounts in the urban population than in the rural population.

### Statement of the Problem

The initiatives of Government of India towards financial inclusion have paid off to a large extent in terms of increased network of bank branches and priority sector lending. However, a sizeable portion of population (about 50%) particularly, rural and economically vulnerable groups, continue to remain excluded from the basic financial services. There is dearth of micro-level studies to evaluate the performance of PMJDY and its impact on financial inclusion. An



analysis of these aspects may provide a comprehensive picture of the PMJDY to make the scheme more viable and sustainable. The present study aims to fill in this gap. The research paper is organized as follows. The second section gives a brief overview of the literature followed by research objectives, hypotheses and methodology section. The third section presents the results of the analysis and discussion. Under the fourth section, conclusion and limitations are described.

## **REVIEW OF SELECT STUDIES**

In the context of India, several studies have been conducted on issues related to banking the unbanked population. A brief review of literature of a few select studies is presented in the following analysis.

Tulasi et al. (2017) examined causes of involuntary exclusion from formal financial services and proposed solutions to them. A primary survey was conducted in slums of Delhi to elicit information on financial activities of locals. The study found that there was a demand side issue as these households did not make enough savings and were indifferent to formal and informal institutions when it came to borrowing. Authors suggested improving earning standards and devising tailored and targeted inclusion policies at sub-regional levels.

Schueth and Moler (2017) studied impact of demonetization on financial inclusion using a panel survey of 1,600 individuals before and after announcement of PMJDY in the states of Gujarat, Madhya Pradesh, and Rajasthan. The study found increased bank account registrations and active use of those accounts. It also observed that demonetization increased utilization of various financial services overcoming longstanding demographic barriers.

Günther (2017) used pan-India data from a survey of 135,147 individuals and another 16,000 households before and after the introduction of the PMJDY to understand trends in financial inclusion. The surveys were conducted in four lowest income states in India during 2013-15. The analysis indicated that PMJDY had significantly increased likelihood of previously unbanked population owning an account. But the author also noted a less substantial effect on the most marginalized segment of the people and large regional differences.

Ranade (2017) attempted to draw attention to the potential of fintech and its impact on financial services. He discussed the role of information management and its potential use coupled with the Jan Dhan-Aadhaar-Mobile phones (JAM) infrastructure that can give a big push to financial inclusion. The author also recommended caution in terms of privacy and ownership of data that would be generated in the process.

Bhanot and Bapat (2016) studied financial inclusion while incorporating the contribution of SHG-bank linkage programme thereby highlighting multiplier effect of Self-help groups (SHGs). Financial inclusion was evaluated based on data on branch penetration, credit penetration and deposit penetration collected during 2000-12. The authors

concluded that in rural areas, branch penetration had stagnated, but credit and deposit penetration had improved with a promising improvement due to SHG-bank linkage programme.

Mukhopadhyay (2016) pointed out asymmetry in evaluating financial inclusion from supply side and demand side variables. The author used data from a pan-India survey of a representative adult population, to compute a financial inclusion index for 22 states capturing demand-side information. The author found differential access to bank credit between poor and non-poor in most of states and that non-poor persons were more likely to save in a bank compared to poor. Also, to save money, keeping it at home and in chit funds was preferred even in non-poor states. He noted that merely giving access to financial services may not help achieve satisfactory results as actual usage of these services was not guaranteed.

Ghosh and Vinod (2017) used All India Debt and Investment Survey data (2013) to analyse access to and use of cash loans by households and relevance of gender. The authors found that female headed households were less inclined to access formal modes of finance and more inclined to access informal finance. Women faced restraints due to both demand and supply factors that impeded their access to and use of formal financial services.

The report by IFMR (2017) discussed results of case studies focusing on digital literacy and in-depth quantitative surveys, and focus group discussions with consumers and service providers. The results drew attention to shift in challenge of digital finance from willingness and ability to its access and regular usage. There was a need to systematically develop local ecosystem to bring more users to accept digital finance. Further, digital financial data generated by low-income consumers can be used to discern patterns in payments, savings, credit which can help service providers design targeted financial products catering to diverse and specific segments of society. But these potentials remained untapped as digital finance ecosystem was yet to be scaled up beyond urban financially integrated individuals.

### **The Research Objective**

The research objective of this study is to determine whether and to what extent PMJDY has an impact on financial inclusion. The specific objectives are:

1. To study the socio-economic profile of PMJDY beneficiaries
2. To evaluate the effectiveness of PMJDY on financial inclusion in Jharkhand
3. To make suggestions for effective and efficient implementation of PMJDY for increased financial inclusion

### **Research Questions/ Hypotheses**

On the basis of the above discussion, following hypotheses is proposed for the study:

1. Access to financial services has improved after PMJDY
2. Availability of financial services has improved after PMJDY
3. Usage of financial services has improved after PMJDY
4. The impact of PMJDY on financial inclusion (i.e. access, availability and usage) differs among socio-economic profiles (age, qualification, caste, income etc.) of beneficiaries

## **RESEARCH METHODOLOGY**

### **1. Data Collection**

Data were collected from both primary and secondary sources. Primary data for the study were gathered through self-developed schedule consisting of two sections, one general and other to elicit information about three dimensions of financial inclusion namely, access, availability and usage of financial/banking services. A stratified multi stage sampling technique is used for the purpose of the study. The primary data is collected from 215 PMJDY beneficiaries in Palamu district of Jharkhand state of India through a well-structured questionnaire by face to face interview. Survey instruments were administered personally. First of all, the study area of Palamu district in Jharkhand state was selected. In the second stage, three mandals /blocks were selected from palamu district .After choosing blocks, three villages from each mandal were selected on a random basis. In the next stage, three banks were selected randomly from each village and in the final stage comprehensive list of PMJDY account holders were collected from the chosen banks. From this list, 215 beneficiaries were randomly selected from each bank using proportional random sampling method. After dropping the outliers, the total number of sample was around 200. Information relating to these dimensions were collected on five point Likert scale (5<----1>) where 5 denotes strongly agree and 1 denotes strongly disagree. Suggestions were kept in open ended form to get specific response. A brief overview of the three dimensions of financial inclusion is as under:

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

The items of the construct consisted of access dimension incorporating 17 items (Sarma & Pais, 2008; Kumar, 2011 and Gupte et al., 2012), availability containing 18 items (Sarma & Pais, 2008; Kumar, 2011 and Gupte et al., 2012), usage including 9 items (Sarma & Pais, 2008; Kumar, 2011 and Gupte et al., 2012),

Thereafter, various statistical tools such as mean, standard deviation, Exploratory Factor

Analysis, one-way ANOVA, were used to derive meaningful results. Secondary information was collected from various journals, published information from internet, RBI reports and magazines.

## **II. Data Analysis**

The multivariate data reduction techniques of factor analysis has been used with the help of SPSS which is the most appropriate for the present study as it involves the examination of interrelationships among variables and reduces large number of variables into few manageable sets (Stewart, 1981). Exploratory factor analysis (EFA) has two primary functions i.e., data summarization and data reduction. In data summarization, factor analysis derives underlying dimensions that when interpreted and understood, describes the data in much smaller numbers of concepts than the original individual variables. Data reduction can be achieved by calculating scores for each underlying dimension and substituting them for original variables. This is done through factor score. The data reduction is performed in four steps, first inter-item correlation is checked, the items with value less than 3 are removed, in the second step, anti-image correlation matrix, the items with value less than .50 on the diagonal axis are deleted. In the third step, the extracted communalities are checked and items with values less than .50 are ignored for further analysis. In the fourth & the final step, rotated component matrix, statement with cross or multiple loading and values below .50 are deleted.

Eigen value equal to or more than one criterion has been used to determine the number of components to be extracted for further analysis (Stewart, 1981). KMO measure of sampling adequacy has been used to verify the appropriateness of a factor loading, where the value greater than .50 is acceptable, values between .50 & .70 are mediocre, .70 & .80 are good, .80 & .90 great and above .90 superb (Malhotra, 2002). Further, Bartlett test of sphericity, which is also called zero identity matrix, has also been used to determine correlation among the variables using the Statistical Package for Social Sciences (SPSS).

## **RESULTS AND DISCUSSION**

**Socio-Economic Profile of Sample Respondents:** The socio -economic profile of sample respondents are presented in Table 2.

**Age Composition of Group Members:** The study consists of respondents from 20-65 age groups. It is pertinent from the table that majority of the sample respondents belong to 40-50 age group (76%). Thus, it is revealed from the study that relatively aged people are actively participating in PMJDY.

**Caste of Group Members:** It is depicted from the figure that 55% of the sample respondents are from general category, followed by 18% of the respondents from SC category, 14% of the respondents from ST category and the rest 13% of the respondents are from other categories.

**Literacy Level of Group Members:** It is interesting to note from the figure that about 50% of the sample respondents are upto higher secondary level almost same percentage of the respondents are either neo-literates or literates.

**Table 2:Socio-Economic Profile of Sample Respondents:**

<b>Variable</b>	<b>Classification</b>	<b>Number of Respondents</b>	<b>Percentage of Total</b>
Name of Bank	State Bank of India	96	48
	Punjab National Bank	50	25
	Allahabad Bank	36	18
	Grameen Bank	18	9
Gender	Male	172	86
	Female	28	14
Age	20-30	42	21
	30-40	72	36
	40-50	76	38
	50-65	10	5
Qualification	Illiterate	6	3
	Literate but below Primary Level	8	4
	Upto Primary	22	11
	Upto Middle	40	20
	Upto Secondary	24	12
	Upto Higher Secondary	54	27
	Upto Graduate or Higher	44	22
	Any Other	2	1
Monthly Income	> 5000	42	21
	5000-15000	64	32
	15,000-30,000	84	42
	< 30000	10	5
Marital Status	Married	164	82
	Unmarried	36	18
Religion	Hindu	190	95
	Muslim	6	3
	Sikh	4	2
Caste	General	110	55
	SC	36	18
	ST	28	14
	OBC	26	13

*Source: Survey*

**Annual Income of Group Members:** Distribution of the sample respondents by annual income depicts that annual income of the majority of the sample respondents ranges up to Rs. 15,000- 30,000 (42%). At the next level, 32% of the sample respondents' annual income of the sample respondents ranges from Rs. 5,000 -15,000.

## **Factor Analysis Results**

### **I. Beneficiaries' Perception Regarding Access**

The suitability of raw data for factor analysis obtained from bank customers is examined through KMO value, Bartlett test of sphericity and p-value = 0.000, indicating sufficient common variance and correlation matrix (Dess et al., 1997 and Field, 2000). The process of R-mode principal component analysis (PCA) with Varimax rotation brought the construct to the level of 12 statements out of 17 statements originally kept in the domain of access. The KMO value (0.901) and Bartlett test of sphericity (2981.425) indicates acceptable and significant values. Therefore, factor loading in the final factorial design are consistent with conservative criteria, thereby resulting into three-factor solution using Kaiser criteria (i.e. eigen value  $\geq 1$ ) with 68.06% of the total variance explained. The communality for 12 items ranges from 0.588 to 0.811 indicating moderate to high degree of linear association among the variables. The factor loading ranges from 0.583 to 0.902 and the cumulative variance extracted ranges from 40.764 to 68.057 percent. The commonalities and percentage of variance explained by each factor is displayed in the Table 3. A brief description of factors emerged are as under:

#### **(i) Factor 1 (Information Accessibility)**

This factor consists of seven items namely, 'The bank is conveniently located', 'The employees are easily accessible when needed', 'Banking institution or its substitute is easily approachable', 'Bank is easily approachable in case of emergencies', 'You have easy access to the information that is useful', 'Employees' of bank are cooperative, friendly and knowledgeable' and 'Employees' possess sufficient banking information'. The mean values varied between 2.58 - 3.66, factor loading between .731 - .858 and communalities from .633 - .810. This factor highlights that sample respondents are satisfied with the accessibility of bank representatives & officials, informations and cooperative behaviour of bank employees after the implementation of PMJDY.

#### **(ii) Factor 2 (Physical Accessibility)**

This factor envisages three items i.e., 'Bank have sufficient staff to meet its customers' requirements', 'The bank manager promptly redress your problems' and 'Banking officials respond well'. The mean values for the aforesaid items ranges between 2.71 - 3.53. The factor loading ranges between .546 - .812 and communality from .588 - .614. This factor connotes that respondents have location wise access to financial services.

### **(iii) Factor 3 (Approachability)**

The items, 'This is the only bank in your area' and 'As compared to other banks, this bank is nearest to you' are taken into consideration by this factor which supports the items with significant mean values 4.09 & 4.31, high factor loading values .820 & .832 and communalities with values .713 & .718 respectively. On the whole, all items significantly contribute towards this factor.

## **II. Beneficiaries' Perception Regarding Availability**

The suitability of raw data for factor analysis obtained from bank customers is examined through Anti-image, KMO value, Bartlett test of sphericity and p-value = 0.000, indicating sufficient variance and correlation matrix. The process of R-mode principal component analysis (PCA) with Varimax rotation extracted 9 statements out of 18 statements which are actually kept in the construct of availability. The KMO value (.767) and Bartlett test of sphericity (2168.756) indicates highly acceptable and significant values. Therefore, factor loadings in the final factorial design are consistent with conservative criteria, thereby resulting into three-factor solution using Kaiser criteria (i.e. eigen value > 1) with 72.15% of the total variance explained. The communalities for 9 statements range from .542 to .917, indicating high degree of linear association among the variables.

### **(i) Factor 1 (Loan Availability)**

It contained three items, 'Loan is easily available', 'Loan is available within time limit' and 'Procedure involved in getting loan is easy'. The mean values for all the items range from 2.24 to 2.41, factor loadings from .885 to .941 and communalities from .836 to .917. The statement 'Loan is easily available' adjudged to be most important and strongest among all with highest factor loading (.941) & communality (.917). The beneficiaries perceive that easy procedure for availing loan that too within time frame is possible due to PMJDY.

### **(ii) Factor 2 (Support & Assistance)**

This factor comprised of four items specifically, 'Help desk/assisting staff is available for filling withdrawal/deposit form', 'Field workers promote various schemes of bank', 'Infrastructure is as per the requirements of the customers' and 'Bank follows quick problem solving approach'. The mean values for the items fluctuate between 2.78 to 3.32 representing moderate position. The factor loadings range between .613 - .755 and communalities from .542 - .581. The factor depicts that bank should not only focus on making various products & services available but due consideration be given for lending helping hand to the customers.

**Table 3: Factor Loading and Variance Explained after Exploratory Factor Analysis (Rotated Component Method)**

Factor-wise Dimension	Mean	Standard Deviation	Factor Loading	Eigen Value	Variance Explained	Cumulative Explained	Communality	Cronbach's Alpha
<b>ACCESS</b>								
<b>Factor 1: Information Accesability</b>				5.384	40.746	40.746		0.902
you can easily access the information related to PMJDY	2.58	1.04	0.858				0.719	
Banking Officials respond well to the queries	3.34	1.22	0.846				0.81	
Bank Employees possess sufficient information	3.57	1.06	0.81				0.689	
The employees are easily accessible when needed	3.34	1.09	0.786				0.649	
Bank staffs are cooperative, friendly and well acquainted	3.49	0.91	0.774				0.633	
Banking Institutes or its substitute is easily approachable	3.62	1.03	0.753				0.724	
The Bank Manager promptly redress your doubts	3.66	1.42	0.731				0.648	
<b>Factor 2: Physical Accesability</b>				1.518	13.855	54.601		0.601
Bank is easily approachable in case of emergencies	3.44	1.18	0.546				0.614	
ATM Service is nearby your location	2.71	1.27	0.812				0.648	
The bank is conveniently located	3.53	1.33	0.639					
<b>Factor 3: Approachability</b>				1.344	13.456	68.057	0.588	0.583
This is the only bank in your area	4.09	0.54	0.832				0.718	
This bank is nearest to your location compared to other banks	4.31	0.56	0.82				0.713	
<b>AVAILABILITY</b>								
<b>Factor 1: Loan Availability</b>				3.556	29.506	29.506		0.931
Loan is easily available under PMJDY	2.41	1.56	0.941				0.917	



Loan is available within time limits	2.37	1.51	0.932				0.913	
There is no unexpected procedural delay in getting loan	2.24	1.48	0.885				0.836	
<b>Factor 2: Support and Assistance</b>				1.675	22.337	51.843		
Help Desk/assisting staff is available for filling withdrawal/deposit form	3.32	1.12	0.755				0.581	
Business Correspondents inform about various advantages of PMJDY	3.24	1.23	0.69				0.542	
Infrastructure is adequate for customer's requirements	2.89	0.97	0.703				0.556	
Banks follow quick problem solving approach	2.78	1.23	0.613				0.548	
<b>Factor 3: promotion</b>				1.302	20.213	72.056		0.779
Employees are helpful in providing information about newer schemes	1.92	1.29	0.891				0.809	
Newer schemes and benefits are advertised frequently	1.79	1.08	0.882				0.793	
<b>USAGE</b>								
<b>Factor 1: General Usage</b>				2.264	34.965	34.965		
you frequently use the credit facilities of the bank	1.91	1.23	0.854				0.731	
you frequently use advance schemes of banks	2.01	1.24	0.846				0.718	0.782
you use bank for the repayment of loan	1.69	1.19	0.776				0.622	
<b>Factor 2: Specific Usage</b>				1.698	29.812	64.777		0.604
You are using bank for depositing money	3.84	0.73	0.834				0.691	
you are using banks as replacement of moneylenders	3.91	0.47	0.812				0.671	
you regularly visit banks for deposits/withdrawals	3.44	1.02	0.656				0.514	

Source: Survey

### **(iii) Factor 3 (Promotion)**

The two items falling under this factor consisted of 'Employee's are helpful in making information available regarding new schemes' and 'New bank schemes are advertised frequently'. The two variables factor loading values are .891 & .882 and communalities .809 & .793 respectively which reveals that the variables significantly and positively contribute to the factor. Beneficiaries strongly perceive that information about the new schemes are advertised frequently under PMJDY.

### **III. Beneficiaries' Perception Regarding Usage**

The suitability of raw data for factor analysis obtained from bank customers is examined through Anti-image, KMO value, Bartlett test of sphericity and (p-value = 0.000), indicating sufficient variance and correlation matrix. The process of R-mode principal component analysis (PCA) with Varimax rotation extracted 6 statements out of 9 statements which are actually kept in the construct of usage. The KMO value (.662) and Bartlett test of sphericity (698.028) indicates acceptable and significant values. The communalities for 6 statements range from .514 to .731, indicating high degree of linear association among the variables. The factor loading ranges from .656 to .854 and the cumulative variance extracted ranges from 34.965 to 64.777 percent. The communalities and percentage of variance explained by each factor is displayed in the Table 3. A brief description of factors emerged are as under:

#### **(i) Factor 1 (General Usage)**

This factor envisages three items focussing upon 'You frequently use credit facilities of the bank', 'Advance schemes of bank are frequently used by you' and 'You are using bank for the repayment of loan'. The mean values for the aforesaid items range between 1.69 - 2.01. The factor loadings and communalities exhibited significant values (Table 3). This factor emphasises on not merely opening of account but on its usage as well. Accounts opening under this scheme are being operated and used for availing credit facilities, repayment of loans, etc.

#### **(ii) Factor 2 (Specific Usage)**

The three variables included in this factor are 'You are using bank for depositing money', 'You are using banking services, because interest charged by the bank on advance is economical than charged by the moneylender' and 'You are a regular visitor of the bank' signifying mean values between (3.44 - 3.91), factor loadings (.656 - .834) and communalities (.514 - .691). The results reflect that PMJDY Beneficiaries frequently visit banks and utilizing the facilities necessary for effective implementation of financial inclusion scheme.

### **Output from One-way ANOVA**

Table 4 shows output from One-way ANOVA using different socio-economic variables subdivided into age, caste, religion, qualification and income on nature of financial inclusion. (4.1, 4.2 & 4.3)

Table 4.1 depicts age-wise output from One-way ANOVA using different dimensions of financial inclusion subdivided into access, availability and usage. In case of access, variance of group is same as the value of p is more than 0.05, indicating insignificant mean difference exist among respondents of different age groups. Whereas in case of availability and usage, variance of group is not same as the value of p is less than 0.05, indicating significant mean difference exist among different age groups. With regard to availability & usage dimensions of financial inclusion, beneficiaries belonging to 50-60 years of age (2.83 & 2.91) are highly satisfied followed by 40-50 years (2.72 & 2.86), 30-40 years (2.64 & 2.78) and upto 30 years (2.41 & 2.69).

Table 4.2 shows caste-wise output from One-way ANOVA using different dimensions of financial inclusion i.e. access, availability and usage. For access & usage dimensions, variance of group is not same as the value of p is less than 0.05 indicating significant mean difference exist among respondents belonging to different caste. Whereas no significant mean difference exist among respondents of different caste with respect to availability dimension as variance of group is same as the value of p is more than 0.05. Caste-wise analysis shows that with regard to access dimension general caste (3.53) beneficiaries are highly contended followed by OBC (3.37) SC (3.24) and ST (3.23) beneficiaries. This trend is same for other two dimensions i.e. availability and usage.

**Table 4.1: Age-wise output from One-way ANOVA**

Dimensions financial Inclusion	Description of Variable	Mean	Nature of Variables	Sum of Squares	D.f	Mean Square	F Value	Sig.	Remarks
Access	20-30	3.48	Between Groups	0.696	3	0.232	0.517	0.669	Insignificant
	30-40	3.47	Within Groups	222.396	196	0.448			
	40-50	3.53	Total	223.091	199				
	50-60	3.57							
Availability	20-30	2.41	Between Groups	5.197	3	1.734	2.739	0.0432	Significant
	30-40	2.64	Within Groups	313.724	196	0.633			
	40-50	2.72	Total	318.922	199				
	50-60	2.83							
Usage	20-30	2.69	Between Groups	3.641	3	1.215	3.147	0.0252	Significant
	30-40	2.78	Within Groups	190.998	196	0.386			
	40-50	2.86	Total	194.64	199				
	50-60	2.91							

**Table 4.2: Caste-wise Output from One-way ANOVA**

Dimensions financial Inclusion	Description of Variable	Mean	Nature of Variables	Sum of Squares	D.f	Mean Square	F Value	Sig.	Remarks
Access	General	3.53	Between Groups	3.496	3	0.167	0.377	0.048	significant
	SC	3.24	Within Groups	219.596	196	0.443			
	St	3.23	Total	223.096	199				
	Obc	3.37							
Availability	General	2.71	Between Groups	1.827	3	0.734	1.159	0.416	In Significant
	Sc	2.64	Within Groups	318.124	196	0.633			
	St	2.52	Total	317.922	199				
	Obc	2.69							
	General	2.89	Between Groups	3.941	3	1.315	3.406	0.018	Significant
	Sc	2.57	Within Groups	190.558	196	0.386			
Usage	ST	2.46	Total	194.639	199				
	OBC	2.71							

**Table 4.3: Religion-wise output from One-way ANOVA**

Dimensions financial Inclusion	Description of Variable	Mean	Nature of Variables	Sum of Squares	D.f	Mean Square	F Value	Sig.	Remarks
Access	Hindu	3.48	Between Groups	0.696	3	0.232	0.517	0.669	In significant
	Muslim	3.47	Within Groups	222.396	196	0.448			
	Sikh	3.53	Total	223.091	199				
Availability	Hindu	2.41	Between Groups	5.197	3	1.734	2.739	0.056	Significant
	Muslim	2.64	Within Groups	313.724	196	0.633			
	Sikh	2.72	Total	318.922	199				
Usage	Hindu	2.69	Between Groups	3.641	3	1.215	3.147	0.025	Significant
	Muslim	2.78	Within Groups	190.998	196	0.386			
	Sikh	2.86	Total	194.64	199				

**Table 4.4: Qualification-wise Output from One-way ANOVA**

Dimensions financial Inclusion	Description of Variable	Mean	Nature of Variables	Sum of Squares	D.f	Mean Square	F Value	Sig.	Remarks
Access	Illiterate	2.31	Between Groups	20.696	7	2.901	6.623	0.001	significant
	Literate but below Primary Level	2.48	Within Groups	222.704	192	0.438			
	Upto Primary	3.32	Total	223.096	199				
	Upto Middle	3.45							
	Upto Secondary	3.44							
	Upto Higher Secondary	3.68							
	Upto Graduate or Higher	3.71							
	Any Other	3.75							
Availability	Illiterate	2.11	Between Groups	15.596	7	2.152	3.599	0.002	significant
	Literate but below Primary Level	2.31	Within Groups	312.704	192	0.598			
	Upto Primary	2.41	Total	333.096	199				
	Upto Middle	2.45							
	Upto Secondary	2.64							
	Upto Higher Secondary	2.68							
	Upto Graduate or Higher	2.71							
	Any Other	2.89							
Usage	Illiterate	2.37	Between Groups	11.196	7	1.801	5.328	0	significant
	Literate but below Primary Level	2.68	Within Groups	183.504	192	0.338			
	Upto Primary	2.78	Total	194.631	199				
	Upto Middle	2.91							
	Upto Secondary	3.02							
	Upto Higher Secondary	3.13							
	Upto Graduate or Higher	3.26							
	Any Other	3.45							

Table 4.3 indicates religion-wise output from One-way ANOVA using different dimensions of financial inclusion. The analysis depicts that Sikh respondents (2.86) are more satisfied with usage dimension followed by Hindu (2.79) and Muslim (2.18) beneficiaries.

Table 4.4 depicts qualification-wise output from One-way ANOVA. For all the dimensions of financial inclusion i.e. access, availability and usage variance of group is not same as the value of p is less than 0.05, indicating significant mean difference exist among beneficiaries under different qualification categories. For all the dimensions i.e., access, availability & usage, beneficiaries with upto graduation or higher qualification are maximally satisfied with mean value (3.71, 2.71 & 3.26) and beneficiaries with below primary qualification are minimally satisfied with mean value (2.48, 2.31 & 2.68) respectively.

Income-wise output from One-way ANOVA depicts that Variance of group is not same as the value of p is less than 0.05, indicating significant mean difference exist among respondents belonging to different monthly income categories with regard to different dimensions of financial inclusion. Beneficiaries with above ₹30,000 income are highly satisfied with regard to access, availability and usage dimensions compared to other income groups.

Thus, all the hypotheses are validated in the study. PMJDY has improved access, availability and usage of financial/banking services and induced financial inclusion in the area under study. However, there seems considerable variations in these three dimensions among different socio-economic groups.

## **CONCLUSION AND SUGGESTION**

The entire emphasis of the Government, RBI and banks is to open more accounts of the customers. However, mere opening the account will not help furthering the process of financial inclusion. The segment of population working in unorganised sector who often deal through middleman and fall into traps/ clutches of private money lenders need to be targeted to include under financial inclusion. There is a need that the payment for social schemes should be done through account payment to plug the issue of money pilferage. The Government should make a budgetary provision for the cost and reimburse banks accordingly. Banks should also provide doorstep banking services to them as an incentive so that other people also join the inclusion programme of banks.

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