

GENDER DISPARITY IN FINANCIAL INCLUSION: AN INTER-STATE ANALYSIS

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ABSTRACT

Financial inclusion has become an important policy issue because of its relevance in determining economic growth and development. Financial inclusion has been recognized as a fundamental driver that could aid in achieving seven out of the seventeen outlined sustainable development goals. The present paper focuses onto understanding status of gender disparity in financial inclusion with reference to its extent in Indian States. The research has been done using secondary data source from Reserve Bank of India, built index of 27 states for the period 2014 and 2018 i.e. before and after launching PMJDY scheme. The study's finding shows southern and western states are performing better in financial inclusion than other states.

KEYWORDS: *Financial Services, Index Of Financial Inclusion, Bank Branch, Gender Disparity, Interstate.*

1. INTRODUCTION

In India, three types of financial services providers are functioning in the financial space – Formal, Semi formal and Informal. Financial inclusion by its very nature focuses on the role played by formal financial institutions namely scheduled commercial banks, public sector banks, regional rural banks and cooperatives banks. The Semi-formal sector includes NGOs, MFIs, SHGs (which in many cases have a linkage with a formal financial institution) and the informal sector includes money lenders, friends and relatives etc.

Although, there has been a general spread of the basic banking services in India over the years women remain largely deprived of these services. However, we should guard against assuming that all the states in India are performing poorly on various aspects of financial inclusion or that the situation does not have a gendered nuance.

2. CONCEPT OF FINANCIAL INCLUSION

Rangrajan Committee (2008) [1] comprehensively defines financial inclusion as "the process of access to financial services and timely and adequate credit needed by vulnerable groups such as weaker sections and low-income groups at an affordable cost". Defined thus, there is great emphasis not only on the delivery of banking services and credit at an affordable cost but also on eliminating delays in the due process as well as ensuring that the amount received is sufficient to cover their needs. The term financial services, as used in this context denotes access to payments and remittance facilities, avenues for saving, loans and insurance services offered by the formal financial system. The two major components of this definition are therefore access and affordability.

The financial services does not mean only banking products, but a host of other financial services

like credit, insurance and other types of equity products (The committee on financial sector reforms, Raghuram Rajan, 2009 [2]). The segment of the society not able to access timely credit and other financial services, from the formal sources are financially excluded creating a concern for the policy maker. Thus the three important elements or dimensions of financial inclusion are having access to banking services, access to affordable & timely credit and access to financial literacy programmes that educates the people about a healthy financial life. Leeladhar (2005) [3] has defined financial inclusion as the delivery of banking services at affordable cost. Sarma (2008) [4] defines financial inclusion as a process that ensures ease of access, availability, and usage of formal financial systems for all members of an economy. In contrast, Camara and Tuesta (2014) [5] define an inclusive financial system as one that maximizes usage and access while minimizing involuntary exclusions. Hence, they focus more on usage, access, and barriers, which capture both the supply- and demand-side of financial access.

The U.N report (2006) [6] defines a financial system to be an inclusive one which is able to provide credit to all individuals and enterprises who are “bankable” savings, payment & remittance services for all; insurance to insurable people. Economic exclusion considered as one of the form of social exclusion means lack of access to labour markets, credit availability and other forms of capital assets. Financial exclusion is an extended form of economic exclusion depriving people of credit, income and utilization of this credit and income to build capital assets further limiting their living opportunities in the mainstream economy. Being excluded from the opportunity to be employed or to receive credit may lead to economic impoverishment that may, in turn, lead to other deprivations (such as undernourishment or homelessness) (Sen, 2000) [7].

3. LITERATURE REVIEW ON GENDER DISPARITY IN FINANCIAL INCLUSION

Okoyeuzu (2020) [8] noted that legal restrictions on women’s right to hold property and to inherit, make women, relative to men, less likely to own an account, which affects their ability to save, borrow and to use the variety of financial services.

Kaur (2017) [9] found that though in terms of ‘one account per household’ almost all the states have achieved 100% financial inclusion but in terms of gender, females lag far behind as even at the national average also the per capita female account value is less than one. It also found presence of huge disparities in terms of female accounts across different states of India.

Kelkar et al. (2004) [10] explored the impact of the microcredit institutions on gender relations and women’s agency in rural Bangladesh. Access to micro credit for women can positively enhance women’s agency – women as income earners, asset owners, being more mobile, dealing with outsiders, taking up trade, etc. All these changes can give women voice in household decision making. Access to finance empowers women as it affects a woman’s ability to make decisions, boosts their self-confidence, and improves their status in the community, etc.

Aker et al. (2016) [11] in their paper studied the benefits of mobile money cash transfer in Niger through a randomized experiment. They have found that cash transfer payment to mobile accounts reduced the cost of accessing the money and also enhanced women’s bargaining power and household consumption. Field et al. (2019) [12] empirical result show that in India increasing female control over benefits payments could help women push past social constraints to labour force participation.

Goetz & Sen Gupta (1996) [13] challenge the assumption of availability of credit to women leading to economic empowerment based on the case of special credit institutions in Bangladesh. They argue that access to credit did not significantly impact the economic empowerment of women as a larger proportion of women’s loans were controlled by their male counterparts. Kulkarni and Ghosh (2021) [14] although rapid expansion of digital financial inclusion in India, women face barriers to access and usage of digital financial services. The study uses secondary

data to examine the regional profile of the gender gap in digital financial inclusion in India. The analysis shows that the economic development of the state does not determine the gender disparity in digital financial inclusion. Hence, these findings suggest that a gender sensitive approach to financial inclusion is imperative for the success of policy initiatives. Despite the importance of access to finance, especially for women, there is still a stark gender gap in financial inclusion.

The Reserve Bank of India (RBI, 2015) [15] report highlights the problem of women's financial exclusion. The report underlines that States with higher rural population and higher share of female population had comparatively lower level of financial inclusion.

Ghosh & Vinod (2016) [16] in their paper address the gender aspect of financial inclusion. Based on household level survey data, a multivariate regression analysis was performed to analyze the interface between gender and financial inclusion and found that female-headed households in India are more inclined to access informal finance than formal finance.

Morsy (2020) [17] revealed that women's access to finance benefit from an increase in their economic opportunities through enhancing their educational attainment. Higher women's educational attainment would enhance financial literacy and increase their demand for financial services. Hence governments could support women's financial inclusion by focusing on investing in women's and girls' education and fostering their educational attainment.

Chavan (2020) [18] found that there has been an increase in women's share in bank credit in India in recent years, which includes credit given directly to women and indirectly via microfinance institutions that lend to women. However, bank credit to women has not grown as fast as credit given to men, resulting in a widening gender gap. She suggests that to close the gender gap, policy of financial inclusion must be gender-sensitive and correct its disproportionate emphasis on deposits by women.

Ozşuca (2019)' [19] study indicate that a significant portion of the disparity in financial inclusion is attributable to employment, while age and tertiary education are also found as contributing factors to the financial inclusion gap. Another notable finding is that upper income quintiles contribute positively to the gender gap, indeed to a greater extent compared to lower income groups. As far as the measurement of financial inclusion is concerned in our country most of the studies have proposed a multi-dimensional index as the best method. It can be said that the studies conducted in India are methodologically very similar to the cross-country comparisons mentioned above.

CRISIL (2018) [20] index was constructed at the national as well as district level in India. The Incuses used four dimensions of financial inclusion, namely- bank branch penetration, credit penetration, deposit penetration and insurance penetration. The fourth dimension of insurance was incorporated much later in the index i.e, as recently as 2018. The level of financial inclusion across states, according to CRISIL varied from Kerala, in the best position, with an index value of 90.9 to Manipur as the worst laggard with a value of 32.0

Soni & path (2019) [21] constructed a composite index of financial inclusion based on data for indicators of three dimensions - banking penetration, availability of banking services and usage of the banking system. This index which was computed for 22 states of India during 2006-2014, found that none of the states could be placed in the category of high financial inclusion during the study period. Sarma (2012) [22] has analyzed the financial inclusion of the various states in India with the help of factor analysis. In this study which stretched from 1984 to 2016, she found that most of the northern states like Bihar, Madhya Pradesh, Uttar Pradesh and Rajasthan displayed low levels of inclusion.

Goel & Sharma (2017)'s [23] study diverges from the previous studies on two counts. Firstly, it is not an inter-state study rather it deals with change in financial inclusion at the All India level from 2004 to 2015. This study concludes that post 2013 India improved its level of financial inclusion dramatically, moving into the high financial inclusion range in 2014-15.

Chattopadhyay (2011)'s [24] study examines the extent of financial inclusion in India, in general and West Bengal, in particular. Thus, it uses a mix of both secondary data for computing the index of financial inclusion (IFI) at the interstate level and primary data to analyse the ground reality in West Bengal.

4. OBJECTIVES

The main objectives of this research work are

- i. To identify the major trends in gender disparity at the interstate level.
- ii. To observe the changes in gender disparity in financial inclusion in pre and post PMJDY period

5. DATA & METHODOLOGY

The study relies on secondary data compiled from Reserve Bank of India "Data base on India Economy" 2014 & 2018. The study covers all the 27 states of India and is carried out for the year 2014 (Pre PMJDY) and 2018 (Post PMJDY). We have considered three dimension of financial inclusion for calculating Index of Financial Inclusion (IFI) for 27 states of India except union territories. All the data covers the year 2014 and 2018.

For the accessibility dimension, we have taken the number of branches of Commercial Banks per 1000 adults, for the availability dimension, we have taken the total number of female employees of bank branch, and for the Utilization dimensions, we have taken the deposit accounts with commercial banks per 1,000 female.

For Calculating Index of Financial Inclusion (IFI), our approach is similar to that which is being used by Sarma (2008) [4] and Chattopadhyay (2011) [25]. The dimension index for the i-th dimension, d_i , is computed by the following formula.

$$D_i = \frac{A_i - m_i}{M_i - m_i} \quad (1)$$

Where, A_i = Actual value of dimension i, m_i = minimum value of dimension i, M_i = maximum value of dimension i

The Index of Financial Inclusion, IFI_i for the ith country, is measured by the normalized inverse Euclidean distance of the point D_i from the ideal point $I = (1, 1, 1, \dots, 1)$. The exact formula is:

$$IFI_i = 1 - \frac{\sqrt{(1 - D_1)^2 + (1 - D_2)^2 + \dots + (1 - D_n)^2}}{\sqrt{n}} \quad (2)$$

Here, in this paper for calculating the Index of Financial Inclusion (IFI), we consider only three dimensions of an inclusive financial system: accessibility, availability of the banking services and usage of the banking system. Algebraically, the formula for calculation will now be:

$$IFI_i = 1 - \frac{\sqrt{(1 - accessibility_1)^2 + (1 - availability_1)^2 + (1 - utilization_2)^2}}{\sqrt{n}} \quad (3)$$

Inter-state Scenario of Gender Disparity in Banking Services

There are significant disparities between men and women in terms of access to many basic facilities, such as nutrition, health, education and ownership of various means of production. One such form of gender disparity which is commonly seen is with regard to the access and usage of formal banking services. In the table below the number of accounts are taken as a proxy for access to formal banking and the amount of deposits can be said to represent the usage. Here, it is reiterated that use of secondary data on financial inclusion has its own limitations in defining the dimensions of financial inclusion.

TABLE 01: STATE-WISE GENDER DISPARITY IN NUMBER OF ACCOUNTS AND AMOUNT OF DEPOSITS (2014 & 2018)

(No. of Account in thousands, Amount in crores)

Sr. No.	State	Disparity (F/M) 2014 (Pre PMJDY)		Disparity (F/M) 2018 (Post PMJDY)	
		No. of A/C	Amount	No. of A/C	Amount
1	Haryana	.368	.440	.505	.509
2	Himachal Pradesh	.453	.413	.531	.520
3	Punjab	.450	.436	.533	.509
4	Rajasthan	.402	.406	.542	.489
5	Arunachal Pradesh	.389	.355	.600	.569
6	Assam	.368	.335	.563	.463
7	Manipur	.496	.253	.646	.404
8	Meghalaya	.493	.456	.758	.734
9	Mizoram	.580	.469	.732	.580
10	Nagaland	.496	.301	.547	.407
11	Tripura	.472	.329	.700	.486
12	Bihar	.373	.252	.518	.373
13	Jharkhand	.337	.298	.480	.394
14	Odisha	.343	.339	.479	.438
15	Sikkim	.468	.392	.619	.468
16	West Bengal	.387	.414	.527	.501
17	Chhattisgarh	.247	.302	.318	.414
18	Madhya Pradesh	.311	.384	.378	.479
19	Uttar Pradesh	.367	.353	.506	.452
20	Uttarakhand	.355	.364	.546	.495
21	Goa	.640	.556	.666	.536
22	Gujarat	.422	.442	.503	.495
23	Maharashtra	.464	.413	.501	.471
24	Andhra Pradesh	.388	.441	.621	.588
25	Karnataka	.590	.530	.661	.509
26	Kerala	.632	.414	.664	.416
27	Tamilnadu	.631	.497	.737	.569

Source: Calculation based on RBI database, 2018

Note: Union Territories are excluded from the calculation.

FIGURE 01: DISPARITY IN NO. OF ACCOUNT

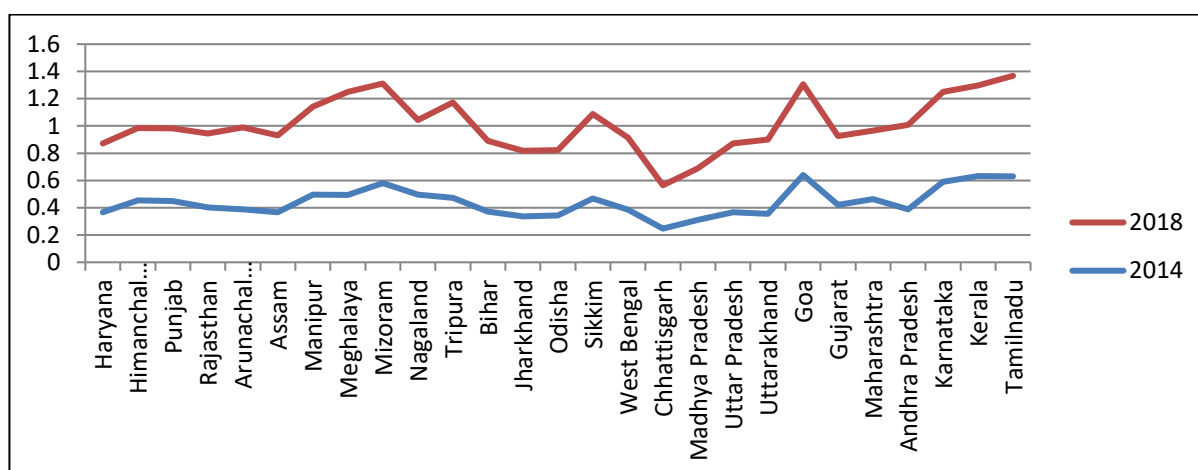
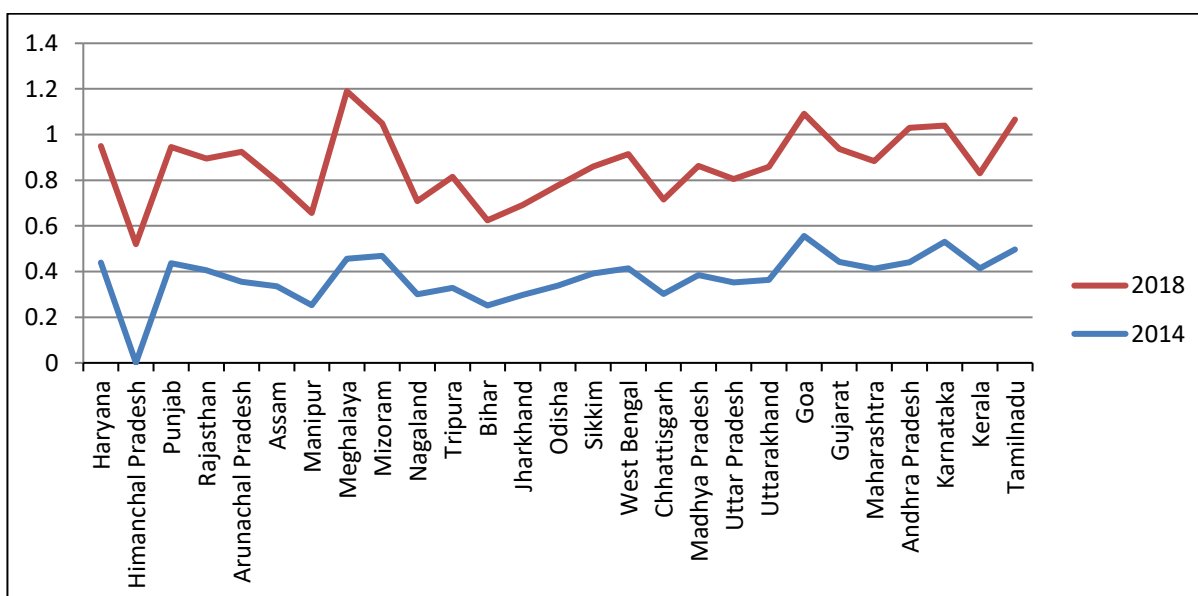


FIGURE 02: DISPARITY IN AMOUNT



As far as gender disparity in number of accounts is concerned states such as Meghalaya, Mizoram, Tripura and Tamil Nadu have a female / male ratio of over 0.7. The other reasonably good performers are Goa, Kerala, Karnataka, Manipur, Sikkim, and Arunachal Pradesh with values of around 0.6. The worst performers seem to be the eastern states of Jharkhand and Orissa as well as the central Indian states of Chhattisgarh and Madhya Pradesh. This becomes even more concerning in view of the significant percentage of tribal population residing in the last mentioned states. The situation is glaringly worse when the disparity in the amount of deposits is observed. Seventeen states have a female/ male ratio of less than 0.5. There is only one state namely Meghalaya which has a value of over 0.7.

These results seem to indicate that the process of opening of accounts for females seems to have gained traction in most of the states, but they are using it much less compared to their male counterparts. To get a better picture of the classification of states on the basis of their index value in the table below:

TABLE 02: STATE-WISE CLASSIFICATION OF INDEX OF FINANCIAL INCLUSION

	IFI (2014)	IFI (2018)
High	Maharashtra, Andhra Pradesh, Karnataka, Tamilnadu	Maharashtra, Uttar Pradesh, Tamilnadu, Karnataka
Medium	West Bengal, Kerala, Gujarat	West Bengal, Gujarat, Rajasthan, Bihar, Madhya Pradesh, Andhra Pradesh, Kerala
Low	Uttar Pradesh, Bihar, Rajasthan Madhya Pradesh, Punjab Odisha, Haryana, Jharkhand Assam, Chhattisgarh, Uttarakhand Himanchal Pradesh, Goa, Tripura Meghalaya, Manipur, Mizoram Nagaland, Arunachal Pradesh, Sikkim	Punjab, Telangana, Haryana, Odisha, Jharkhand, Assam, Chhattisgarh, Uttarakhand, Himanchal Pradesh, Goa, Tripura, Meghalaya, Manipur, Mizoram, Nagaland, Arunachal Pradesh, Sikkim

Source: Author's calculation

In addition to holding a savings account and actively using it, availability of formal credit is an integral pillar of financial inclusion. Researchers in India and in other countries of the world have emphasized the clear existence of gender disparity in the access of formal credit (Nautiyal & Tanushree, 2017 [26]; Sorsa, 2015 [27]; Manta, 2014 [28]; Venugopal, 2012 [29]; Chavan, 2020[18]).

An All India picture of gender disparity in credit can be gleaned from the following table.

TABLE 03: GENDER DISPARITY IN ACCESS TO CREDIT (2014 & 2018)

Population group	2014				2018			
	No. of Credit Accounts (%)		Amount outstanding (%)		No. of Credit Accounts (%)		Amount outstanding (%)	
	Male	Female	Male	Female	Male	Female	Male	Female
Rural	77.9	19.2	78.7	18.5	66.8	27.8	71.4	24.4
Semi-Urban	72.1	25.0	73.1	24.1	59.2	33.0	66.6	29.4
Urban	72.5	23.7	71.3	23.7	45.0	44.9	59.5	35.1
Metropolitan	81.8	16.8	78.4	17.2	70.1	19.7	70.4	21.4
All-India	76.5	20.9	75.7	21.0	62.6	29.4	68.0	27.1

Source: RBI

In above table it clearly shows that in year 2014, out of the total number of credit account holders in rural areas, 77.9 percent are male borrowers and only 19.2 percent are female borrowers. In the semi urban areas 72.1 are male and 25 are female borrowers. In the urban areas, 72.5 percent are male and 23.7 percent are female. Surprisingly, even in metropolitan areas male and female account holders were at 81.8 percent and 16.8 percent respectively. This shows that irrespective of level of development the reach of female borrowers to formal banking is limited. The gap between the number of male and female credit account seems to be narrowing only in urban areas. It must be however, added here that the share of men in the total percentage of credit accounts has

decreased in all the types of areas, whereas the share of women has increased. The steepest fall in men's share of total credit accounts is seen in urban areas (72.1 % to 59.2 %) and in semi urban areas (72.5% to 45%).

In year 2018, out of the total number of credit account holders in rural areas, 66.8 percent are male borrowers and only 27.8 percent are female borrowers. In the semi urban areas 59.2 are male and 33.0 are female borrowers. In the urban areas, 45.0 percent are male and 44.9 percent are female. In metropolitan areas male and female account holders were at 70.1 percent and 19.7 percent. The same pattern is reflected in the amount outstanding. If we take the outstanding amount as an indicator of credit disbursed, then in every population group, the lion's share of almost 60 percent and above has gone to males.

Thus, it is obvious that women at large remain considerably deprived of basic banking services as compared to men in India across all the states. Commercial banks seem to be more important for women as a means of savings than as a source of credit. Thus, there is a critical and urgent need to incorporate a more definite gender perspective in the policy of financial inclusion.

6. CONCLUSION & SUGGESTIONS

Availability of formal financial services to the entire population without any discrimination is the prime objective of financial inclusion, yet there is a marked degree of disparity in the way males and females access and use them. Similarly, the vulnerable social groups are still not able to benefit fully from the government initiatives, although they are identified as a target beneficiary.

These aspects need to be urgently addressed because achieving gender equality and social parity in financial inclusion is an important way to unlock resources for economic empowerment and growth. Yet, at this point we must accept that the government schemes in the recent past have been more beneficial to women as compared to men. This is revealed especially strongly in the case of credit accounts where the percentage share of men has decreased across categories whereas the share of women has correspondingly increased. This shows that government efforts can indeed turn the wheel in the opposite direction.

Various measures which Government of India should implement effectively in the formal banking system are:

- a. It should be move from focus on 'access' to usage of financial services (Quantity to quality of financial services e.g. consumer protection, product appropriateness etc.)
- b. Focused on financial innovations (easy and safe) for women.
- c. Increase number of female employees in financial institutions.
- d. Reduce entry access and usage costs and barriers to financial services for female
- e. Increasing role of technology i.e. effective use of Information Technology Solutions exclusively for women.
- f. The women banking correspondents can be extended.
- g. Increasing commercialization of traditional NGOs and MFIs.
- h. It should be product diversification (focused not only on credit but also cost effective payments, micro saving, micro insurance)

7. FURTHER SCOPE OF THE STUDY

- Financial inclusion index can be constructed with more number of dimensions which can include insurance, pension, mobile banking and internet banking usage as the extensions.

- Similar data can be compared with the other developing economies.

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