



# Financial Inclusion in India - 2023

**A Trend Report**

**BIRD**

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**Bankers Institute of Rural Development Lucknow**

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**Centre for Research on Financial Inclusion and Microfinance (CRFIM)**



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## Director's Message

Financial inclusion is an important driver for inclusive development. The Government of India and the Reserve Bank of India have undertaken many steps in this aspect. Pradhan Mantri Jan Dhan Yojana (PMJDY), launched in August 2014, was a watershed moment in the financial inclusion programme in the country. The programme leveraged the existing banking network and technological innovations to provide every household with access to basic financial services, thus bridging the gap in the coverage of banking facilities. RBI's National Strategy for Financial Inclusion (NSFI) 2019-2024 has given a further impetus to these efforts. The NSFI establishes the vision and core objectives of India's financial inclusion policy in order to help develop and sustain the national financial inclusion process through a broad convergence of actions encompassing all financial sector stakeholders.



In this context, Centre for Research on Financial Inclusion and Microfinance (CRFIM), Bankers Institute of Rural Development (BIRD) Lucknow has brought out the fifth issue of the Trend Report on Financial Inclusion in India. The report analyses the trend of various indicators of financial inclusion such as - account penetration, branch penetration, ATM deployment in terms of geographical and demographical penetration, reflecting the depth of financial inclusion and banking services in the country and their reach. It also covers progress of various social security schemes, progress of DBTs and PMMY. Several indicators capturing country's growth in digital payment transactions and payment system infrastructure are also summarised in the report. The data and information presented in the report have been retrieved from various secondary sources such as - Global Findex Database 2021, The World Bank database, RBI's website, Census of India, Department of Financial Services, CMIE, and open source web portals of Government of India. The report analyses trends of various parameters over the last five years i.e., from 2019 to 2023.

I hope the readers would find this issue of Trend Report on Financial Inclusion in India useful.

**Nirupam Mehrotra**

Director,  
BIRD, Lucknow



## Objective

Historically, Government of India and Reserve Bank of India have initiated various landmark initiatives to reach the large section of financially excluded population. There was nationalisation of banks, expansion of bank branch network, introduction of BCs/BFs to provide door step delivery of banking services, introduction of mandated priority sector lending targets, lead bank scheme, formation of self-help groups, offering zero balance BSBD accounts etc. The last decade perhaps witnessed, starting with JAM trinity, opening up vistas which led to tremendous progress in Financial Inclusion.

The current trend report attempts to provide an overview and progress in the Indian context. The report is based on the secondary data sources. Data have been retrieved from RBI's official website - <https://dbie.rbi.org.in>, Department of Financial Services, GoI, data base of CMIE and other open source web portal of GoI. Progress of various parameters of financial inclusion have been analysed for the last five years (2019 to 2023). The report provides secondary database analytical information to researchers, students, development practitioners and other stakeholders in the sector.

## Coverage

The report covers progress of account penetration, branch penetration, ATM penetration, progress of various schemes of financial inclusion in India, credit outreach, usage of digital financial inclusion etc. The analysis has been done to assess performance of various financing agencies as well as to analyse state and regional specific trend.



## Key Highlights



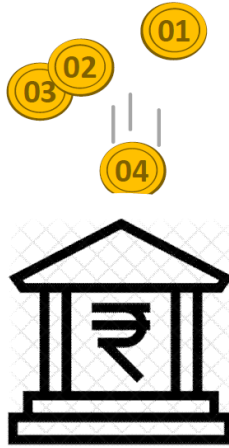
### Global Development

- 76% of global population has access to account either with a FI or mobile money provider
- Account ownership is higher in high-income economies (96%) as compared to the developing economies (71%)
- 4% gender gap has been witnessed in account ownership in 2021
- 1.4 billion adults (24%) globally are still financially excluded



### Financial Inclusion - India

- 22.74 lakh banking outlets in villages as on March, 2022
- 668 million BSBD accounts with gross deposits to the tune of Rs. 2.27 lakh crore
- PM-Jan Dhan Yojna has played a key role with more than 500 million accounts with more than INR 2 lakh crore deposit
- Key role in large-scale, real-time implementation of DBT has been played through the JAM trinity. As of March 2023, DBT covers about 313 Govt. schemes and has Total Benefit Transfer of Rs. 7.16 lakh crore during FY 2022-23



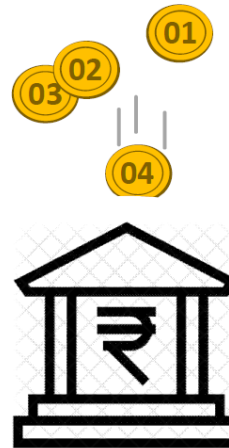
### Pradhan Mantri Mudra Yojana (PMMY)

- Till FY23, PMMY has extended support to 6.23 crore micro entrepreneurs with credit support of Rs.4.57 lakh crore
- 71.03 percent loans were sanctioned to women entrepreneurs
- Private Sector Banks (41.96%) & NBFC-MFIs (24.49%) constitute major financing agencies under PMMY



### Bank Branch Network

- 1.63 lakh physical bank branches of SCBs at the end of FY23
- More than 22.18 lakh rural branchless BC banking-outlets were available across the country
- 61 percent of commercial bank branches are concentrated in rural and semi urban areas
- Regional disparity is witnessed in spread of bank branches with southern (28%) & central (20%) having a larger share
- At all India level, there were 47 bank branches per thousand sq. km in 2019 which have increased to 51 at the end of March 2023





## Deployment of ATMs

- India has 21 ATMs per lakh adult population, as against the world average of 40
- Interstate variation exists with 9 ATM in Bihar and 70 ATM in Chandigarh (per lakh)
- Public sector banks have deployed the maximum number of ATMs (55%), Private banks (30%) and white label (13%) as on March, 2023
- 34 ATMs per one lakh urban population vis-à-vis 16 ATMs per one lakh population in rural areas



## Digital Payments

- Total number (volume) of digital payment transactions and total value of digital transactions have shown an increasing trend in the last five years
- In FY 23, about 13,462 crore digital transactions worth Rs. 3,344 lakh crore was recorded
- UPI accounts for approximately 75 percent of the total transaction volume in the retail segment
- In FY 23, about 806.54 thousand crore financial transactions was carried out for a total value of nearly Rs. 220.32 lakh crore using mobile payment mode while 43 thousand crore transactions worth Rs. 915 lakh crore was undertaken through internet payment channels

# Chapter 1

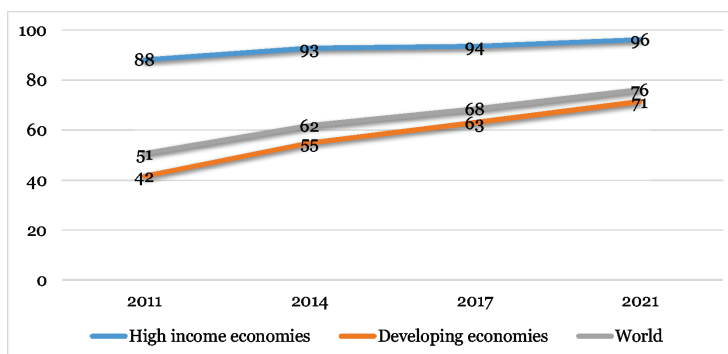
## Financial Inclusion: The Global Perspective

### 1.1 Progress of Financial Inclusion - Global Scenario

In today's rapidly evolving world, financial inclusion has become a critical issue that needs to be addressed on a global scale. Financial inclusion refers to the accessibility and availability of affordable financial services for individuals and businesses, especially those who are traditionally excluded from the formal banking sector. The lack of access to financial services has far-reaching implications for individuals and communities. It hinders economic growth and development by limiting opportunities for savings, investment and entrepreneurship. It also exacerbates inequality by excluding marginalized populations from participating in the formal economy. However, advancements in technology have opened up new avenues for promoting financial inclusion. Digital banking solutions and mobile money platforms have emerged as powerful tools in bridging the gap between the unbanked population and formal financial systems. Fintech companies are leveraging these innovations to create user-friendly and cost-effective solutions that can extend financial services even to remote areas.

The Global Findex Database 2021, the World Bank's global database that tracks financial inclusion, shows significant progress in financial inclusion during the last ten years. The global scenario of financial inclusion is complex and varied. Currently, 76 percent of the world's adult population has access to an account with a financial institution or mobile money provider, up from 51 percent in year 2011 (Figure 1.1). Developing economies<sup>1</sup> have seen remarkable progress, with 71 percent of the adult population having an account, a 30-percentage-point increase over the last decade. Despite near-universal account

**Figure 1.1: Growth in Global Account Ownership Rate (% of Adult accountholders, Age+15)**



Source: The Global Findex Database 2021

<sup>1</sup>Developing economies are low-and middle-income economies, as classified by the World Bank (The Global Findex Database 2021)

ownership in many high-income economies since 2011, average ownership increased by 8 percentage points over the past decade, from 88 percent in 2011 to 96 percent in 2021.

Individual economies saw different rates of growth over the past decade. Between 2011 and 2021, economies such as Peru, South Africa and Uganda drove up the average with account ownership increase of 25 percentage points or more. Uganda, in fact, saw its rate more than tripled, from 20 percent to 66 percent. In India, account ownership more than doubled in the past decade, from 35 percent in 2011 to 78 percent in 2021. This outcome stemmed, in part from a policy by the Government of India, launched in 2014 that leveraged biometric identification cards to boost account ownership among unbanked adults. Other economies saw much smaller increases over longer periods. Pakistan, for example, grew by just 11 percentage points over the past decade, from 10 percent in year 2011 to 21 percent in year 2021 (The Global Findex Database 2021).

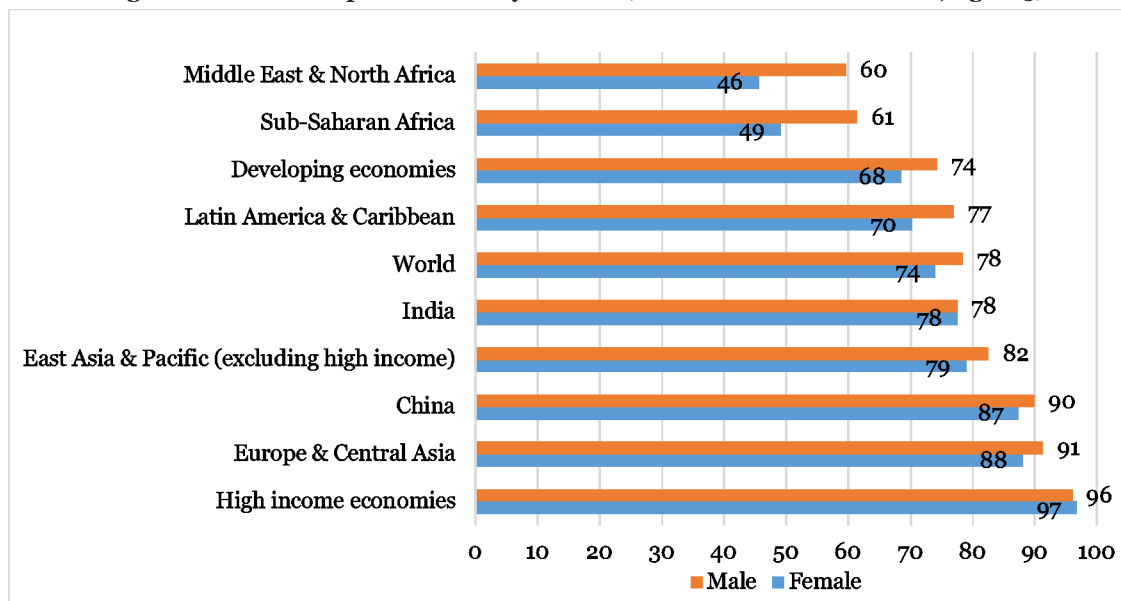
The sources of global growth in account ownership have also changed and expanded in recent years. Between 2017 and 2021, account ownership grew by more than 5 percentage points in 62 out of 123 economies, including by more than 10 percentage points in 34 economies. The finding contrasts with the concentrated growth that occurred between 2014 and 2017, driven by India, when account ownership increased by 27 percentage points. During the same period, account ownership in developing economies grew by 8 percentage points, from 55 percent in 2014 to 63 percent in 2017. If India is excluded, account ownership grew by just 3 percentage points, from 55 percent in 2014 to 58 percent in 2017 (The Global Findex Database 2021).

Among the economies experiencing significant growth since 2017 are Brazil, Ghana, Morocco, South Africa and Myanmar, each of which has seen double-digit growth in account ownership.

## 1.2 Ownership of Account by Gender

Gender gap in financial inclusion remains in every region around the world. Globally, 78 percent of men and 74 percent of women have an account thus indicating a gender gap of 4 percentage points during year 2021 (Figure 1.2). Developing economies have a wider average gap of 6 percentage points, as 74 percent of men and 68 percent of women had an account. Sub-Saharan Africa and the Middle East & North Africa reported 12 and 14 percentage point gender gaps, respectively which is twice as wide as the developing economy average and three times wider than the global average. By contrast, the gender gap in account ownership in East Asia and Pacific is lower at 3 percentage points. Interestingly, in India, the data reveals that there is no gender gap in ownership of account in the year 2021. The COVID-19 induced Government payments directly to the bank accounts are the key driver of elimination in gender gap in India (The Global Findex Database 2021).

Figure 1.2: Ownership of Account by Gender (% of Adult accountholders, Age+15)

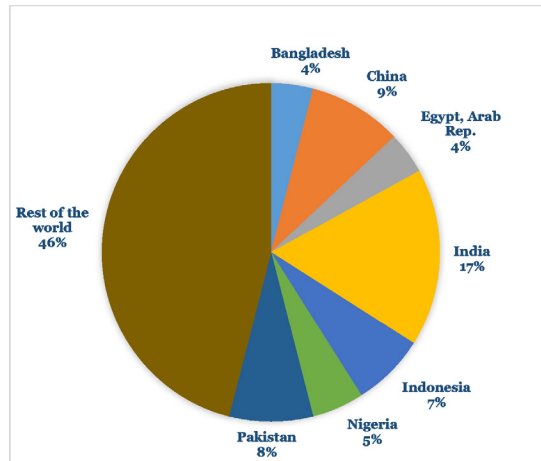


Source: The Global Findex Database 2021

### 1.3 Financial Exclusion

While significant progress has been made in some regions, there are still millions of people around the world who remain unbanked or underbanked. Approximately 1.4 billion adults (24%) globally are still financially excluded, i.e., they don't have an access to an account. However, this number has declined from 2.5 billion in 2011 and 1.7 billion in 2017. As account ownership is nearly universal in high-income economies, virtually all unbanked adults live in developing economies. Further, 54 percent of the unbanked i.e., 740 million people live in only seven economies. Despite having relatively high rates of account ownership, China and India claim large shares of the global unbanked population (130 million and 230 million, respectively) because of their huge population size. Pakistan, with 115 million unbanked adults, and Indonesia, with 100 million, have the next-largest populations of unbanked. These four economies, together with Bangladesh, Egypt, and Nigeria—are home to more than half of the world's unbanked population. The gender-wise data analysis of the unbanked population reveal that the majority of unbanked adults worldwide are women. 13 percent of the unbanked adults are women as compared to 11 percent of unbanked men (The Global Findex Database 2021).

Figure 1.3: Adults with no bank account (%), 2021

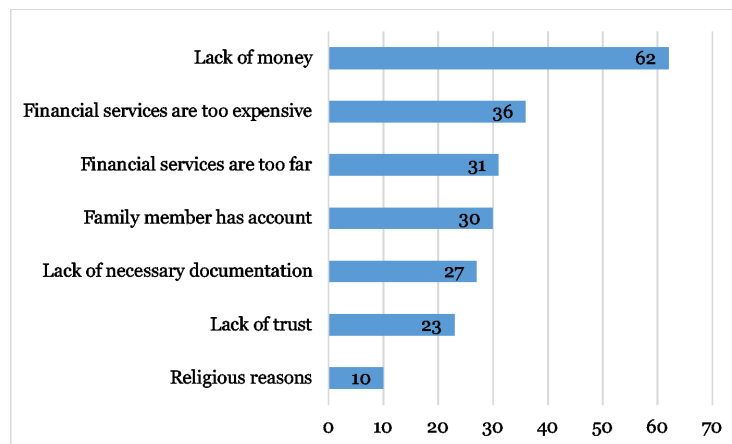


Source: The Global Findex Database 2021

### 1.4 Reasons for Financial Exclusion

According to The Global Findex Database 2021, lack of money, perceived cost of accounts, and distance to financial institutions are the main reasons due to which people remain unbanked. The data suggests that, 62 percent of unbanked people did not have bank account due to lack of funds (Figure 1.4). Worldwide, 36 percent of unbanked adults reported that financial services are too expensive for them. This share was almost twice as high as 60 percent in Latin America and the Caribbean. In Brazil, Colombia, Honduras, Nicaragua, Panama, Paraguay, and Peru, more than 60 percent of unbanked adults

Figure 1.4: Reasons for not having bank account (% of Adults with no account)



Source: The Global Findex Database 2021

cited cost as a barrier. As per the report, distance is also a barrier for not having bank account, as cited by 31 percent of unbanked adults. Apart from these, other factors also contributed to lack of bank account ownership. Globally, 30 percent of unbanked adults said that they do not have an account because a family member already has one. Twenty-seven percent of the unbanked reported lacking the documentation needed to open an account. Lack of trust on the financial system is a greater barrier in some regions, and globally it was cited by 23 percent of unbanked adults. Finally, about 10 percent of the unbanked adults globally cited religion as a barrier.

### **1.5 Progress of Financial Inclusion in India**

The Government of India and the Reserve Bank of India (RBI) have been working together to promote financial inclusion as one of the country's key national goals. Some of the major efforts made in the last five decades include nationalization of banks, building up of robust branch network of scheduled commercial banks, co-operatives and regional rural banks, introduction of mandated priority sector lending targets, lead bank scheme, formation of self-help groups, permitting BCs/BFs to be appointed by banks to provide door step delivery of banking services, zero balance BSBD accounts, etc. The fundamental objective of all these initiatives is to provide financial services to the large section of the hitherto financially excluded Indian population. Government of India and RBI have taken various steps for financial inclusion of vast segment of unbanked people into mainstream banking such as Micro Finance-Self Help Group Model (1992), Kisan Credit Card (1998), BSBD Accounts (2004), Business Correspondents and Business Facilitators (2006, 2009), Swabhimaan (2011), National Strategy for Financial Inclusion (2020), etc.

The RBI, in the year 2021, introduced Financial Inclusion Index (FI Index) to capture the extent of financial inclusion throughout the country across three broad parameters: Access, Usage, and Quality. The index captures information on various aspects of financial inclusion in a single value ranging between 0 and 100, where 0 represents complete financial exclusion and 100 indicates full financial inclusion. The FI Index of the RBI stood at 60.1 per cent for the financial year ending in March 2023, as compared to 56.4 per cent in March 2022, due to growth across all sub-indices. The value stood at 53.9 per cent in March 2021 (RBI, 2023). To provide historical context, it's worth noting that in March 2017, the FI Index stood at 43.4 (RBI, 2022).

Progress made with respect to Financial Inclusion in India is presented in Table 1.1. The data reveals that the country has made significant progress in various banking parameters over the last five years (2018 to 2022) (figures for year 2023 are provisional, so analysis done with reference to year 2022). The banking outlets in villages have increased from 5.70 lakh in March 2018 to over 22 lakh in March 2022. Significant increase in number of

banking outlets in villages is due to reclassification done by banks. However, such outlets in villages are mostly in branchless BC mode. As of March 2022, about 97.5 percent (22,18,470 out of 22,74,236) of banking outlets in villages are served through BCs. During March 2018 to March 2022, coverage of urban locations through BCs increased by almost nine folds from 1.42 lakh to 12.95 lakh. However, such an increase in BCs services is due to a significant increase in data reported by a few private sector banks.

Basic Savings Bank Deposit Accounts (BSBDAs) have increased over the past years from 536 million in 2018 to 668 million in March 2022. However, such progress are mainly at BC level. Sixty percent (402 million out of 668 million) of BSBD accounts have been

**Table 1.1: Progress in Financial Inclusion in India**

Particulars	Mar-18	Mar-19	Mar-20	Mar-21	Mar-2022	Mar-2023*
Banking Outlets in Villages - Total	<b>569547</b>	<b>597155</b>	<b>599217</b>	<b>1248079</b>	<b>2274236</b>	<b>1681957</b>
Banking Outlets in Villages - Branches	50805	52489	54561	55112	53287	53802
Banking Outlets in Villages - BCs (Branchless mode)	518742	541129	541175	1190425	2218470	1625882
Banking Outlets in Villages - Other	0	3537	3481	2542	2479	2273
Urban Locations Covered Through BCs	142959	447170	635046	426745	1295307	415218
BSBDAs - Opened Total (No. in Million)	<b>536</b>	<b>574</b>	<b>600</b>	<b>646</b>	<b>668</b>	<b>686</b>
BSBDA through Branches (No. in Million)	247	255	261	266	266	275
Number of BSBDA per Branch	4862	4858	4784	4827	4992	5111
BSBDA through BCs (No. in Million)	289	319	339	380	402	411
Number of BSBDA per BC	557	590	626	319	181	253
BSBDAs - Deposits mobilisation - Total (Amt. in Rs. Billion)	<b>1121</b>	<b>1409</b>	<b>1684</b>	<b>2060</b>	<b>2279</b>	<b>2632</b>
BSBD through Branches (Amount in Rs. Billion)	731	878	958	1184	1205	1337
BSBDA through BCs (Amount in Rs. Billion)	391	531	726	876	1074	1295
Average Balance per BSBDA (Rs.)	2091	2455	2807	3189	3412	3837
Average Balance per BSBDA – BC (Rs.)	1353	1665	2142	2305	2672	3151
OD Facility Availed in BSBDA (No. in million)	5.8	5.9	6.4	6	6.8	5.1
% of BSBD account holder availed OD facility	1.08	1.03	1.07	0.93	1.02	0.74
OD Facility Availed in BSBDA (Amt. in Rs. Billion)	4.08	4	5.29	5.34	5.16	5.72
KCC - Total (No. in Million)	46	49	48	46	47	49
KCC - Total (Amt. in Rs. Billion)	6096	6680	6391	6726	7107	7683

Source: RBI - Trend and Progress of Banking in India: 2017-23, RBI Annual Report: 2022 - 23

\*: Provisional data of March 2023

opened through BCs as of March 2022. The share of BCs in opening BSBDA has shown an increasing trend over the past years. Further, deposit mobilisation in BSBDA has shown a steady gain. As on March 2022, gross and average deposit per BSBDA stood at Rs.2,279 billion and Rs.3,412, respectively. In comparison to this, the respective values for March 2018 were Rs.1121 billion and Rs.2091, indicating effective utilization of accounts. However, as far as availing of overdraft (OD) facility is concerned, the figure is not so impressive. As of March 2022 only 6.8 million account holders (about 1.02%) availed the OD facility for an amount of Rs.5.16 billion.

### **1.6 Financial Exclusion and Account Inactivity in India**

As per the Global Findex Database 2021, India still has 230 million adults which are unbanked adult population in the world. About 230 million Indian adults are still unbanked followed by China which has an unbanked population of 130 million. The share of account owners with an inactive account<sup>2</sup> is also high in India at 35 percent, the highest in the world. Adults in India did not use their accounts mainly for three main reasons - distance from a financial institution, lack of trust, and having no need of operating account. Each of these reasons was cited by about half of adults with an inactive account. As for other reasons, nearly 40 percent said they did not have enough money to use an account, and about 30 percent cited not feeling comfortable using an account by themselves. Notably, more men with an inactive account (34% as compared to women with an inactive account @ 26%) said they did not feel comfortable using an account by themselves.

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<sup>2</sup>As per The Global Findex Database 2021 Report, an account is termed inactive if it has not received or made a digital payment in the past year)

## Chapter -2

# Pradhan Mantri Jan Dhan Yojana

### Scheme Details

Pradhan Mantri Jan-Dhan Yojana (PMJDY) is the national mission for financial inclusion to ensure access to financial services, viz., basic savings and deposit accounts, remittance, credit, insurance, pension, etc. in an affordable manner. Under the scheme, a basic savings bank deposit (BSBD) account can be opened in any bank branch or Business Correspondent (Bank Mitra) outlet, by persons not having any other account (MoF, 2023).

### 2.2 Benefits under PMJDY

1. One basic savings bank account is opened for unbanked person.
2. There is no requirement to maintain any minimum balance in PMJDY accounts.
3. Interest is earned on the deposit in PMJDY accounts.
4. RuPay Debit card is provided to PMJDY account holder.
5. Accident Insurance Cover of Rs 1 lakh for RuPay cardholders of Old PMJDY Cards and of Rs 2 lakhs for RuPay cardholders of New PMJDY Card<sup>3</sup>.
6. An overdraft (OD) facility up to Rs.10,000 to eligible account holders is available.
7. PMJDY accounts are eligible for Direct Benefit Transfer (DBT), Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), Pradhan Mantri Suraksha Bima Yojana (PMSBY), Atal Pension Yojana (APY), Micro Units Development & Refinance Agency Bank (MUDRA) scheme.

Continuation of PMJDY beyond year 2018 witnessed a noticeable shift in approach to meet challenges and requirements of emerging financial inclusion landscape in the country. There has been a shift in focus from “every household” to “every adult”, with added emphasis on usage of accounts by enhancing Direct Benefit Transfer (DBT) flows through these accounts, promoting digital payments through the use of RuPay cards, etc. The escalation in financial inclusion in the country is reflected in the latest Global Findex Database 2021 report which suggests that in India about 78 percent of adults has access to bank accounts in 2021 as compared to only 53 percent in 2014. The scheme also reduced the gender gap in ownership of bank accounts. The data suggests that female

<sup>3</sup>As per NPCI, PMJDY OLD\* – RuPay PMJDY Cards issued on PMJDY accounts opened till 28<sup>th</sup> Aug 2018; PMJDY New\*\* – RuPay PMJDY Cards issued on PMJDY accounts opened after 28<sup>th</sup> August 2018

accounts ownership increased from 43 percent in 2014 to 78 percent in 2021, leading to almost complete elimination of the gender gap in ownership of bank accounts in the country (The Global Findex Database 2021).

### 2.3 Progress in PMJDY in India

As of March 2023, the programme has completed more than 8 years of its existence and reached out to 48.65 crore unbanked population with a wide range of financial services (Table 2.1). PMJDY has proved to be a catalyst for one of the biggest financial inclusion programmes for the country, with about 67 percent of accounts opened in rural and semi-urban areas and 33 percent accounts opened in urban and metro centre under the scheme. Total deposit in PMJDY accounts stood at Rs.1,98,844 crore at the end of March, 2023. Both gross and average deposit per account have increased over the time, representing improvement in access and usage of financial services. The average deposit per account, which was recorded as Rs.2,725 during the year 2019 reached its all-time high at Rs.4,087 at the end of March 2023. Under PMJDY, 32.9 million Rupay cards have been issued till March 2023.

**Table: 2.1. Progress in PMJDY over the last five years**

Particulars	2019	2020	2021	2022	2023
1. Total Number of Account Opened (Crore)	35.27	38.32	42.59	45.06	48.65
1.1. Out of which, Rural & Semi - Urban Accounts (Crore)	20.90 (59)	22.63 (59)	28.34 (67)	30.07 (67)	32.45 (67)
1.2. Urban & Metro Centre (Crore)	14.37 (41)	15.69 (41)	14.24 (33)	14.99 (33)	16.20 (33)
2. Deposit in Accounts (Crore)	96,107	1,18,434	1,44,157	1,66,459	1,98,844
2.1. Average Deposit per Account (Rs.)	2,725	3,091	3,385	3,694	4,087
3. <i>Rupay</i> Debit Cards Issued (crore)	27.91	29.3	31.1	31.6	32.9
3.1. % of <i>Rupay</i> Debit Card Issued (% of Account Holders)	79.13	76.46	73.02	70.17	67.63

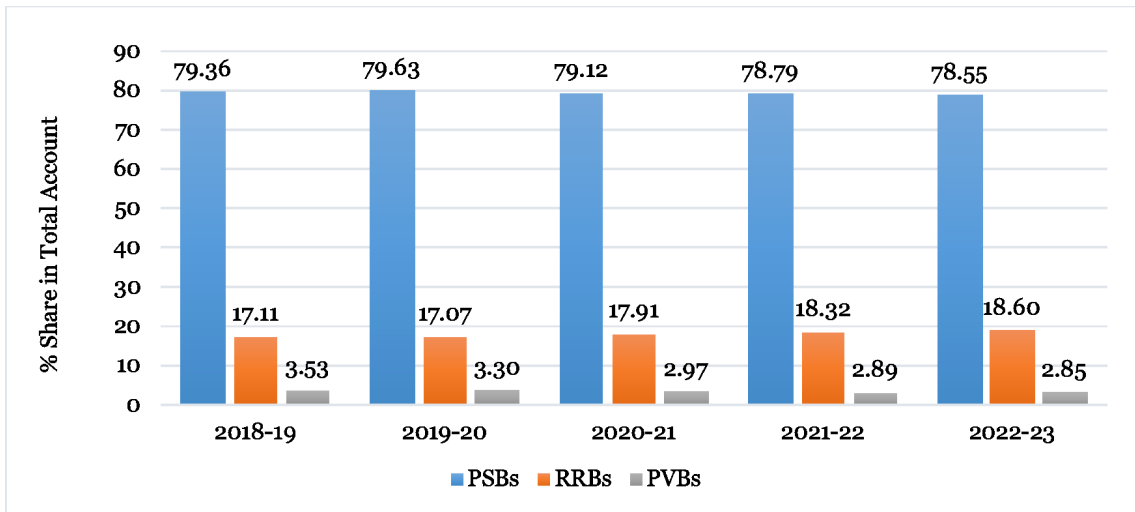
Source: <https://pmjdy.gov.in/Archive>

(Figures in the parenthesis represents % share in total)

### 2.4 Bank Group wise Progress

Public sector banks has played a significant role in opening accounts under the Pradhan Mantri Jan-Dhan Yojana (PMJDY) due to their vast network (Figure 2.1). As on March 2023, 78.55 percent of PMJDY accounts across the country were opened through PSBs followed by Regional Rural Banks (RRBs) at 18.60 percent and Private Sector Banks (PVBs) at 2.85 percent.

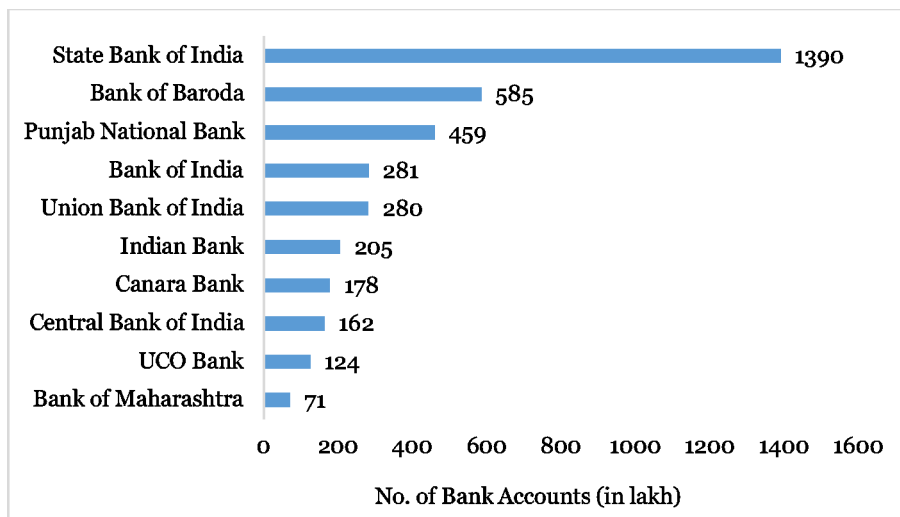
Figure 2.1: Trend in Opening of PMJDY accounts by Bank Group



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

Among the public sector banks, State Bank of India has taken the lead in PMJDY by opening over 1,389 lakh accounts, followed by Bank of Baroda (584 lakh) (Figure 2.2). The other important players among the public sector banks are Punjab National Bank, Bank of India, Bank of India, Union Bank of India, etc.

Figure 2.2: Top 10 PSBs having PMJDY Outreach as on March, 2022 (in lakh)

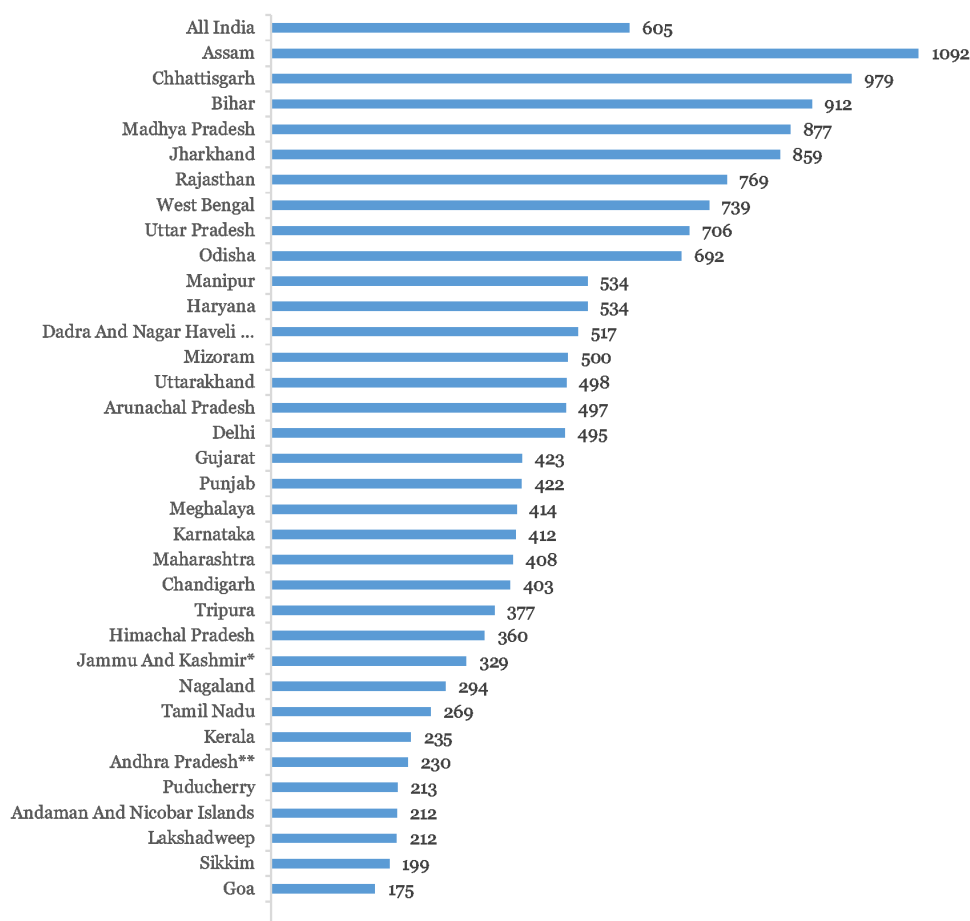


Source: <https://pmjdy.gov.in/Archive>

## 2.5 Account Penetration – State wise tally

State wise count of account penetration in PMJDY scheme in terms of accounts per thousand adult population (15 + Years) shows that at all India level, there are 605 PMJDY accounts per thousand adult population, as of 13 September 2023 (Figure 2.3). Among the states, Assam has occupied the highest position with 1,092 PMJDY beneficiaries per thousand adult population. It is followed by Chhattisgarh with 888 beneficiaries per thousand adult population. The other states which have crossed the all India level figure are - Bihar, Madhya Pradesh, Jharkhand, Rajasthan, West Bengal, Uttar Pradesh and Odisha.

**Figure 2.3: PMJDY beneficiaries per thousand adult population, by State**



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

\*: Data includes Telengana, \*\*: Data includes Ladakh - due to not availability of population figure.

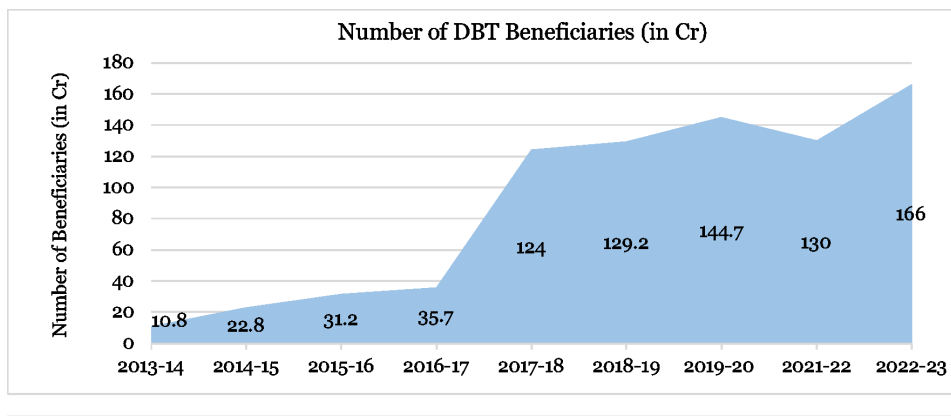
## 2.6 PMJDY and Direct Benefit Transfer

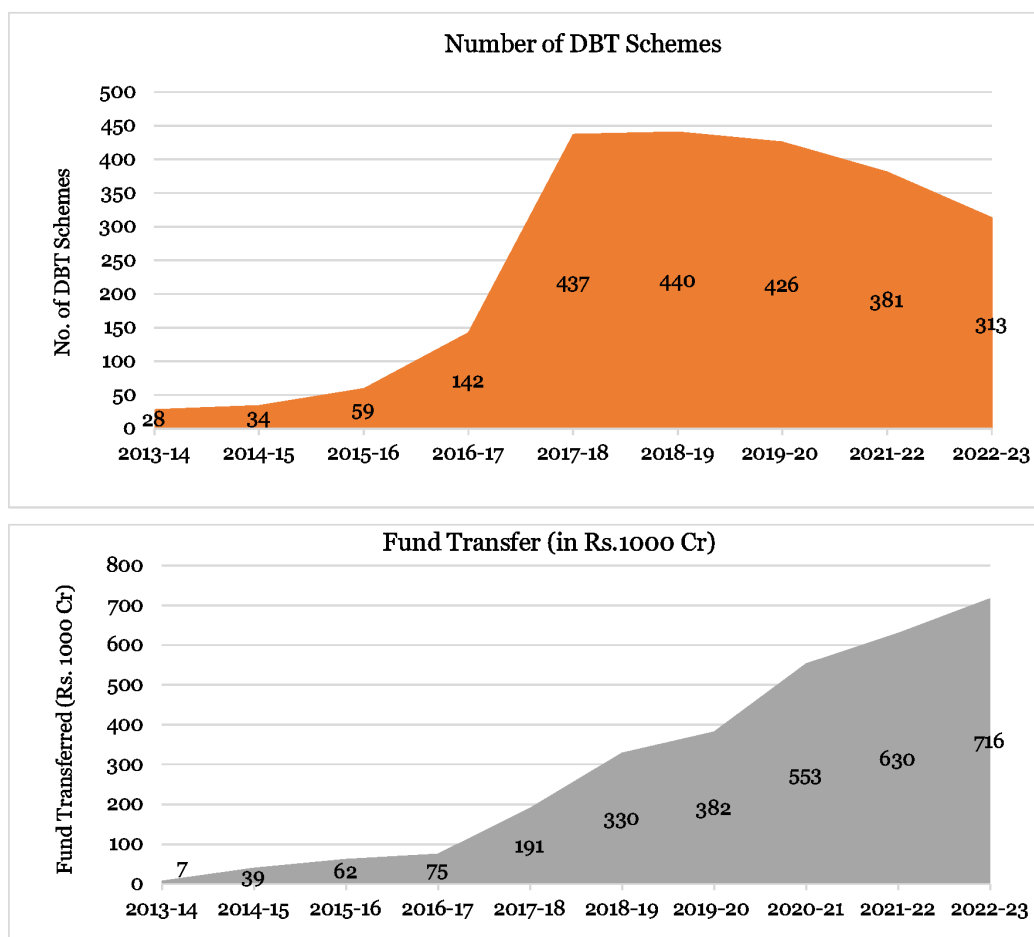
Direct Benefit Transfer (DBT) is a scheme launched by the Government of India on 1st January 2013 with the aim of reforming the government delivery system by re-engineering the existing process in welfare schemes for simpler and faster flow of information/funds and to ensure accurate targeting of the beneficiaries, de-duplication, and reduction of fraud. First phase of DBT was initiated in 43 districts and later on 78 more districts were added in 27 schemes pertaining to scholarships, women, child and labor welfare. DBT was further expanded since its inception across the country.

A key role in large-scale, real-time implementation of DBT has been played through the JAM trinity- Jan Dhan accounts, Aadhaar numbers and Mobile numbers. Jan Dhan bank accounts aim to ensure universal financial inclusion, Aadhaar numbers provide a means for identification and authentication, and mobile banking offers an alternative mechanism of payment and withdrawal. The JAM trinity has enabled India to make substantial progress in financial inclusion. JAM and DBT linked more than 22 crore Jan Dhan Account, more than 100 crore Aadhaar and about 100 crore Mobile connections to provide a unique opportunity to implement DBT in all welfare schemes across country including States & UTs. As of March 2023, DBT covers about 313 Govt. schemes and has total benefit transfer of Rs.7,16,396 crore during FY 2022-23 through a total of 693 crore transactions.

DBT and other governance reforms have led to removal of duplicate/ fake beneficiaries and plugging of leakages etc., as a result of which the government has been able to target the genuine and deserving beneficiaries. Total i.e. Cumulative Direct Benefit Transfer to beneficiaries upto February 2024 is Rs.34,13,425 crore. The progress of Direct Benefit Transfers in terms of fund transferred and number of beneficiaries covered are presented in Figure 2.4.

**Figure 2.4: Progress in Direct Benefit Transfers**





Source: [https://dbtbharat.gov.in./](https://dbtbharat.gov.in/)

## 2.7 Progress under Social Security Schemes

PMJDY has also provided a platform for micro insurances to the beneficiaries for accidental and life risk cover, as also pension scheme for support during old age. Three social security schemes viz. Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), Pradhan Mantri Suraksha Bima Yojana (PMSBY), Atal Pension Yojana (APY) were implemented in Phase-II during May 2015. Features of the schemes are given in Box 2.1.

As of July 2023, a total of 17.38 crores, 37.71 crores and 4.86 crores beneficiaries have subscribed to PMJJBY, PMSBY and APY, respectively (Table 2.2). The subscription ratio indicates the price-sensitive nature of the Indian customers in availing of insurance benefits. As more than double the beneficiaries enrolled in PMSBY due to its lower

price as compared to PMJJBY. As far as gross enrolment vis-à-vis female enrolment is concerned, the data suggests that despite a significant reduction in the gender gap in account ownership of bank account, the Indian insurance market are still dominated by male.

**Box 2.1: Features of PMJJBY, PMSBY and APY**

Particulars	PMJJBY	PMSBY	APY
Term	Life insurance term plan for one year, renewable year after year	Personal accidental scheme for one year	
Eligibility	Individual in the age group of 18–50 years (life cover up to age 55) having a savings bank account are eligible for this scheme. Account holders need to give consent to join and enable auto-debit.	Individual in the age group of 18–70 years and having a savings bank account. Account holders have to give their consent to join the scheme.	Individual in the age group of 18–40 years and having a savings bank account who are not income tax payers.
Coverage	Covers death (either accidental or natural causes) during the coverage period. Any type of disability suffered is not covered under the plan.	Covers only accidental deaths, permanent total disability and permanent partial disability. Natural deaths are not covered in this scheme.	Covers monthly pension after 60 years of age of the subscriber.
<b>Benefit payable</b>	Rs. 2.00 lakh	Accidental death/permanent disability: Rs.2.00 lakh. Partial Disability due to accident: Rs.1 lakh	Guaranteed minimum monthly pension of Rs.1000 or Rs.2000/Rs. 3000/ Rs.4000/ Rs.5000 after the age of 60 years, based on contributions made by the subscriber  On death of subscriber, same pension to given to spouse, followed by the nominee (in case of death of spouse), for the remaining vesting period, till the original subscriber would have attained age of 60 years
Premium	Rs. 436/-per annum per member	Rs. 20/- per annum per member	Varies from monthly fee of Rs.42 to Rs.210 under five pension plan slabs available

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

**Table 2.2: Progress in PMJJBY, PMSBY and APY**

Scheme	Mar-18	Mar-19	Mar-20	Mar-21	Apr-22	Jul-23
<b>PMJJBY</b>						
Gross Enrolment (No. in cr.)	5.33	5.92	6.96	10.27	10.24	17.38
Total Nos. of Claims Disbursed	89708	135212	178189	234905	244197	683767
<b>PMSBY</b>						
Gross Enrolment (No. in cr.)	13.48	15.47	18.54	23.26	23.4	37.71
Total Nos. of Claims Disbursed	16430	32176	39969	45472	45992	120779
<b>APY</b>						
Gross Enrolment (No. in cr.)	0.96	1.50	2.11	2.80	3.63	4.86
Contribution (Amount in Rs. cr.)	3602	6335	9747	13764	18647	26582

Source: <https://financialservices.gov.in> & <https://www.indiastat.com>

## 2.8 Pradhan Mantri MUDRA Yojana (PMMY)

The Micro Units Development & Refinance Agency Ltd (MUDRA) was set up and Pradhan Mantri Mudra Yojana (PMMY) was launched in April 2015 with the objective of ensuring the flow of credit to the small business sector. These loans are extended through various agencies, viz., Banks, Non-Banking Financial Companies (NBFCs), and Micro-Finance Institutions (MFIs). The collateral free Loans up to Rs.10 lakh under PMMY have been categorised as (i) Shishu: covering loans up to Rs.50,000, (ii) Kishore: covering loans above Rs.50,000 and up to Rs.5 lakh, and (iii) Tarun: covering loans above Rs.5 lakh and up to Rs.10 lakh. The scheme has completed 8 years of its implementation and has reached to more than 41.16 crore loan accounts with a cumulative credit support of Rs.22.89 lakh crore, primarily benefitting the borrowers of weaker sections of the society. Approximately 21 percent of the total loans have been sanctioned to new entrepreneurs, about 69 percent loans to women borrowers and 51 percent loans have been sanctioned to SC/ST/OBC categories of borrowers.

Table 2.3 displays the progress of the scheme over the last four years. During the FY 2022-23, Rs.4.57 lakh crore loans have been sanctioned, benefitting 6.23 crore borrowers. The average loan size has increased from Rs.54,212 in FY 2019-20 to Rs.73,268 in FY 2022-23. Inter-agency wise comparison shows that, during the year 2022-23, 41.9% of loan were sanctioned by private sector banks, 24.49% by NBFC-MFIs, 12.50% by Public Sector Banks, 11.17% by SFBs, 5.60% by NBFCs, 3.76% by RRBs and 0.52% by MFIs, under PMMY.

In terms of different categories of the enterprise financed, the majority (69.13%) of units are in the Shishu category followed by Kishore (28.75%) and Tarun (2.11%).

Women continued to have the largest share in terms of loan received over the last four years. During 2022-23, 71.03 percent of loan were sanctioned to women. Further, the scheme has also benefited a large extent of weaker section (SC/ST/OBC) of society. The share of the weaker section out of the total number of loan sanctioned stood at 50.48 percent, of which, 16.69 percent were SC, 5.68 percent were ST and 28.22 percent belonged to OBC categories.

**Table 2.3: Progress of PMMY over the last 4 Years**

Parameter	2019-20	2020-21	2021-22	2022-23
<b>A. Overall Progress :</b>				
No. of Accounts (in Crore)	6.22	5.07	5.38	6.23
Sanctioned Amount (Rs. Lakh Crore)	3.37	3.22	3.39	4.57
Average loan size (Rs.)	54,218	63,420	63,037	73,268
<b>B. By Financing Agency (No. of Loan Accounts )</b>				
Public Sector Banks	7981168 (12.82)	8060595 (15.89)	6121790 (11.38)	7787071 (12.50)
Private Sector Banks	20866882 (33.52)	20037222 (39.49)	24549895 (45.64)	26147399 (41.96)
Regional Rural Banks	1522746 (2.45)	1602237 (3.16)	1308114 ( 2.43)	2340463 (3.76)
State Cooperative Banks	122 (Negligible)	50 (Negligible)	40 (Negligible)	-
Small Finance Banks	7160402 (11.5)	4389991 (8.65)	6211265 (11.55)	6962551 (11.17)
MFIs	2059118 (3.31)	952423 (1.88)	1253650 (2.33)	322392 (0.52)
NBFC-MFIs	17562463 (28.21)	13080471 (25.78)	12720130 (23.65)	15258775 (24.49)
Non-Banking Finance Companies	5094705 (8.18)	2612057 (5.15)	1630642 (3.03)	3491947 (5.60)
<b>C. By Enterprise Category (No. of Loan Accounts )</b>				
Shishu: (Up to Rs.50000)	54490617 (87.54)	40180115 (79.2)	41721154 (77.56)	43077851 (69.13)
Kishore: (loans above Rs.50,000 and up to Rs.5 lakh)	6471873 (10.4)	9486160 (18.7)	11088206 (20.61)	17915912 (28.75)
Tarun: (loans above Rs.5 lakh and upto Rs.10 lakh)	1285116 (2.06)	1068771 (2.11)	986166 (1.83)	1316835 (2.11)
<b>D. By Social Category (No. of Loan Accounts )</b>				
General	32497506 (52.21)	25864699 (50.98)	25994139 (48.32)	30856600 (49.52)
SC	10281553 (16.52)	8398417 (16.55)	9364702 (17.41)	10335914 (16.69)
ST	3889696 (6.25)	3123282 (6.16)	3518084 (6.54)	3536426 (5.68)
OBC	15578851 (25.03)	13348648 (26.31)	14918601 (27.73)	17581658 (28.22)
<b>E. Coverage (No. of Loan Accounts )</b>				
Women	39103349 (62.82)	33303604 (65.64)	38429259 (71.44)	44256813 (71.03)
New Entrepreneurs	11913903 (19.14)	7740581 (15.26)	6530351 (12.14)	10066770 (16.16)

Source: <https://www.mudra.org.in>; [www.indiastat.com](http://www.indiastat.com) (Figures in the parenthesis represents percentage share in total and total may not be 100 due to rounding off)

## Chapter - 3

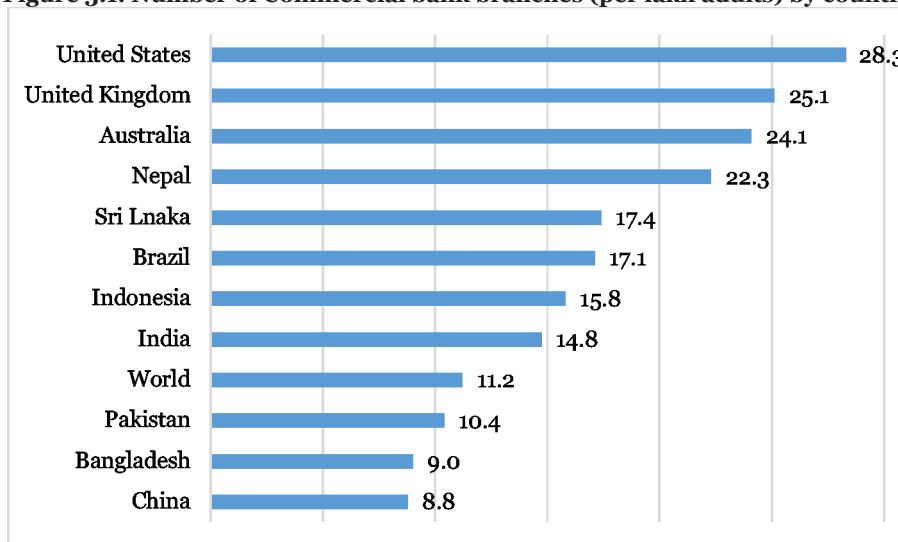
### Bank Branch Network

#### 3.1 The Global Scenario

Banking refers to the system of financial institutions, such as banks and credit unions that provide various financial services to individuals, businesses, and governments. Banking services mainly include accepting deposits, lending money, facilitating transactions, and offering various financial products like savings accounts, loans and credit cards. Banking plays a crucial role in the economy by facilitating the flow of money and enabling economic activities. The Reserve Bank of India (RBI) is India's central bank and regulatory body, responsible for regulation of the Indian banking system.

As per the World Bank, the number of commercial bank branches available per lakh adult population in the country in year 2021 is 14.75. In comparison to this, the world average is 11.2 bank branches. The number of commercial bank branches per lakh adult population of a few selected countries, is presented in Figure 3.1.

**Figure 3.1: Number of Commercial bank branches (per lakh adults) by country**



Source: The World Bank

India has the highest number of commercial bank branches in the world. According to the RBI, there are over 1,62,908 bank branches in India in March 2023, as against 1,52,407 bank branches in March 2019, indicating that the expansion of bank branch network by all commercial banks has been persistent over the years (Table 3.1). To serve the rural population about 61 percent of bank branches are concentrated in rural and semi urban

areas (33.37% in rural & 27.60% in semi – urban) and remaining approximately 39 percent are located in urban and metropolitan area (19.24% in urban & 19.79% in metropolitan). In addition to brick and mortar branches, unbanked and underserved rural areas are also served through “banking outlet” which is a fixed-point service delivery unit manned by either the bank’s staff or its BC where services of acceptance of deposits, encashment of cheque/cash withdrawal, or lending of money are provided for a minimum of 4 hours per day for at least 5 days in a week. In order to ensure delivery of banking services, the rural banking outlets in the branchless mode has witnessed massive rise in their number. As of March 2022, over 22.18 lakh rural branchless banking outlets were available across the country to offer doorstep banking services to people.

**Table 3.1: Population Group-wise Number of Bank Branches**

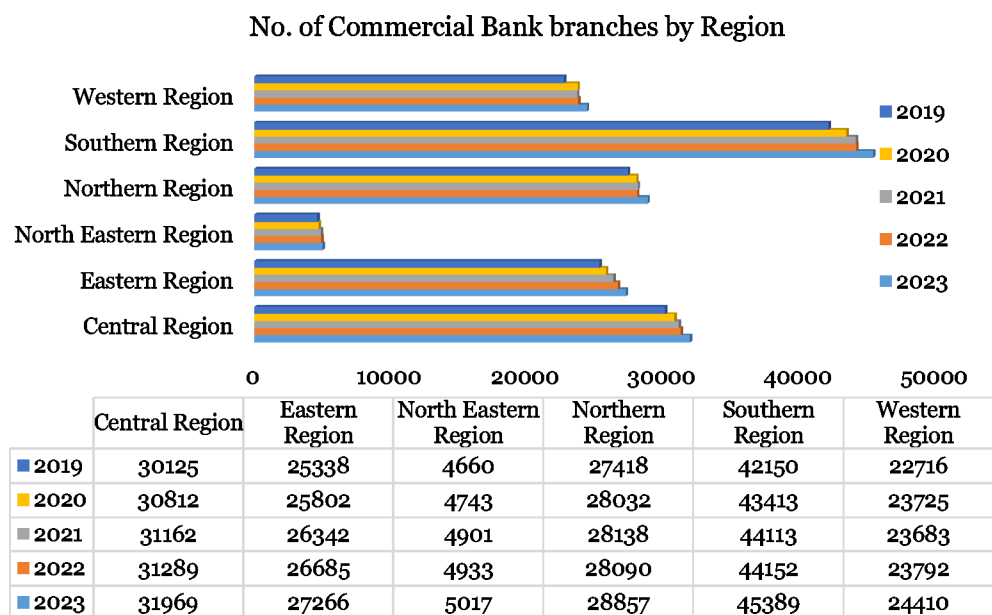
Year	Rural	Semi-urban	Urban	Metropolitan	Total
2019	51661 (33.90)	41495 (27.23)	28813 (18.91)	30438 (19.97)	152407
2020	52448 (33.51)	42682 (27.27)	29882 (19.09)	31515 (20.13)	156527
2021	52761 (33.32)	43538 (27.50)	30705 (19.39)	31335 (19.79)	158339
2022	53319 (33.55)	43608 (27.44)	30661 (19.29)	31353 (19.73)	158941
2023	54370 (33.37)	44955 (27.60)	31342 (19.24)	32241 (19.79)	162908

Source: <https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications#!17>

\*: Data excludes administrative offices (Figures in the parenthesis represents percentage share)

### 3.2 Regional Outreach of Bank Branches

Analysis of data on regional outreach of scheduled commercial bank branches reveals that there exists considerable regional variations in the banking coverage in India and the best served region by a bank branch is Southern region. As of March, 2023, the Southern region accounted for 28 percent of the total number of brick and mortar branches in India followed by Central region (20%) Northern region (18%) and Eastern region (17 %). North Eastern region, with 03%, has the lowest share of bank branches in the country (Figure 3.2).

**Figure 3.2: Trend in Commercial Bank branches by Region**

Source: <https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications#17>

### 3.3 Geographical Penetration of Bank Branch—Branches per 1000 Sq. Km.

Availability of scheduled commercial bank branches per 1000 sq. km measures the extent of geographical penetration of banking sector services across the country. It assesses the average distance a customer needs to cover to reach the nearest bank branch. Higher the geographical penetration less is the distance required to be travelled by an individual to reach the bank and vice versa.

Analysis of data on the State and Union Territory (UT) wise availability of scheduled commercial bank branches per 1000 sq. km geographical area reveals that there is an increasing trend in geographical penetration of bank branches in India over the last five years (Table 3.2). At all India level, there were 47.25 bank branches per thousand sq. km in 2019 which has increased to 50.50 at the end of March 2023. This suggests that people are required to travel less in 2023 as compared to 2019, to visit the nearest bank branch. However, variation is observed amongst the States and UTs. Four UTs viz. Chandigarh, NCT of Delhi, Lakshadweep and Puducherry tops the list of number of bank branches per 1000 sq. km geographical area. Among the States, Goa occupies the highest position with 184.49 bank branches per 1,000 sq. km while Arunachal Pradesh ranks lowest with 2.26 bank branches per 1,000 sq. km. Twenty states/UTs are below the national average of 50.50 bank branches per 1000 sq. km.

**Table 3.2: Trend in SCBs Branch Penetration Per 1,000 Sq. Km. (By State/UT)**

State/UT	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23
Chandigarh	4035.09	4184.21	4122.81	4052.63	4105.26
Delhi	2601.48	2655.43	2584.63	2561.7	2611.6
Lakshadweep	466.67	466.67	733.33	733.33	733.33
Puducherry	551.02	561.22	565.31	563.27	577.55
Goa	191.52	192.33	189.09	183.95	184.49
Kerala	173.71	177.47	178.96	177.96	182.56
Dadra and Nagar Haveli and Daman and Diu	177.74	186.05	176.08	174.42	172.76
Punjab	133.69	135.66	135.32	132.48	134.25
Haryana	116.87	120.42	120.13	119.38	122.75
West Bengal	104.57	104.58	105.83	107.56	110.41
Tamil Nadu	90.04	93.26	94.66	95.24	98.14
Bihar	79.12	80.84	82.61	82.95	84.67
Uttar Pradesh	74.79	76.01	76.76	76.60	78.02
Tripura	54.45	55.22	56.55	57.60	59.32
Karnataka	56.14	57.64	58.00	57.55	58.74
Telangana	48.08	49.77	51.42	51.84	53.69
Andhra Pradesh	44.49	45.81	47.02	47.29	48.75
Maharashtra	44.28	45.64	45.67	46.03	46.99
Gujarat	42.17	45.14	44.96	45.06	46.70
Uttarakhand	41.28	41.62	42.41	41.71	42.31
Jharkhand	39.98	40.53	41.32	41.25	42.38
Assam	37.55	38.34	39.65	39.56	40.15
Odisha	33.33	34.22	35.21	35.62	36.58
Himachal Pradesh	29.80	30.14	31.02	30.98	32.06
Madhya Pradesh	23.14	23.93	24.24	24.6	25.31
Rajasthan	22.44	23.12	23.61	24.00	24.96
Sikkim	22.41	23.11	23.39	23.68	24.8
Chhattisgarh	20.45	21.43	21.67	22.34	22.98
Jammu and Kashmir	17.70	17.75	18.01	18.32	18.85
Meghalaya	16.67	16.67	17.08	17.03	17.21
Nagaland	11.04	11.22	11.58	11.64	11.88
Manipur	9.41	9.54	9.99	10.70	11.02
Mizoram	9.77	9.96	10.39	10.91	10.82
Andaman and Nicobar Islands	8.61	8.85	8.97	8.85	8.97
Arunachal Pradesh	2.04	2.08	2.16	2.17	2.26
Ladakh	1.13	1.18	1.30	1.40	1.54
<b>All India</b>	<b>47.25</b>	<b>48.52</b>	<b>49.09</b>	<b>49.27</b>	<b>50.50</b>

 Source: <https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications#17>

Geographical area- CMIE States of India, Geographical area as per Census 2011

### 3.4 Demographical Penetration – Branches per Lakh Population

Number of bank branches per lakh population measures the extent of demographic penetration of bank branches. Availability of more number of bank branches per lakh population indicates adequate supply of banking services for more number of clients thus enabling better supply of financial services to people to meet business or individual banking needs.

Data analysis over the last five years shows an increasing trend of demographic penetration of commercial bank branches per lakh population (Table 3.3). The number of bank branches per lakh population in the country has increased from 12.59 in year 2019 to 13.46 in year 2023. However, in spite of the increasing number of bank branches in the country over the years, 12 States, viz. Meghalaya, Maharashtra, Rajasthan, Chhattisgarh, West Bengal, Madhya Pradesh, Jharkhand, Assam, Nagaland, Manipur, Uttar Pradesh and Bihar have recorded below the national average of 13.46 branches per one lakh population, suggesting a need for more bank branches to cater to the banking needs of populations of these states. Sixteen states and eight UTs have reported higher demographical penetration of bank branches as compared to the national average.

**Table 3.3: Trend in SCBs Branch per 1,00,000 Population**

State/UT	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23
Goa	48.61	48.82	47.99	46.69	46.83
Chandigarh	43.58	45.19	44.53	43.77	44.34
Lakshadweep	21.71	21.71	34.12	34.12	34.12
Ladakh	23.06	24.10	26.51	28.57	31.33
Sikkim	26.04	26.86	27.19	27.51	28.83
Himachal Pradesh	24.17	24.44	25.16	25.13	26.00
Punjab	24.27	24.63	24.56	24.05	24.37
NCT of Delhi	22.98	23.46	22.83	22.63	23.07
Puducherry	21.64	22.04	22.20	22.12	22.68
Uttarakhand	21.89	22.07	22.49	22.12	22.44
Haryana	20.38	21.00	20.95	20.82	21.41
Kerala	20.20	20.64	20.81	20.70	21.23
Mizoram	18.77	19.14	19.96	20.96	20.78
Andaman and Nicobar Islands	18.66	19.18	19.44	19.18	19.44
Karnataka	17.62	18.09	18.21	18.07	18.44
Dadra and Nagar Haveli and Daman and Diu	18.27	19.12	18.10	17.93	17.75
Tamil Nadu	16.23	16.81	17.06	17.17	17.69

<b>State/UT</b>	<b>Mar-19</b>	<b>Mar-20</b>	<b>Mar-21</b>	<b>Mar-22</b>	<b>Mar-23</b>
Telangana	15.40	15.94	16.46	16.60	17.19
Tripura	15.54	15.76	16.14	16.44	16.93
Andhra Pradesh	14.63	15.06	15.46	15.54	16.03
Jammu and Kashmir	14.63	14.67	14.89	15.14	15.58
Gujarat	13.69	14.66	14.60	14.63	15.16
Arunachal Pradesh	12.36	12.57	13.08	13.15	13.66
Odisha	12.36	12.70	13.06	13.21	13.57
Meghalaya	12.61	12.61	12.91	12.88	13.01
Maharashtra	12.12	12.50	12.51	12.60	12.87
Rajasthan	11.20	11.54	11.79	11.98	12.46
Chhattisgarh	10.82	11.34	11.47	11.82	12.16
West Bengal	10.17	10.29	10.46	10.74	10.92
Madhya Pradesh	9.82	10.15	10.29	10.44	10.74
Jharkhand	9.66	9.79	9.99	9.97	10.24
Assam	9.44	9.64	9.97	9.94	10.09
Nagaland	0.49	9.25	9.40	9.70	9.75
Manipur	8.17	8.29	8.68	9.30	9.57
Uttar Pradesh	9.02	9.17	9.26	9.24	9.41
Bihar	7.16	7.31	7.47	7.50	7.66
All India	12.59	12.93	13.08	13.13	13.46

Source: <https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications#!17>

*Population- CMIE States of India, Population figure as per Census 2011*

## Chapter - 4

# Deployment of ATMs

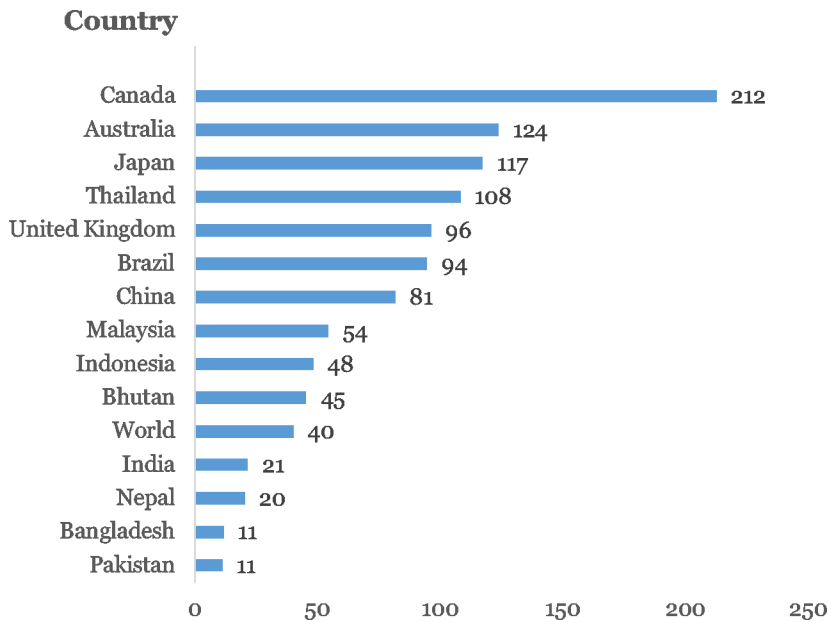
### 4.1 India vis-à-vis Global Scenario

Automated teller machines (ATMs) are computerized telecommunications devices that provide clients of a financial institution with access to financial transactions in a public place. It is a form of electronic banking terminal that helps customers to carry out simple transactions without the support of a branch operator. Customers can perform self-service tasks such as deposits, cash withdrawals, bill payments and account transfers through ATMs. ATMs allow customers to have access to bank services 24/7.

Currently, there are more than three million ATMs around the world and more than half the world's ATMs are found in five countries — China, United States, Japan, Brazil and India. Of these, the first four experienced a decline in numbers during 2018, while India, saw a marked slowing of ATM growth, according to Global ATM Market and Forecasts to 2024, a report from the London-based research and consulting firm, RBR (RBR, 2019). Each of these countries had its own reasons for the decline in numbers of ATMs, for example, swift adoption of non-cash payments in China, branch closures leading to fewer bank ATMs in the USA, surge in the use of digital channels in Brazil, etc. The number of ATMs in the World decreased by 1.8 machines per 100,000 adults (-4.36%) from 41.24 per 100,000 adults in 2020 to 39.49 per 100,000 adults in 2021. Despite these findings, RBR's study shows that ATM numbers have actually grown in most countries, in particular financial inclusion initiatives continue to boost ATM growth in developing markets across Asia-Pacific, the Middle East & Africa and Latin America. With this pattern expected to continue over the next few years, the global ATM total is set to fall slowly, to 3.22 million in 2024.

Number of ATMs per 100,000 adults in 2021 for various countries is presented in Figure 4.1. The data shows that India lags behind in ATM penetration (ATMs per lakh adult population) from most of the emerging markets and large economies like Russia, Brazil, China, UK, etc. According to World Bank most recent available data (2021), there are 21 ATMs available per lakh adult population in India which is significantly low as compared to China with 81 ATMs, Thailand, Japan, Australia and other countries having more than 100 ATMs per 100,000 adults in the same period.

**Figure 4.1: Number of ATMs Per Lakh Adult Population**



Source: World Bank, 2021; <https://databank.worldbank.org/source/world-development-indicators/Series/FB.ATM.TOTL.P5>

## 4.2 Deployment of ATMs/CRMs/WLAs in India

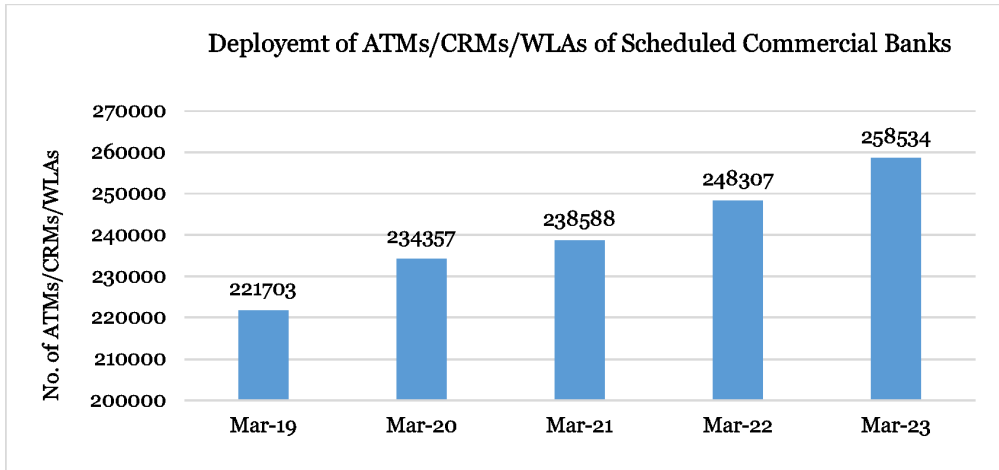
Official data shows that the value and volume of banknotes in circulation increased by 9.9 percent and 5.0 percent, respectively, in 2021-22, compared to 16.8 percent and 7.2 percent, respectively, in 2020-21. This emphasizes the importance of cash flow in a country with a big population, and ATM networks play a critical role in facilitating and preserving it.

Although customers can use ATMs for a variety of banking tasks, the two most common uses of ATMs have historically been cash withdrawal and balance enquiries. Additionally, ATMs are being used to deposit cash, activate cards and reset card PIN. These reasons have necessitated the establishment of ATMs on almost every street corner in the country. However, it is anticipated that fewer transactions will be made through ATMs after FY 2026–2027 as a result of the growing use of digital payment methods like UPI, Central Bank Digital Currency (CBDC), and cards (PwC, 2023).

At the end of March 2023, there were more than 2.58 lakh ATMs/Cash Recycling Machines (CRMs)/White Label ATMs (WLAs) operating nationwide in comparison to 2.48 lakh in March 2022, thus registering a growth of about 4 percent in year 2023 over the previous year (Figure 4.2). This is mainly on account of placement of more ATMs/

CRMs/WLAs by Payment Banks, White Label ATM Operators and Small Finance Banks (SFBs).

**Figure 4.2: Trend in Deployment of ATMs/CRMs/WLAs of Scheduled Commercial Banks over the last five years**

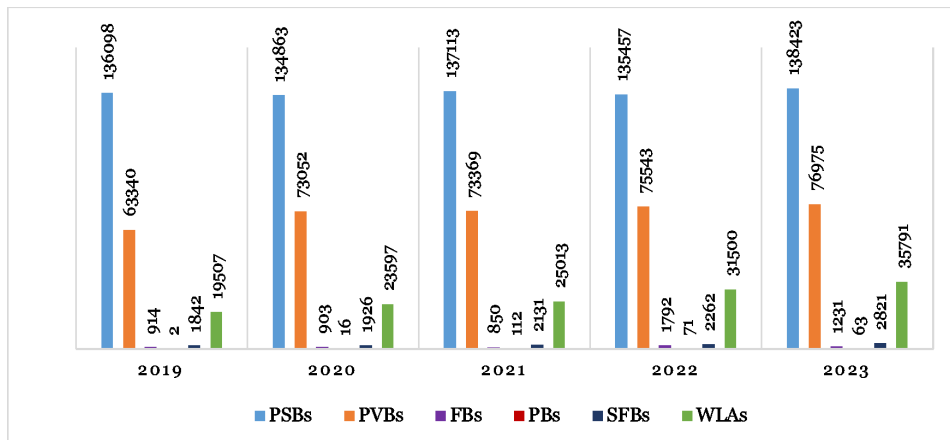


Source: RBI

### 4.3 Deployment of ATMs/CRMs/WLAs by Entities

As of March 2023, public sector banks have the highest share (1,38,423; 54.22%) in total ATMs/CRMs deployed in the country followed by private sector banks (76,975; 30.15%) and WLAs (35,791; 12.77%) deployed by White Label ATM Operators (Figure 4.3). Foreign Banks (FBs), Payment Banks (PBs) and SFBs together account for only 1.61 percent of total ATMs.

**Figure 4.3: Trend in Deployment of ATMs by Entities**

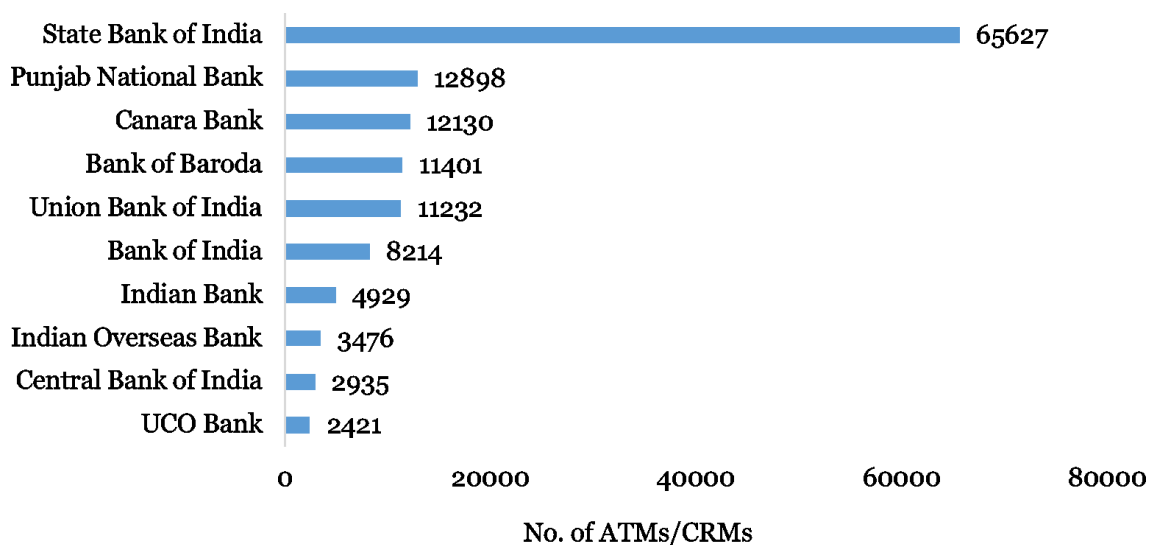


Source: RBI (Figures exclude StCBs, UCBS, DCCBs & RRBs)

Deployment of ATMs by PSBs, PVBs, SFBs and WLAs have witnessed an increasing trend over the previous year. However, it has declined in case of Foreign Banks and Payments Banks.

Public sector banks have an expansive network of ATMs across India. The major players are State Bank of India, Punjab National Bank, Canara Bank, Bank of Baroda, etc. According to RBI's data, as on March 2023, SBI has the highest number of ATMs/CRMs in India i.e. 65627 ATMs/CRMs and it account for more than one fourth of country's total ATMs/CRMs (Figure 4.4).

**Figure 4.4: Top 10 PSBs having highest ATM Outreach (As of March, 2023)**

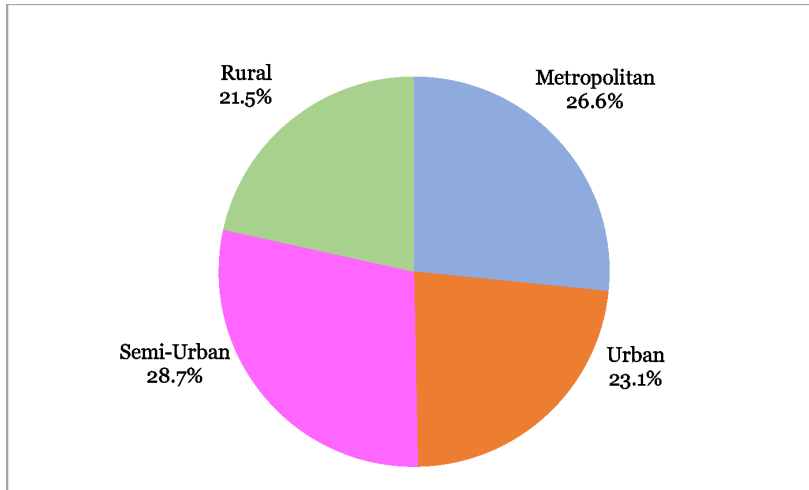


Source: RBI

#### 4.4 Distribution of ATMs in India

The ATMs deployed across the country can be categorized into four locational categories – Metro, Urban, Semi-Urban and Rural. The number of ATMs across the country stood at over 2.58 lakh by the end of March 2023 which are almost equally divided between metro and urban regions and semi-urban and rural region. As of March, 2023, 49.7 percent of ATMs in India are deployed in urban and metro centres and remaining 50.3 percent are located in rural and sub-urban areas (Figure 4.5). As per the census 2011, 83.37 crore (69%) Indian population resides in rural areas while 37.71 crore (31%) lives in urban regions. Thus, locational distribution indicates that ATM penetration in India is skewed towards urban cities as compared to rural areas. There are about 34 ATMs per one lakh urban population as compared to only 16 ATMs per one lakh population in rural areas.

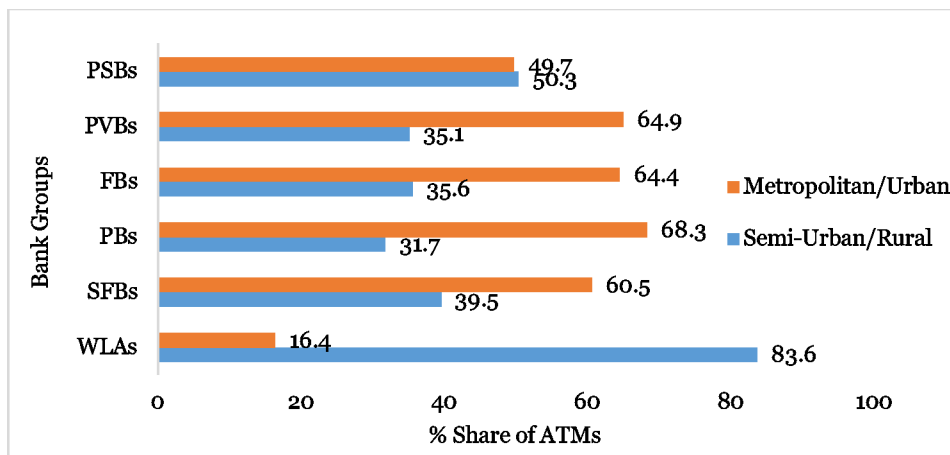
**Figure 4.5: Regional Distribution of ATMs (as of March 2023)**



Source: RBI

Further, data analysis on bank group wise and location wise ATM deployment in India reveals that public sector banks have evenly deployed about 50 percent of their ATMs in metro/urban centers and remaining 50 percent ATMs in semi-urban/rural centres. However, ATMs of payments banks, private sector banks, foreign banks and SFBs are mostly urban/metro centric, accounting for about 68.3 percent, 64.9 percent, 64.4 percent and 60.5 percent, respectively. Rural areas are mostly served by WLAs, as about 83.6 percent (29,929 ATMs) ATMs deployed by WLAs are concentrated in rural and semi – urban areas (Figure 4.6).

**Figure 4.6: Bank Group and Location Wise Spread of ATMs (in % Share) as of March 2023**



Source: RBI

#### 4.5 Demographical and Geographical Outreach of ATMs

Demographic and geographic outreach of ATMs are the indicators of access to financial services, rescaled by adult population (number of ATMs per one lakh population) and land mass (number of ATMs per thousand sq.km.), respectively. Lower demographical outreach suggests accessibility of more ATMs for clients while higher geographical outreach indicates lower distance required to be covered by clients to reach the nearest ATM.

As of March 2023, Goa has the highest number of ATMs per one lakh population in the country. It has over 71 ATMs per one lakh population. Goa is followed by four UTs viz., Chandigarh, Ladakh, Puducherry, and Dadra & Nagar Haveli and Daman & Diu to make up the top five state/UTs in terms of number of ATMs available per lakh population. Bihar occupies the last position in the list with only 9 ATMs available per one lakh population. The states which are below the national average of 21 ATMs per one lakh population are - Arunachal Pradesh (20), Chhattisgarh (17), Rajasthan (17), Nagaland (17), Mizoram (17), Tripura (16), Madhya Pradesh (16), Manipur (16), Meghalaya (15), Assam (15), West Bengal (15), Jharkhand (13), Uttar Pradesh (12) and Bihar (9) (Table 4.1).

Geographical outreach of ATMs i.e., availability ATMs per thousand sq.km. shows that about 78 ATMs are available per thousand sq.km. Five UTs viz. Chandigarh (6526), NCT of Delhi (5318), Puducherry (1369), Lakshadweep (767) and Dadra and Nagar Haveli and Daman and Diu (517) have occupied the top positions in terms of geographical proximity of ATMs. Among the states it is higher in Kerala (299) followed by Goa (280) and Tamil Nadu (231) and significantly lower in most of the north eastern states (Table 4.1).

**Table 4.1: Demographical and Geographical outreach of ATMs, as on March 2023**

State/UT	Demographical outreach #	Geographical outreach @
Andaman and Nicobar Islands	33	15
Andhra Pradesh	25	76
Arunachal Pradesh	20	3
Assam	15	60
Bihar	9	103
Chandigarh	70	6526
Chhattisgarh	17	32
Dadra and Nagar Haveli and Daman and Diu	53	517
Goa	71	280
Gujarat	24	73

Haryana	29	164
Himachal Pradesh	33	41
Jammu and Kashmir	23	28
Jharkhand	13	52
Karnataka	31	100
Kerala	35	299
Ladakh	55	3
Lakshadweep	36	767
Madhya Pradesh	16	37
Maharashtra	26	96
Manipur	16	18
Meghalaya	15	20
Mizoram	17	9
Nagaland	17	20
NCT of Delhi	47	5318
Odisha	21	55
Puducherry	54	1369
Punjab	29	158
Rajasthan	17	34
Sikkim	38	33
Tamil Nadu	42	231
Telangana	33	103
Tripura	16	58
Uttar Pradesh	12	103
Uttarakhand	30	57
West Bengal	15	154
<b>All India</b>	<b>21</b>	<b>78</b>

(Source: Data on ATM- RBI, Population - CMIE, States of India, Population figures and geographical area are as per Census 2011, #ATMs Per Lakh Population, @ATMs Per thousand Sq. Km.)

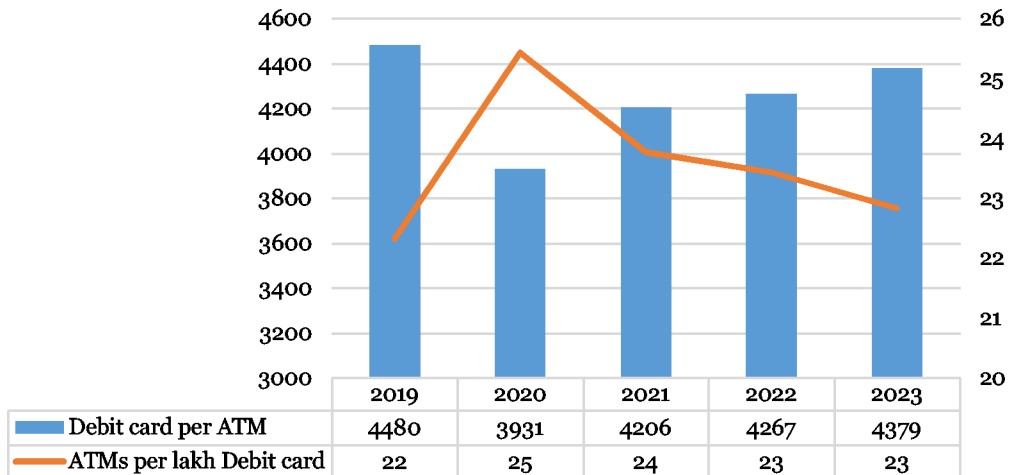
#### 4.6 Debit Cards to ATM Ratio

The total number of outstanding debit cards in India increased by 4.8 percent to 9613 lakh in March 2023 from 9177 lakh a year ago. The issuance of debit card is significantly high in India due to the issuance of *RuPay* cards to a vast section of the unbanked population. The Indian digital payments provider RuPay was introduced in 2012 by the National Payments Corporation of India (NPCI) and a big proportion of RuPay accounts

was issued under the Pradhan Mantri Jan Dhan Yojana (PMJDY). RuPay has a market share of about 70 percent in the debit card segment, as of March 2023.

The ratio of debit card per ATM shows that on an average 4,379 debit cards are available per ATM as of March, 2023. Further, availability of ATMs per one lakh debit card in India is still very low at 23 ATMs per lakh debit cards (Figure 4.7). This signifies poor outreach of ATMs in the country to complement the outstanding debit cards.

Figure 4.7: Debit Card to ATM Ratio



Source: RBI

#### 4.7 Cash Withdrawal at ATMs

Although India has seen a significant rise in digital payments, a number of factors, including a large unbanked population, cultural influences, infrastructure issues, and a slower rate of financial and digital literacy ensure that cash remains relevant and vibrant while coexisting with cutting-edge tech solutions for payments and settlements. A closer look at the volume and value of cash withdrawal at ATMs using debit cards showcases a strong emphasis on the dynamism of cash in India. During the COVID-19 pandemic, debit card-based cash withdrawals from ATMs were severely disrupted. However, the same has shown a strong recovery during the post pandemic period. At Rs.2.84 lakh crore in March 2023, the cash withdrawal value has grown by an absolute 121.33 percent compared to withdrawals values of April 2020 (Table 4.2). On the volume front, there is 100 percent recovery compared to April 2020 levels (CMS, 2023).

**Table 4.2: Debit card-based ATM cash withdrawal volume and value**

<b>Year</b>	<b>Volume (Lakh)</b>	<b>Value (Rs. Crore)</b>	<b>Average Transaction (Rs.)</b>
<b>2019-20</b>	5,416.25	2,48,096.60	4,580.60
<b>2020-21</b>	6,011.88	2,84,635.53	4,734.55
<b>2021-22</b>	5,927.87	2,85,892.55	4,822.85
<b>2022-23</b>	5,878.89	2,84,949.02	4846.99

Source: RBI Payment System Indicator

## Chapter - 5

# Digital Payments

### 5.1 The Global Development

Digital payment is the transmission of funds via a digital device or channel between payment accounts. Payments using bank transfers, mobile money, QR codes, and credit, debit, and prepaid cards may all fall under the criteria. Over the last decade, consumers and organizations have been gradually moving toward digital payments due to technology advancements, altered user preferences as well as changes in legal and regulatory frameworks. The growth of mobile money, electronic wallets, and online banking has been aided by smartphones and increased internet access. This has helped consumers and businesses to move away from cash and cheques towards digital payment systems which offers more efficiency, convenience and speed. These trends were further accelerated with the COVID-19 pandemic in 2020 as well as rise in e-commerce sector.

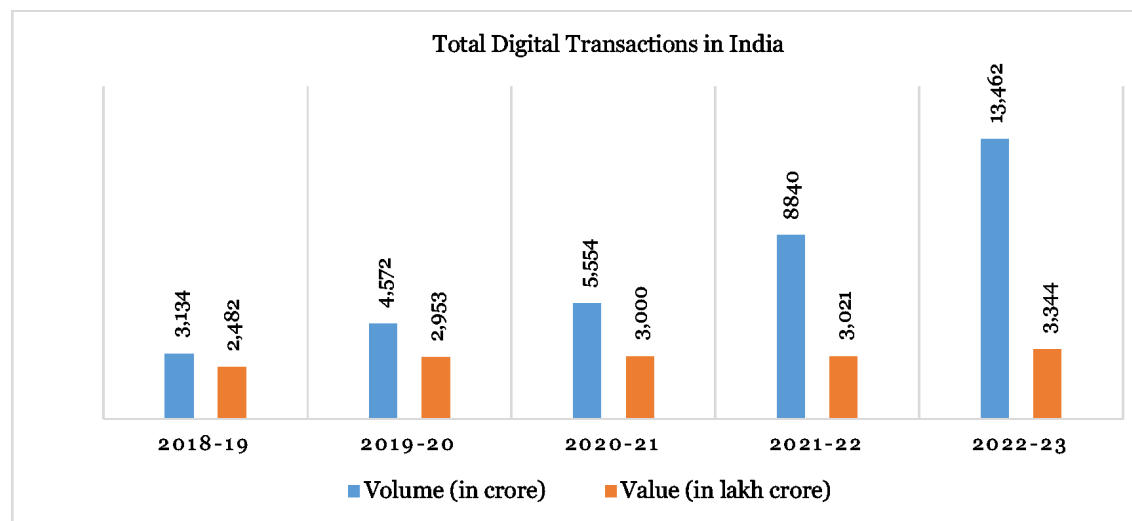
As per The Global Findex 2021 report, 84 percent of account owners, or 64 percent of adults worldwide, reported having made or received at least one digital payment. About 95 percent of adults (98% of account owners) in high-income nations reported doing so, compared to 57 percent of adults (80% of account owners) in emerging economies. Digital payment usage has been almost ubiquitous in high-income economies since 2014, when such data were first collected as part of The Global Findex survey. Adults in developing economies have become more adept at using digital payments as between 2017 and 2021, this number increased by 13 percentage points, from 44 percent to 57 percent. In fact, in developing economies, the increase of digital payment usage exceeded the growth of account ownership. From 69 percent in 2017, the percentage of account owners that made or received digital payments climbed to 80 percent in 2021.

CPMI Briefs (2023) published by Bank for International Settlements also reveals that the shift towards cashless and digital payments has remained steady across the world, both in terms of value and volume. The total value of cashless payments grew to its highest level yet, both in advanced economies (AEs) and emerging market & developing economies (EMDEs). In AEs, the total value of cashless payments raised by 14 percent and in EMDEs by 15 percent in 2021 from previous year. E-money payments grew most robustly (27%), followed at a distance by card payments (4%) and credit transfers (4%). In 2021, there was a notable surge in the volume of cashless payments made in both AEs (11%) and EMDEs (34%), primarily due to the growing use of card payments (Glowka et al., 2023).

## 5.2 Digital Payment Ecosystem in India

Demonetization in November 2016 as well as the government's and authorities' persistent drive for a cashless economy, accelerated the growth trajectory of digital payments in India. Later, the COVID-19 pandemic, gave digital payment a strong thrust with its adoption expanding rapidly due to its ability to allow easy, contactless transactions. Digital payment transactions in the country have grown at an unparalleled rate during the past four years. Prepaid payment instruments (PPIs), National Electronic Toll Collection (NETC) system, Bharat Interface for Money-Unified Payments Interface (BHIM-UPI), Immediate Payment Service (IMPS), and other simple and convenient digital payment methods have all experienced significant growth and have changed the digital payment ecosystem by increasing both Person-to-Person (P2P) as well as Person-to-Merchant (P2M) payments. Existing traditional payment methods including credit cards, debit cards, Real-Time Gross Settlement (RTGS), and National Electronic Funds Transfer (NEFT) have also expanded quickly at the same time. Additionally, the Indian government introduced e-RUPI, a contactless and cashless digital payment method that is anticipated to significantly increase the efficacy of Direct Benefit Transfer (DBT) in digital transactions within the nation. Together, these resources have produced a strong environment for the digital finance sector in India. The total number (volume) of digital payment transactions and total value of digital transactions undertaken during the last five years are depicted in Figure 5.2.

**Figure 5.2: Total digital transactions in India in the last five years**



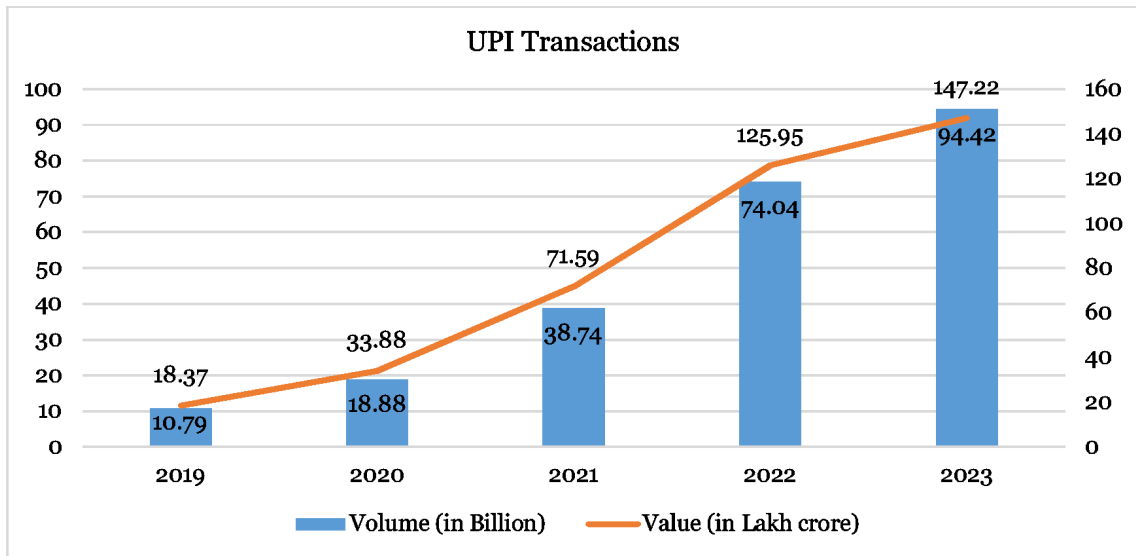
Source: <https://digipay.gov.in/dashboard/default.aspx>

### 5.3 Unified Payments Interface (UPI): Transforming Digital Payments

UPI has seen significant growth in India since its launch in 2016 by National Payments Corporation of India (NPCI). UPI allows for real-time inter-bank transactions and simplifies the process of making digital transactions. UPI’s core function is to support easy and secure money transfers between bank accounts. It does this by adding multiple bank accounts into a single mobile application, allowing for seamless fund transfers and merchant payments from one place. It also enables ‘peer to peer’ and ‘peer to merchant’ collection requests, which can be scheduled and paid as requested. Payments can be made using a UPI ID, UPI Number, Account number, and an Indian Financial System Code (IFSC).

UPI has significantly contributed to the digitization of payments and set India firmly on the path to a cashless economy. As per NPCI data, in the month of October 2023 alone, 505 banks were live on the UPI interface, with 11.41 billion financial transactions being carried out for a total value of nearly Rs.17.15 lakh crores. UPI has been instrumental in driving digital payments in India, and has accounted for approximately 75 per cent of the total transaction volume in the retail segment during the period of 2022-23. Highlights of the UPI journey in India with Year-on-Year (YoY) growth statistics till October 2023 is presented in Figure 5.3.

Figure 5.3: UPI transactions in the last five years



Source: <https://www.npci.org.in/what-we-do/upi/product-statistics>

## 5.4 Payment Modes of Digital Transaction

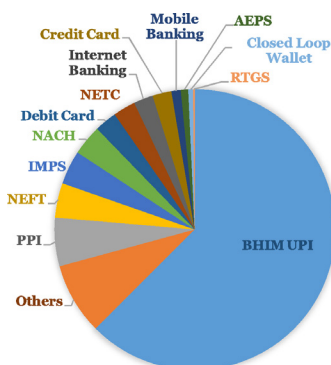
The data on share of transaction volume across various digital transaction modes taken from RBI, NPCI and banks for the FY 2022-23 is presented in Table 5.1 and graphically represented in Figure 5.4. RBI payment modes are RTGS, NEFT, Credit Card, Debit Card, and PPI; NPCI payments modes are BHIM, BHIM Aadhaar, IMPS, NACH, USSD and AePS; Bank payment modes are Mobile Banking, Internet Banking and others. Closed Loop Wallet data are collected from Metros and Oil Marketing Companies (OMCs) (Source: Digidhan Dashboard).

**Table 5.1: Payment mode wise data of digital transaction (FY 2022-23)**

S. No.	Mode of Payment	Volume (in Cr.)	% Share
1	BHIM UPI	8324.04	62.49
2	Others	1103.20	8.28
3	PPI	746.67	5.61
4	NEFT	528.47	3.97
5	IMPS	521.08	3.91
6	NACH	463.16	3.48
7	Debit Card	341.95	2.57
8	NETC	340.87	2.56
9	Internet Banking	302.41	2.27
10	Credit Card	291.56	2.19
11	Mobile Banking	139.98	1.05
12	AEPS	118.43	0.89
13	Closed Loop Wallet	71.46	0.54
14	RTGS	24.26	0.18
15	BHIM Aadhaar	2.27	0.02
16	USSD	0.12	0.00

Source: Digidhan Dashboard; <https://digipay.gov.in/dashboard/default.aspx>

**Figure 5.4: Graphical representation of payment mode wise digital transaction (FY 2022-23)**



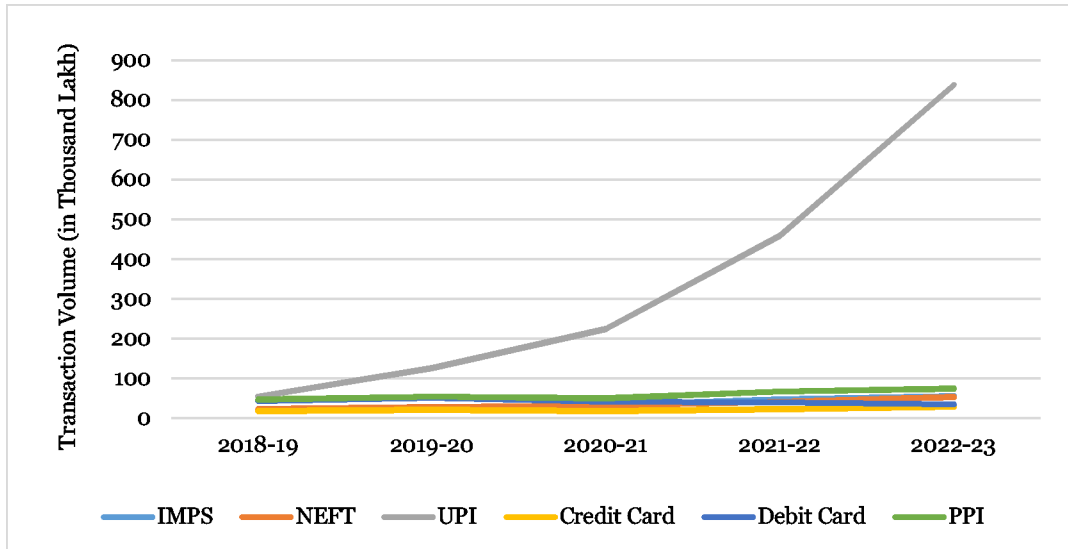
Source: Digidhan Dashboard; <https://digipay.gov.in/dashboard/default.aspx>

### 5.5 Digital Retail Payment Systems

The retail payments system in India comprising of paper based and electronic systems, handle large volume of transactions. The retail payments in electronic space include NEFT, IMPS, NACH (credit, debit and APBS), card payment transactions (excl. cash withdrawal), PPI payment transactions (excl. cash withdrawal), UPI (including BHIM & USSD), BHIM Aadhaar Pay, AePS fund transfer and NETC (linked to bank accounts). In recent years, India has experienced rapid growth in retail digital payments. In FY 2022-23, volume of transactions carried out for digital retail payments increased from 71.74 billion in the previous year to 113.70 74.2 billion. Retail digital payments accounted for over 99 percent of total retail payments in terms of volume and more than 89 percent in terms of value of the total retail payments carried out in FY 2022-23.

Trend in usage of various key modes of retail digital payments in India viz. IMPS, NEFT, UPI, Credit Card, Debit Card and PPI is presented in Figure 5.5 which displays the volume of transactions carried out for making retail digital payments over the last five years. It shows that the usage of UPI has grown exponentially in the past three years. It accounted for approximately 75 percent of the total transaction volume in the retail segment during the period of 2022-23. Its share was about 64 percent in the same segment during FY 2021-22.

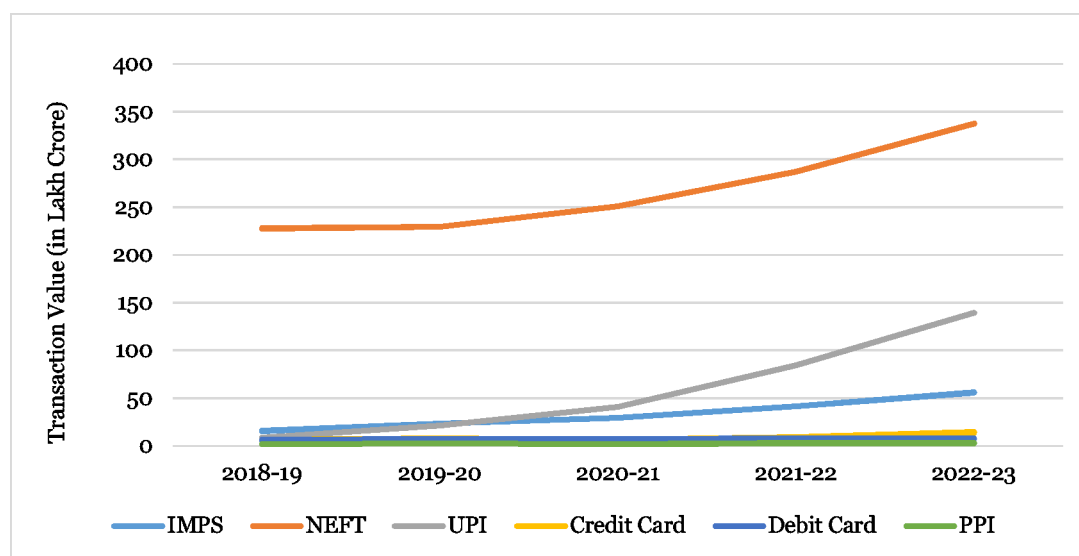
**Figure 5.5: Trend in usage of various modes of retail digital payments in India in terms of transaction volume**



Source: <https://rbi.org.in/Scripts/PSIUserView.aspx?Id=22>

Presently, NEFT is leading the retail electronic payments segment in terms of total value of transactions among various modes of retail digital payments (Figure 5.6). However, Table 5.2 indicates that UPI is gradually eating away the market share of NEFT as indicated by the progressively falling share of NEFT from 85.5 percent in FY 2018-19 to 60.6 percent in FY 2022-23 and continuously rising segment of UPI from 3.3 percent in FY 2018-19 to 25.0 percent in FY 2022-23. IMPS has also shown slight improvement in market share from 6.0 percent in FY 2018-19 to 10.0 percent in FY 2022-23.

**Figure 5.6: Trend in usage of various modes of retail digital payments in India in terms of transaction value**



Source: <https://rbi.org.in/Scripts/PSIUserView.aspx?Id=22>

**Table 5.2: Percentage share of various modes of retail digital payments in terms of transaction value**

Particulars	2018-19	2019-20	2020-21	2021-22	2022-23
IMPS	6.0	8.0	8.7	9.6	10.0
NEFT	85.5	78.9	74.6	66.3	60.6
UPI	3.3	7.3	12.2	19.4	25.0
Credit Card	2.3	2.5	1.9	2.2	2.6
Debit Card	2.2	2.4	2.0	1.7	1.3
PPI	0.8	0.7	0.6	0.7	0.5

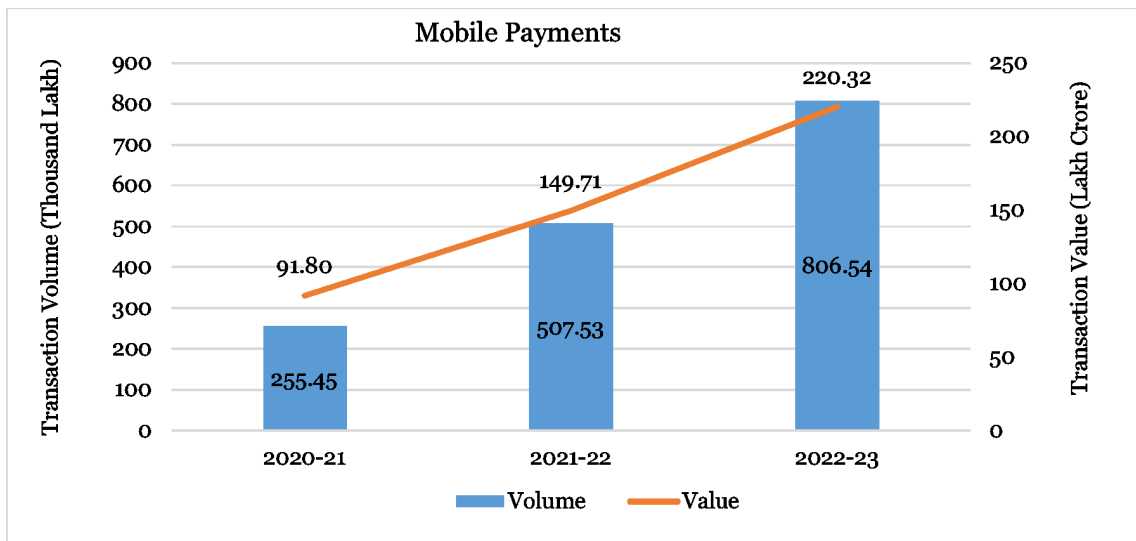
Source: <https://rbi.org.in/Scripts/PSIUserView.aspx?Id=22>

## 5.6 Payment Modes and Channels

Payment Channels including mobile app based Mobile Payments and Internet Payments (Netbanking/internet browser based) are some of the most convenient payment methods for transferring money.

**Mobile Payments:** A mobile payment is a contactless method of payment that involves use of mobile device such as a mobile phone or a tablet. Mobile payments are typically completed using a digital mobile wallet or mobile app, and can be linked to bank accounts, credit cards, debit cards, and other payment method. Popular mobile payment apps include PhonePe, Google Pay, BHIM, Paytm, Freecharge, Mobikwik, Oxigen, mRuppee, Airtel Money, Jio Money, SBI Buddy, Venmo, PayPal, CashApp, etc. Use of Mobile Payments is fast gaining momentum. Its remarkable rise over past three years is depicted in Figure 5.7.

Figure 5.7: Trend in usage of mobile payments for digital transactions

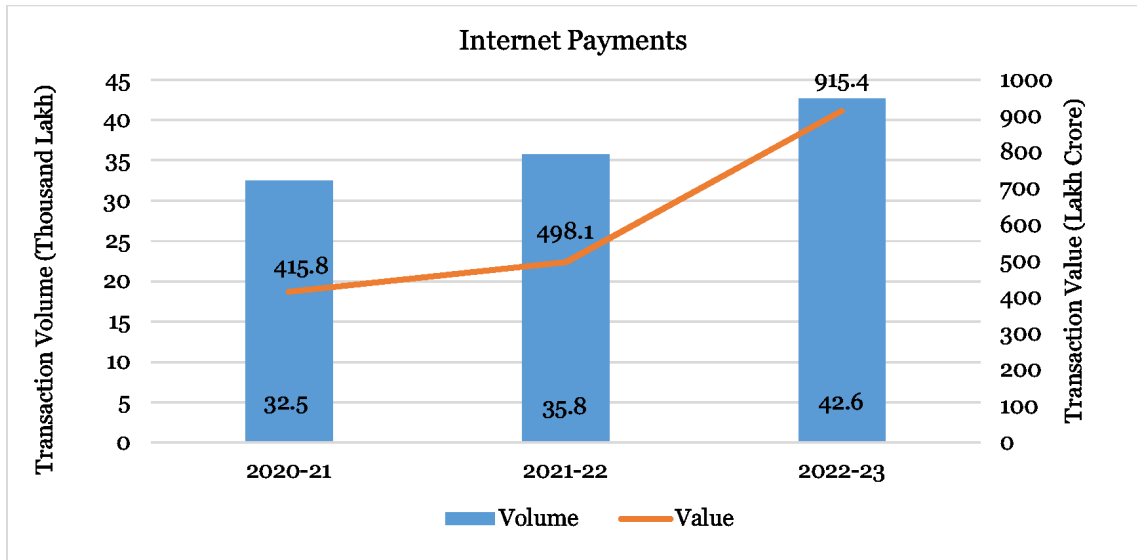


Source: <https://rbi.org.in/Scripts/PSIUserView.aspx?Id=22>

**Internet Payments:** Internet banking is an electronic payment system that enables customers of a bank to conduct a range of financial transactions through the bank’s website. It is also known as Netbanking, online banking, e-banking or virtual banking. Payments through Internet banking has revolutionized the way people conduct financial transactions. It has increasingly become popular over time, gaining people’s confidence and appreciation for their convenience, security, and the wide range of financial services easily available via the internet.

Most of the banks have developed their own apps that can be downloaded on the phone and used any time. Through mobile devices, users can make transactions through mobile apps and can transfer fund through services such as Immediate Payment Services (IMPS), National Electronic Fund Transfer (NEFT), and Real-time Gross Settlement (RTGS). Trend in usage of net banking for internet payments is depicted in Figure 5.8

**Figure 5.8: Trend in usage of internet payments for digital transactions**



Source: <https://rbi.org.in/Scripts/PSIUserView.aspx?Id=22>

## 5.7 Payment System Infrastructures

Over the past decades, India's payment system has undergone several transformation. This is largely owing to the introduction, influence, and ever-changing nature of technology, which has digitized much of the infrastructure we see today. Infrastructure is the key requirement to facilitate both cash and digital transactions. Over the decades, RBI has introduced various payment acceptance infrastructures, such as - Debit and Credit cards, PoS, ATMs, micro-ATMs, Bharat QR, and UPI QR code. Among these PoS terminals and QR codes directly aid electronic transactions.

## 5.8 Debit and Credit Cards

With an emerging middle class, the number of credit and debit cards gathered pace in India. As on March 2023, the number of active debit cards in the country is around 96 crore as against 91.7 crore in March 2022 (Table 5.2). High rate of issuance of debit card can partially be attributed to RuPay cards issued to a large section of the unbanked

population in India under the Pradhan Mantri Jan Dhan Yojana (PMJDY) scheme. RuPay cards have debit, credit, and prepaid propositions. More than 750 Million RuPay cards are in circulation as of October 2023 (Ministry of Commerce & Industry; <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1964712>). RuPay cards make up more than 60 percent of total cards issued in India, with every second Indian having a RuPay card presently.

As on March 2023, the number of active credit card in India is about 8.5 crore, a jump from 7.4 crore a year ago (Table 5.3). Recent data from the Reserve Bank of India shows that India, which was primarily a country that used debit cards, is increasingly using credit cards. India recorded 25 crore credit card-based merchant payments in April 2023, overtaking debit card payments which stood at 22 crore. The total transaction value of credit cards was Rs.1.33 lakh crore against Rs.53,000 crore for debit cards. These include purchases from e-commerce and physical outlets. Historically dominated by debit card transactions, the shift towards credit cards is driven by several factors including growing acceptance and adoption of this payment method by consumers at both online and offline merchants, more convenience and benefits associated with credit cards, etc.

**Table 5.3: Trend in Outstanding Cards in India**

(in lakh)

Particulars	End of March 2019	End of March 2020	End of March 2021	End of March 2022	End of March 2023
Total Card Outstanding	9,528.62	8,863.07	9,602.51	9,912.93	10,465.62
Out of which Debit Cards	9,058.13	8,285.62	8,982.02	9,176.66	9612.59
Out of which Credit cards	470.49	577.45	620.49	736.27	853.03
Credit cards per hundred Debit cards	5.19	6.97	6.91	8.02	8.87

Source: <https://rbi.org.in/Scripts/PSIUserView.aspx?Id=22>

## 5.9 Pre-paid Payment Instruments (PPIs)

PPIs are instruments that facilitate purchase of goods and services, conduct of financial services and enable remittance facilities, among others, against the money stored in them. PPIs can be in the form of mobile wallets, physical smart cards, secure tokens, magnetic chips, vouchers or any other method that allows access to prepaid funds.

Prepaid cards are a convenient method to pay. Because of the growing use of smartphones and the internet, India has made enormous strides in the e-commerce business over the last ten years, leading to a surge in the use of prepaid cards for online transactions. These instruments can be easily opened involving paperwork, which is an added advantage. In

FY 2022–23, PPIs handled 74667.44 lakh transactions worth Rs.2.87 lakh crore (Table 5.4). The number of transactions is expected to increase in the future. The major reason for transaction volume growth is the significant increase in the number of wallets and digital gift cards issued by FinTechs (PwC, 2023).

**Figure 5.4: Trend in PPIs over the last three years**

PPIs	During 2020 – 21			During 2021 – 22			During 2022 – 23		
	Volume (Lakh)	Value (Cr.)	Ticket Size (Rs.)	Volume (Lakh)	Value (Cr.)	Ticket Size (Rs.)	Volume (Lakh)	Value (Cr.)	Ticket Size (Rs.)
Total	49392.26	197696	400.26	65812.39	293658.19	446.20	74667.44	287111.16	384.52
Out of which m-Wallet	39987.01	152065	380.29	52683.01	226644.51	430.20	59112.76	221895.88	375.38
m-Wallet: % of total	80.96	76.92	-	80.05	77.18	-	79.17	77.29	-
Out of which PPI Cards	9405.25	45631	485.17	13129.38	67013.68	510	15554.7	65215.29	313.57
PPI Cards: % of total	19.04	23.08	-	19.95	22.82	-	20.83	22.71	-

Source: <https://rbi.org.in/Scripts/PSIUserView.aspx?Id=22>

## 5.10 Point of Sale (PoS) Terminals

A POS or point of sale is a device that is used to process transactions by retail customers. The earliest POS terminal introduced was merely used to accept card payments. However, over time POS devices have been further enriched to accept other modes of contactless payments. Currently, technological advancements have led the development of e-POS, a payments acceptance software that runs on a smartphone and can be used to accept digital payments without a physical card swipe machine. Recent POS systems come in various shapes and sizes and are equipped to accept all forms of payments including - cash and cheque; debit, credit and prepaid cards with a magnetic strip; debit, credit and prepaid cards with an embedded chip; and contactless payments through mobile wallets, unified payments interface UPI or a quick response code (QR code).

India has made considerable progress in the deployment of PoS terminals over the last five years. As of March 2023, 77.90 lakh PoS terminals are available in the country, marking an increase of 28.32 percent over the previous year. The number of terminals available per 100,000 inhabitants at around 643 can be considered as one of the indicators of the level of financial inclusion in a country. The Table 5.5 shows increase in the number of PoS terminals per 100,000 population in India from FY 2018-19 to FY 2022-23.

**Table 5.5: Trend in Deployment of PoS over the last five years**

Year	PoS* (in Lakh)	PoS per lakh Population
2018-19	37.22	307
2019-20	44.37	367
2020-21	47.20	390
2021-22	60.70	501
2022-23	77.90	643

Source: <https://rbi.org.in/Scripts/PSIUserView.aspx?Id=22>

(\*Figures are at the end of March, Population figure as per Census 2011)

### 5.11 Quick Response (QR) Code

A QR (Quick Response) code is a machine-readable information matrix that contains the information needed to receive payments from clients. To make a QR code-based payment, a client scans a QR code that is displayed at a point-of-sale or printed on an invoice using a mobile application, enter the amount needed to be paid and submit their payment. QR payments offer more flexibility with less infrastructure than traditional point-of-sale payment terminals or cash payments.

In order to expedite India’s transition to a less - cash society as well as to address the issues of multiple QR codes, a common QR code called as Bharat QR has been collectively developed by NPCI, Mastercard and Visa to enable digital payments without card or card swiping machines. In August 2016, NPCI launched UPI with UPI QR codes, which are more user-friendly and safe.

QR Codes have gained widespread popularity in India in recent years as an effective payment tool and have seen significant adoption, especially after demonetization and COVID-19 pandemic. While the number of Bharat QR deployed grew by 8.25 percent to 53.82 lakh in FY 2022-23 from previous year, the standout is UPI QR code which grew by 48.4 percent to 2563.77 lakh during the same period. UPI QR code growth is largely driven by the private companies dominating UPI’s acceptance. The growth in UPI QRs is also reflected in the growth in UPI transactions as well as how it has had an impact on other forms of payments.

### 5.12 Micro ATMs

Micro ATMs are portable handheld devices used by Business Correspondents (BC) to enable basic banking transactions in remote or underserved areas, providing doorstep financial services to unbanked populations. BCs through Micro ATMs offer banking facilities to customers without requiring them to visit a physical bank branch or an ATM centre. The key functions that Micro ATM is capable of performing are - cash deposit, cash withdrawal, money transfer, balance enquiry, service request acceptance, e-KYC

based account opening and Aadhaar linking. Micro ATM supports various means of authentication for interoperable transactions which includes- Aadhaar + Biometric, Aadhaar + OTP, Magnetic stripe card + Biometric, Magnetic stripe card + OTP and Magnetic stripe card + Bank PIN.

**Table 5.6: Availability of Micro-ATMs over the last four years**

Year	Number of Micro-ATMs* (in Lakh)	Micro-ATM per Total Population	Micro-ATMs per Rural Population
2019-20	2.71	4468	3077
2020-21	4.04	2994	2061
2021-22	7.81	1551	1068
2022-23	16.11	752	518

Source: <https://rbi.org.in/Scripts/PSIUserView.aspx?Id=22>

(\* Figures are at the end of March, Population figure as per Census 2011)

With the surge in AePS transactions in recent years, along with the pandemic, Micro ATMs have been gaining more popularity. Many FinTechs are also working on Micro ATMs and expanding the market by offering financial services to the unserved and underserved population and making primary banking services easily accessible in remote areas. There is a rapid rise in micro ATMs being deployed across the country in the recent years. As per the RBI data, in FY 2021-22, there were about 7.81 lakh micro ATMs in India. The number more than doubled to reach a whopping 16.11 lakh in FY 2022-23 (Table 5.6). Out of the total 16.11 lakh Micro ATMs used in India, almost a quarter i.e. 3.74 lakh are deployed by SBM Bank India Ltd. followed by Fino payments bank which has deployed 3.69 lakh Micro ATMs, and the third biggest player is NSDL Payments Bank with 3.17 lakh devices.

### 5.13 Conclusion

Great strides have been made toward financial inclusion globally, as about 76 percent of the world's adult population has access to an account with a financial institution or mobile money provider. Financial inclusion is now increasing rapidly in developing nations too with India being no exception. The country has achieved tremendous progress in all aspects of financial inclusion over the recent years. PMJDY has brought millions of people into the formal banking system, providing them with access to credit, insurance and government benefits, apart from abolishing gender gap in account ownership. More banking outlets with branchless BC mode have been set up to provide doorstep banking services, especially to rural to semi urban population. The growing geographical and demographic penetration of banking outlets has resulted in the provision of more access points with an adequate supply of banking services for a greater number of clients. More

number of ATMs, PoS, and micro-ATMs are available now than the previous years to cater to the financial needs of the people.

The country is witnessing massive digital transformation in the finance sector. The country's digital economy has grown rapidly over the last few years, which can be attributed to range of factors, including digital initiatives of the government, entry of private players, technological innovations, market changes, people's eagerness to adapt quickly, etc. The expansion of digital payments in India, as well as the availability of many simple and convenient digital payment alternatives, has facilitated people's ease of life, financial inclusion, and commercial and economic growth. The increasing digitalization of the Indian economy is a crucial element in sustaining robust growth over a long period of time.

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## Abbreviations

AePS	Aadhaar Enabled Payment System
AEs	Advanced Economies
APBS	Aadhaar Payment Bridge System
APY	Atal Pension Yojana
ATM	Automated Teller Machine
BC	Business Correspondent
BF	Business Facilitator
BHIM-UPI	Bharat Interface for Money-Unified Payments Interface
BSBDA	Basic Savings Bank Deposit Account
CBDC	Central Bank Digital Currency
CDM	Cash Deposit Machine
COVID-19	Coronavirus Disease 2019
CRMs	Cash Recycling Machines
DBT	Direct Benefit Transfer

EMDEs	Emerging Market and Developing Economies
FBs	Foreign Banks
FI	Financial Inclusion
IFSC	Indian Financial System Code
IMPS	Immediate Payment Service
JAM	Jandhan Yojana, Aadhar and Mobile
KYC	Know Your Customer
MFI	Microfinance Institutions
MoF	Ministry of Finance
MUDRA	Micro Units Development & Refinance Agency
NACH	National Automated Clearing House
NBFCs	Non-Banking Financial Companies
NEFT	National Electronic Funds Transfer
NETC	National Electronic Toll Collection
NPCI	National Payments Corporation of India
NSFE	National Strategy for Financial Education
OBC	Other Backward Class
OD	Over Draft
OMCs	Oil Marketing Companies
P2M	Person-to-Merchant
P2P	Person-to-Person
PBs	Payment Banks
PMGKY	Pradhan Mantri Garib Kalyan Yojana
PMJDY	Pradhan Mantri Jan Dhan Yojana
PMJJBY	Pradhan Mantri Jeevan Jyoti BimaYojana
PMMY	Pradhan Mantri Mudra Yojana
PMSBY	Pradhan Mantri Suraksha Bima Yojana
PoS	Point Of Sale
PPIs	Pre-paid Payment Instruments
PSBs	Public Sector Banks
PVBs	Private Sector Banks
QR	Quick Response
RBI	Reserve Bank of India
RBR	Retail Banking Research
RRBs	Regional Rural Banks
RTGS	Real-Time Gross Settlement
SBI	State Bank of India
SCBs	Scheduled Commercial Banks
SFBs	Small Finance Banks
ST	Scheduled Tribe
UPI	Unified Payments Interface
USSD	Unstructured Supplementary Service Data
UT	Union Territory
WLAs	White Label ATMs



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