The Progress of Financial Inclusion in India: Insights from Multiple Waves of Survey Data

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Abstract

How the unbanked can be brought into the financial system remains a question of policy and academic interest. India lends itself as an interesting case study. I use Pan-India data from a survey of 135,147 individuals, and another survey of 16,000 households in four of India's lowest income states to understand the country's trends in financial inclusion. The sample frame (2013-2015) covers a time-period before and after the introduction of the PMJDY scheme, a supply-shock led to the opening of over 260 million new bank accounts. I find that PMJDY scheme has significantly increased the likelihood of owning an account among the previously unbanked, such as the poor and uneducated. While I also observe some progress in the active use of accounts, a reversing effect for the most marginalized is less substantial. I further characterise large regional differences in the progress of financial inclusion

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1. Introduction

Financial inclusion denotes the ability to access the formal financial sector for the purposes of financial transactions such as making and holding deposits, conducting payments and money transfers, borrowing, or accessing other financial services. Individuals can use these services to smoothen consumption, absorb unforeseen shocks, and make household investments (e.g., Collins, Murdoch, Rutherford and Ruthven, 2009). While much received work on inclusion focuses on its benefits for individuals, it is also useful to the economy at large. For instance, greater access to accounts can result in a larger deposit base for banks or one that is more resilient in times of financial stress (Han and Melecky, 2013).

Globally, about 2.5 billion people are unbanked (Demirgüç-Kunt, Klapper, Singer and Van Oudheusden, 2015). Why financial exclusion persists represents a policy conundrum and an interesting academic question. Supply-side factors point to insufficient progress in branching or outreach (e.g. Beck, Demirguc Kunt and Levine, 2007), while demand-side factors emphasize distrust of financial institutions, varying habits, and insufficient financial literacy (Cole, Sampson, Zia, 2011; Blank, 2008; Bertrand, Mullainathan and Shaffir, 2004).

I study microeconomic data on financial inclusion from India. This is owned to three factors. First, financial inclusion has been a major focus of both the Government of India and its Central Bank. The country is host to the world's largest financial inclusion intervention. On August 28, 2014, Prime Minister Narendra Modi launched the "Pradhan Mantri Jan Dhan Yojana" (PMJDY), which granted access to no-frills accounts for the entire population. Its target of 75 million bank accounts, within relatively a short time-

span, was easily exceeded. [2] As of November 2016, over 260 million accounts were opened. An unprecedented supply shock for the unbanked. Second, the PMJDY scheme is the latest, and undoubtedly largest, intervention in a long list of reforms aimed at increasing inclusion. For instance, India's bank branching rules, nationalization of private banks, and directed lending programs can be viewed as focusing at increasing financial inclusion (Banerjee and Duflo, 2014; Bhue et al. 2016; Burgess and Pande, 2005; Cole, 2009). Various other schemes include: the introduction of bank agents, digital identification (Aadhaar) cards (Garg and Agarwal, 2014), and the digitization of direct benefits transfers. Third, survey data that precedes the PMJDY scheme supports the notion that financial exclusion is widespread in India. Only 53 percent of India's adult population have an account per World Bank's Financial Inclusion Index (Findex, 2014). The same denotes that access is distributed asymmetrically. For instance, 62 percent of men hold an account, compared to 43 percent of women.

In this context, this paper exploits detailed survey data to analyse aspects of the progress of financial inclusion before and after the PMJDY scheme. Here, financial inclusion is defined as access to and active use of bank accounts (in the past 90 days). This paper aims to address several questions; First, what does the evidence for the progress of financial inclusion in India suggest? Second, how does the PMJDY scheme address heterogeneity in inclusion? Third, what are the approximate drivers of financial inclusion in India?

[2] The PMJDY scheme (the Prime Minister's People's Wealth Scheme) was announced on August 14. The scheme targeted the inclusion of 75 million unbanked households with zero balance accounts (no-frills accounts) in a span of five months, before India's republic day on January 26, 2015. As of January 31, 2015, over 100 million accounts were opened. PMJDY accounts also grant access to a full range of financial services, including pension, credit and insurance.

The analysis comprises two parts: The first part consists of summary statistics with time-series variation. For this I use the Financial Inclusion Insights surveys (2013-2015); hereafter FII, spanning across all the regions in India. For specific information on the household-level, I use India's first FinScope Survey (2015). I also draw on the FinScope survey where it provides more insights on PMJDY accounts. In the second part of the analysis, I employ a Heckman Probit specification, using the pooled FII data, to empirically investigate into individual and household-level characteristics associated with (i) account ownership and (ii) active use of accounts; whilst exploiting year-wise and regional variation.

This analysis contributes to the existing literature in a few distinct ways. It adds to studies on financial inclusion more broadly (e.g. Beck, Demirguc Kunt and Martinez Peria, 2008, Demirgüç-Kunt and Klapper, 2012; Demirgüç-Kunt et al., 2015), and for India, specifically. Most studies in India were historically conducted with bank-level data (Kumar, 2013, Burgess and Pande, 2005, Reserve Bank of India, 2015), while survey data can provide interesting insights into the unbanked. For instance, Basu and Srivastava (2005) employ the Rural Finance Access Survey, and show that rural banks primarily cater to the rich, while Ghosh and Vinod (2017), using the All India Debt and Investment Survey, show that women are disadvantaged.

I also see this analysis as complementary to the surge of Randomized Control Trials studying inclusion in India (e.g. Gupta, Kochar and Panth, 2011; Banerjee, Duflo, Glennerster and Kinnan, 2015).

Lastly, this paper contributes to the growing literature on supply-side interventions that can help enhance financial inclusion, such as the PMJDY scheme (Chowhan and Pande, 2014; Agarwal, Alok, Ghosh, Ghosh, Piskorski, and Seru, 2017;

Chopra, Prabhala and Tantri, 2017), the bank agent model (e.g. Dupas, Green, Keats and Robinson, 2012), as well as demand-side models, such as the digitisation of welfare schemes (e.g. Gelb and Decker, 2012; Dancey, 2013).

Overall, I find substantial progress in India's quest for financial inclusion. Whilst important socio-economic and geographic asymmetries remain, post PMJDY, account ownership, and to a smaller extent active account use, have significantly increased for the formerly most disadvantaged, such as women, rural populations, and the poor. Furthermore, I find that interventions to increase inclusion, such as Aadhaar cards, Government Benefit Transfers, and Bank Agents have had a positive impact on account ownership. Yet, the same variables have a negligible impact on active account use. On the other hand, upon holding an account, inhibitors such a large household size, lack of trust in the formal financial system and distance to the nearest bank also appear smoothened. Account access and use are largely driven by savings, but not loans. I further find that even after controlling for demographics, large regional variations remain, that can only partially be explained by regional per capita income and number of bank branches. Lastly, evidence from descriptive statistics points towards misconceptions about PMJDY accounts, as well as an increase in duplicate accounts. Future policy interventions should focus on increasing the breadth and depth of usage, particularly in the most disadvantaged states.

The remainder of the paper is organized as follows. Section 2 introduces the data. Section 3 and 4 characterize progress in the adoption of bank accounts, and the use thereof, respectively. Section 5 describes regional variation. Section 6 lays out the empirical approach. Section 7 explains heterogeneity in patterns of allocation along demographic and regional characteristics, and section 8 concludes.

2. Data

I obtain data on the first three rounds of the Financial Inclusion Insights (FII) surveys (2013-2015). The FII Surveys are conducted by InterMedia, a private company focusing on mobile money, and supported by the Bill and Melinda Gates Foundation. It is important to note that the data is not a panel. That is, it does not feature the same individuals in each survey round but is repeated cross-sectional data that is representative at the state-level. The surveys follow a three-staged, stratified random sampling process and adhere to Indian Census 2011 proportions. The sample is distributed among India's 29 states and 7 union territories proportionally to the size of the target population (aged 15 years +) in each state.[3] The surveys exclude the states of Jammu & Kashmir, Sikkim and two union territories (Andaman-Nicobar Islands and Lakshadweep islands). The remaining five union territories are each treated as part of the closest neighbouring states. Six states of north-eastern India are treated as one state (North-East), but the seventh North-Eastern state, Assam, is treated separately. Thus, the sample comprises 27 states (21 states plus 1 combined state-entity) across more than 500 districts in all the regions of the country. [4] The total pooled sample amounts to 135,147 individuals. [5]

[3] Uttar Pradesh and Bihar were sampled differently. Both states are predominantly rural in their population breakdowns –close to 80:20 (rural/urban) in Uttar Pradesh and 90:10 (rural/urban) in Bihar. Oversampling of urban areas in these provinces was done and the sample allocation to rural/urban was adjusted to 70:30 in these states to more closely mirror the national rural/urban composition. It was then weighted back to census-based urban/rural breakdowns in the state.

[4] These states, ordered by regional location are: Andhra Pradesh (AP), Karnataka (KA), Kerala, (KL), Tamil Nadu (TN) in the Southern region, Delhi (DL), Haryana (HR), Himachal Pradesh (HP), Punjab (PB), Uttarakhand (UK) and Rajasthan (RJ) in the Northern region, Assam (AS) and the rest of the other six states (NE) in the North Eastern region, Bihar (BR), Odisha (OR), Jharkhand (JH), and West Bengal (WB) in the Eastern Region, Gujarat (GJ) and Maharashtra (MH) in the Western region, and lastly, and Chhattisgarh (CG), Madhya Pradesh (MP) and Uttar Pradesh in the Central region.

[5] The first survey round was conducted from October 15, 2013 till January 8, 2014 on a sample of 45,024 individuals. The second survey was conducted just after the initiation of the PMJDY scheme, from September 14 to December 4, 2014 on a sample of 45,087 individuals. The third survey was conducted from June 1st till to October 4th 2015 on a sample of 45,036 individuals.

Table 1 presents the sample distribution across states by rural and urban decomposition. Table 2 shows that the weighted FII surveys sample approximately the same share of females (49 percent) and rural populations (67 percent) as the India Census 2011. FinScope also comes very close to the proportions of women observed in the 2011 Census but has a larger rural sample.[6] The two samples appear similar regarding age, education, and household size.

The largest difference between the FII and the FinScope surveys exists with view to income levels. Neither of the surveys specify monetary income. The FII surveys use the Grameen Progress out of Poverty Index (PPI), which is made up of 10 questions on household size, assets, and cooking sources, and can take a score of 0 to 100 (zero being the lowest). Households scoring less than 54 points are classified as below the poverty line (living below USD 2.50). In the FinScope survey, households are divided into above (APL) and below poverty line (BLP), as well as Antyodaya Anna Yojana (AAY).[7] BPL corresponds to $1.25 per day for rural- and $1.88 per day for urban areas. Without adjusting for the different measurements of poverty, FinScope sample contains nearly 15 percent fewer BPL households (due to a lower poverty-line), but appears overall poorer due to a higher share of the ultra-poor (AAY). Finding a common denominator, I examine the average number of household assets, which suggest that households are poorer in the FinScope sample. The median (mean) number of listed assets owned is 1(2.3) relative to a median of 2 (2.5) in the FII sample. Given, these differences, I control for observables in explaining financial inclusion.

[6] In the Census 2011, the share of India's rural population is 69 percent. As Bihar and Uttar Pradesh have a larger rural population, FinScope samples a higher share of rural households (80 percent).
[7] Among households in the FinScope survey, 10 percent did not know their economic status.

3. Access to Bank Accounts

Bank account ownership has increased quickly. Table 3 shows that between 2013 and 2015 bank account ownership has on average increased by 19 percent. In 2013, 47 percent of individuals had a bank account relative to 66 percent in 2015.[8] In the FinScope sample, account ownership appears higher at first glance. About 72 percent own a bank account. This difference fades when I consider survey differences.[9] Account ownership for households in which at least one member owns a bank accounts equals just above 90 percent. The median (mean) number of accounts is 1 (1) and 2 (2.5) for individuals and households, respectively.

3.1. PMJDY Accounts

PMJDY accounts have played a substantial role in achieving these augmented levels of financial inclusion. Table 3 also shows that on average, 12 percent of adults and 31 percent of households own a PMJDY account. This is interesting seeing that other government-interventions have seen low take-up (Cole et al. 2011).

As a caveat, some reports highlight account duplications in the PMJDY scheme.[10] Information provided in the FinScope survey aids to shed some light on this finding. I distinguish between PMJDY accounts and non- PMJDY accounts. Among individuals and households that own a non-PMJDY account, 14 percent and 30 percent, respectively, also have a PMJDY account. Among individuals and households that have a PMJDY account,

[8] This percentage refers to all types of bank accounts.
[9] In the FII survey, average account ownership in the four common states is only 62 percent in 2015. This is nearly 10 percent lower viz. the FinScope survey. However, account ownership is measured differently. The FII surveys ask for bank accounts that are registered in the respondent's name only. The FinScope survey asks for accounts that are in the respondent's and/or joint names. When only including accounts in the respondent's name, account ownership in the FinScope survey is also merely 56 percent.
[10] The third round of a MicroSave survey (2016) in 42 districts across 17 states found that about 33 percent of customers indicated that PMJDY accounts were not the first accounts.

many - 51 percent and 79 percent respectively- also have a non-PMJDY account. The fact that many PMJDY accounts could be second accounts raises interesting policy questions. One, it could explain why about one quarter of PMJDY accounts currently still have zero balance.[11] Two, it suggests that activity measured in PMJDY accounts may reflect substitution away from other accounts. Alternatively, transactional activity in the PMJDY accounts may reflect not just the benefits of owning an account but other features of the account such as digitization, no-frills, as well as the wide publicity of PMJDY accounts and push for usage by the Prime Minister's office. This is certainly a topic that warrants further formal investigation, especially in view of the emerging micro research on the activity in PMJDY accounts (Chopra, Prabhala, and Tantri, 2017).

In Panel B, I provide additional details, showing that while most households open their account at a bank, nearly 20 percent open their PMJDY account through an agent (interchangeably called business correspondents). This finding lends credence to the agent banking model, which is often considered a means to include the rural poor (Dupas et al., 2012). Although in the Indian context, I find that the use of agents to open PMJDY accounts appears only marginally higher in rural areas (20 percent vs. 18 percent).

To better understand the impact of the PMJDY scheme, I analyse specific statements on PMJDY by dividing respondents into (i) non-account owners; (ii) non-PMJDY account owners, and (iii) PMJDY account owners. While PMJDY accounts were introduced to facilitate account opening, this is not reflected in Table 4. The share of PMJDY account owners who agree that *a lot of documentation is required to open an account* (71 percent) is not very different from that of non-PMJDY-account owners (72

[11] Since September 2016, a share of zero balance accounts of about 25 percent has basically stagnated. See https://pmjdy.gov.in/trend-zero. Accessed on February 8, 2017.

percent). Secondly, PMJDY accounts require no balance. Yet, curiously, among the three groups, those with a PMJDY account seem to agree the most that a *minimum balance is required for opening a PMJDY account* (56 percent of PMJDY account-holders versus 50 percent of non-PMJDY account-owners). PMJDY accounts holders also agree the most that it is *best to open a PMJDY account through a Business Correspondent,* which highlights the afore-finding that many PMJDY accounts were opened through an agent. Furthermore, 18 percent of PMJDY account-holders also believes that it is *best to draw out all funds at once when receiving government or salary payments into the bank account.* This could have potential implications on the use of PMJDY accounts, as analyzed in section 4.

3.1. Drivers and Barriers to Account Ownership

Having observed progress in access to accounts, I next analyses the reasons for and against bank account openings. Table 5 shows that new accounts are foremost driven by *savings* followed by *government payments* (G2P). Opening an account to receive G2P have also augmented the most from about 19 percent in 2013 to 44 percent in 2015. More details on this margin can be retrieved from FinScope. Among account holders who opened an account to receive G2P, 80 percent opened their first account, while the remainder opened an additional account. This implies that the digitization of G2P also led to some duplicate accounts. Perhaps, this shows that government efforts to drive inclusion have not been without side-effects.

To facilitate universal access to accounts, the Government of India also introduced unique digital identification cards (Aadhaar cards). In 2015, the vast population owns an Aadhaar card (82 percent) or another identity card. Not having an

Aadhaar card in the year 2015 can reduce account ownership to 50 percent, a drop of 20 percent relative to those who own said ID card.

Table 5 further reports on the reasons why people do not own a bank account. Globally, *not having enough money* is the main reason (Demirgüç-Kunt et al. 2015). This is also the case in India, although with declining tendencies. It appears, however, that non-monetary related impediments to account ownership have increased. For instance, in 2013 merely 2 percent cite not knowing how to open a bank account relative to 10 percent in 2015. Perhaps, this highlights the existence of demand-side barriers to access other than insufficient income (Hoyo, et al., 2013, Cole, Sampson, and Zia, 2011), while other demand- side reasons such as a lack of trust, or not having an account because one can use someone else's appear trivial. Only 2 percent of non-account owners use someone else's account, perhaps calling into question the notion that account ownership of one household member translates into access for all others.

3.2. Asymmetry in Account Ownership by Socio-Economic Characteristics

Table 6 reports on variations in account penetration along socio-economic characteristics among individual accounts (FII) and household accounts (FinScope). Accounts are divided into 'all accounts,' 'PMJDY accounts' and 'non-PMJDY-accounts'.

Between 2013 and 2015, growth in account ownership was more than twice as high for the lowest income quintile (PPI score) when compared to the richest income quintile (23 percent vs. 11 percent). Contextually, a positive effect on the poor is in line with other studies that examine the effects of an exogenous increase in access to bank accounts (Celerier and Matray, 2014, Bruhn and Love, 2014).

Yet, account ownership remains asymmetrical. For instance, 63 percent of India's adults living below-poverty line have a bank account versus 78 percent of the non-poor, resulting in a 15-point income-gap. Encouragingly, for PMJDY accounts the income gap only amounts to 1.5 points in 2015.

For households, the income-gap is slightly less pronounced. About 96 percent of households which possess an above median number of assets have access to a bank account versus 86 percent of households owning less than that.[12] PMJDY account ownership in these subsets is also slightly smaller, equaling 35 percent and 28 percent, respectively. It thus appears that income still explains who has an account, but the launch of PMJDY accounts has visibly helped to lower this income-driven gap.

Other studies using micro-data (Djankov, 2008), have shown that apart from low income, low education is a main determinant of being unbanked. Therefore, it is encouraging that account ownership grew substantially for the low-educated. While adults with a tertiary education are still nearly 30 percent more likely to hold an account relative to those without formal education, individuals with primary education or less experienced the strongest growth in access between 2013 and 2015 (24 percent). In comparison, account ownership grew merely by 7 percent among adults with tertiary education. The educational-divide is even smaller for PMJDY-accounts (6 percent).

Continuous asymmetry also exists with respect to age. Young adults (aged 15-24 years) remain more disadvantaged. Bank account ownership is highest for people in the retirement age and decreases again for people who are 71 years or older. Yet, PMJDY

[12] Given the different measurement of poverty across surveys, I divide households into below or above median asset ownership, I take the median number of assets (2) in the Financial Inclusion Insights surveys as benchmark.

seems to have positively augmented access for households with a young household head. By way of example, household heads aged 24 years or younger are nearly 18 percent less likely to have an account when excluding PMJDY accounts, but only 9 percent less likely to have an account when considering PMJDY ownership.

Consistent with earlier data from the World Bank, I find disparities in the prevalence of access by gender. In 2015, 61 percent of women own a bank account versus 71 percent of men. This gender-driven divide is slowly declining. The gender-gap decreased from 16 percentage points in 2013 to 10 percentage points in 2015. For PMJDY accounts, the gender-gap equals merely 1 percentage point.

I also observe decreasing asymmetry in access concerning the household's location (urban vs. rural). The location-driven access gap shrunk from 13 percent in 2013 to 7 percent in 2015. To exemplify, in 2015, 64 percent of individuals living in rural areas own a bank versus 71 percent in urban areas. Whether PMJDY accounts contributed to this transformation requires further investigation. Nearly 62 percent of PMJDY account owners come from rural areas. Yet, regarding both individuals and households, the urban population is somewhat more likely to have a PMJDY account. For instance, 30 percent of rural - versus 38 percent of urban households have PMJDY accounts.

In sum, I note that despite persisting asymmetries, much cross-sectional progress has been made regarding account access for the unbanked. A progress that is at least partially derived from the PMJDY scheme.

4. Use of Bank Accounts

I next turn to the use of bank accounts. I analyse deposits, withdrawals, savings, loans, and payments, and the last use of accounts. My data adds to the transaction-level analysis conducted by Chopra et al (2017).

3.3. Financial Transactions

Table 7 indicates increasing bank account activity regarding the depositing, withdrawing, saving, and borrowing of money in the FII survey.[13] Seeing that the most recent data stems from 2015, future survey rounds are yet to show a further increase in transactions as shown by Agarwal et al. (2017) and Chopra et al. (2017).

Transitioning to credit is likely to continue to be an important priority for policy makers. Despite the credit coverage afforded by PMJDY, I find that formal loans have been slow to take off. About 12 percent of account owners report borrowing from a bank in 2015 relative to 7 percent in 2013.

Furthermore, the question as to whether PMJDY accounts have mental accounting effects of being regarded as transactional accounts that do not transition into savings vehicles remains open and interesting. I find that formal savings increases largely after 2013. Yet, this upswing flattens post 2014, after the introduction of PMJDY accounts.[14] In 2015, 77 percent of bank account owners save with a bank. Likewise, deposits increase, although by a modest 3 percent since 2013. An average of 92 percent of account owners deposited money in their account.

[13] Table 7, Panel B, reports on formal savings and loans for individual and household bank account owners in the FinScope sample. Here, formal savings are generally higher but formal loans lower.

[14] This results could also be driven by the survey question itself. The FinScope survey shows that nearly 70 percent of respondents do not consider setting money aside for less than one year to be "savings." Unless a time-frame is specified, respondents might not consider (and mention) their deposits as savings.

Like Chopra and al. (2017)'s analysis of PJDY accounts, I find an asymmetry between withdrawals and deposits. Bank account withdrawals increased more strongly than deposits; nearly 94 percent of account owners made a withdrawal at least once in 2015. Moreover, I find that wealthier bank account owners are more likely to make frequent transactions. By way of example, 58 percent of APL relative to 40 percent of BPL account owners make monthly deposits.

It is further interesting to note that in 2015, post- PMJDY, the average account owner is less likely to identify what interest was received on savings (74 percent versus 81 percent) or paid on loans (84 percent versus 87 percent). One explanation could be the changing identity of account owners. I recall that up-take has been highest among the poor, for who this might be the first encounter with financial products.

The growth in newly acquired accounts among first time account owners is also reflected in account payments. Apart from government benefit transfers (G2P), payments have decreased in the survey sample period. Table 8 (Panel A) shows that about 60 percent of those receiving G2P, receive it into their bank account in 2015, relative to 19% in 2013. However, sending or receiving money, wages or salary, as well as making payments through an account, such as buying groceries and paying utility bills, have all on average decreased relative to the year 2013. The data may be consistent with the view that the cash economy continues to be important for most individuals. These conclusions require further investigation given that the non-panel structure does not allow to control for changing population composition and unobserved heterogeneity.

In Table 8, I further retrieve information on the method of financial transactions. First, it is interesting to note that nearly 10 percent of all account owners do not make their own transactions. Second, when asked *"When you use a bank account for any*

financial activity, do you use any of the following"? it appears that most account owners use a bank branch (88 percent), which amounts to nearly 98 percent (when only considering those who have ever used their account). While the use of ATMs is still low, its popularity is increasing. More than 35 percent use an ATM in 2015, relative to 24 percent in 2013. The use of ATMs is, however, more prevalent among wealthier account owners. In 2015, for instance, the use of ATMs is 34 percent higher among APL relative to BPL account owners. Highlighting this asymmetry, APL relative to BPL account owners also report more frequently that they preferred this method (44 percent vs. 16 percent). Since the FII survey does not ask for ownership of ATM and other bank cards, I turn to the FinScope survey.[15] Table 7, Panel B, shows that merely 16 percent of bank account owners have a debit and/or ATM card, 1.4 percent have a RuPay card, and less than 1 percent have a credit card. Overall, card ownership is higher for the non-poor, potentially explaining why the use of ATMs has mostly gained popularity among non-poor account owners. From a policy perspective, increased use of ATMs remains important. With the spread of ATM and rising familiarity and convenience (e.g., RuPay cards), bank accounts may complement the cash-based economy.

Additionally, I observe that other methods of transactions, such as online or mobile banking, or the use of retail stores or bank agents, are hardly frequented. This raises questions as to why the branchless banking model has not yet taken-off in India as it has in other countries, such as Kenya (Mbiti and Weil, 2011). By way of example, I observe that merely 2 percent of account owners report using a counter at a retail store, and less than 1 report using a bank agent or correspondent (BC) for financial

[15] Use of ATMs is even lower in the FinScope survey, although this could be driven by a different phrasing of the survey question.

transactions. BCs are also one of the least preferred modes of transactions, which is consistent across the three years of surveys. This seems to suggest that bank agents have played an important role in the opening of accounts but not necessarily in the facilitation of transactions.

3.4. Last Use of Accounts

The last time someone used a bank account for a financial transaction lends itself as a good proxy for active account use. Per Findex, 72 percent of individuals in high-income countries use their account 2-3 times in 30 days (Demirgüç-Kunt et al. 2015). Table 9 (Panel A) shows modest progress in account use when using a 30-day threshold. The share of people who have used their account within the past 30 days have increased from 38 percent to 43 percent. This amounts to a near 5 percent increase in account use.

I turn to a 90-day threshold, which seems a more plausible time-frame in an emerging economy. [16] Not surprisingly, it also yields a more positive result. Account use in the past 90 days has increased from 54 percent in 2013 to 64 percent in 2015. Thus, amounting to a 10 percent increase. Despite visible progress, I note that growth in account activity is nearly half of that observed for access to accounts.

I next focus on PMJDY accounts. I do not find lower use of PMJDY accounts relative to non-PMJDY accounts when measured in a 90-day frame. This fits the finding by Agarwal et al. (2017). Using administrative account-level data, they show that while initial usage of PMJDY low, over time they converge with other accounts. The proportion of PMJDY accounts that have never been used is, however, greater, and still at 12 percent

[16] To truly evaluate the active use of accounts we need to know how long an account has been open. I recommend this question for future surveys.

in 2015. In comparison, merely 6 percent of non-PMJDY accounts have never been used. I draw on the FinScope sample for more distinct insights.[17] Overall, account use is higher in the FinScope sample, but use of PMJDY accounts is still lower. Table 10 shows that 68 percent of non-PMJDY accounts have been used in the past 90 days relative to 56 percent of PMJDY accounts. While these results could be driven by differences in demographics between PMJD and non- PMJDY account holders, differences in the stage-of-life-cycle would suggest that the observed difference is because PMJDY account holders are new and transitioning into the financial system (Chopra et al., 2017).

3.5. Asymmetry in Account Activity by Socio-Economic Characteristics

Table 9 (Panel B) and Panel 10 (Panel B) report on account use by socio-economic characteristics in the FII and FinScope surveys, respectively. I find asymmetries in account use in both samples. As was the case with account ownership, account use is higher for richer, male, urban, educated and older bank account owners.

I start with the FII surveys. Table 9 suggest that whilst active account use has increased, the progress for disadvantaged groups – that is at least partially owed to PMJDY accounts - is not as sharp as that observed under account ownership. Between 2013 and 2015, the proportion of account owners who actively use their account has augmented equally for APL and BPL account owners.

Similar findings apply to education. I find that whilst account activity has improved for lowly educated account owners, the improvement is not as great as that observed under account ownership, and similar improvements are also observed for the highly

[17] Unlike the Financial Inclusion Insights survey, the FinScope survey asks a separate question for the last use of PMJDY relative to other accounts.

educated. By way of example, active account use increased by 14 percent for the illiterate, and by 16 percent among those with higher secondary education.

With view to location (rural vs. urban) and gender, I also observe persistent asymmetry in active account, and only moderate improvements. It is also interesting to note that concerning the use of accounts, the gender and location (rural vs. urban) gap is modestly greater for PMJDY accounts.

Lastly, it is encouraging to note that whilst account activity is highest for the elderly (61-70 years), it has increased (15 percent) the most for the young (15-24 years).

Results from the FinScope survey, which allows for a better distinction between the use of PMJDY accounts and other accounts, yield more positive findings. Here, I observe that the PMJDY scheme seems to have smoothened impediments to account use along gender, location, and education- divides. For income, the results are less conclusive. For instance, Table 10 suggest that account use among ABPL and BPL PMJDY account owners is similar but the same diverges largely when considering asset ownership.

These results suggest that dynamics yield different insight from static levels of usage at any one point of time and should be a separate focus in analyses of inclusion. More work remains on spurring account use and PMJDY accounts. Do the digital linkages help? Does the grant of a Rupay card help? If these features help usage, is it through a direct channel such as actual use, or is it indirect through behavioural nudges? These are likely questions of academic and policy interest.

In sum, I note a positive development in the use of accounts that is, however, more moderate than the progress observed for access. Not all financial transactions have increase post PMJDY and individual hurdles along the lines of gender, location, and income do not always appear substantially smoothened.

4. Regional Variation in Access and Use of Accounts

Next I analyse regional variation in inclusion. Table 11 presents the share of account owners and active account users across Indian states. In 2015, the divergence between the state with the largest proportion of account owners (Goa - 83 percent) and the state with the lowest (Assam - 49 percent) amounts to 35 percent. To contrast, the state-wide divergence of PMJDY-accounts is slightly smaller (19 percent).[18] In terms of active-accounts per state, the divergence is even larger with 41 percent. Goa also has the highest share of active bank accounts (93 percent), whilst Jharkhand has the lowest (51 percent). Access, thus, seems largely driven by state-income. Figure 1 shows a positive linear relationship between per capita State Domestic Product (NSDP) and state-wise accounts (Panel A), as well as state-wise active accounts (Panel B).

The highest growth rate in bank account ownership has, however, taken place in low income states. The same figure shows a slight negative linear relationship between the natural logarithm of NSDP per capita, and growth in accounts between 2013 and 2015. For example, the North-Eastern region has seen the highest growth (36 percent), whilst Kerala (12 percent) has seen the lowest.

The same does not apply to active account use. Unlike access to accounts, growth in account use is not highest for low-income states. Figure 1 also shows a flatter but still positive linear relationship between growth in active accounts and NSDP per capita. This implies that use has increased among low income states but not enough to reverse the income-effect. Here, Odisha (-3 percent) experienced the lowest growth, while Punjab (+34 percent) experienced the highest. It is possible that regional heterogeneity is at least

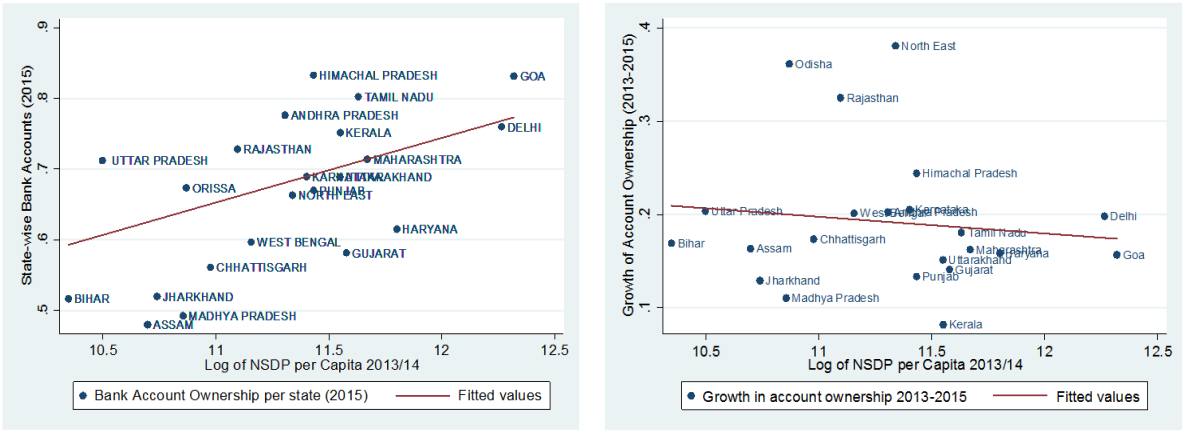
[18] Large fluctuations in the 2014 survey data, which was conducted one month after the introduction of the PMJDY scheme, discourages me from analyzing the state-wise growth rate of PMJDY accounts.

partially due to demographic characteristics. In the next section, I explore the observed regional heterogeneity more formally in a regression-framework.

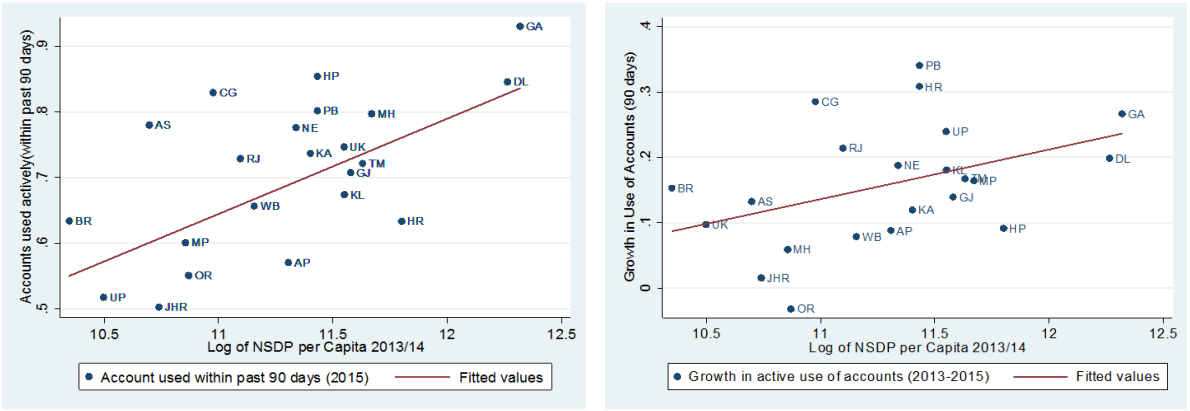
Figure 1

Figure 1, Panel A plots state-wise bank accounts in 2015, and the state-wise growth of bank accounts between 2013 and 2015 against the natural logarithm of 2013/14 per capita State Net Domestic Product (NSDP). Panel B repeats the same for active bank accounts per state in 2015.

Panel: A State-wise Bank Accounts and Growth



Panel B: State-wise Active Bank Accounts and Growth



Source: Financial Inclusion Insights Survey, wave 1-3, & Indiastat, Author's Computation

5. Econometric Evidence

I turn to formal econometric models next to examine the observed heterogeneity in account access and use along the lines of demographics and region. It should be noted that the dataset does not allow for a sharp microeconomic characterization due to (i) the limitations of working with repeated cross-sectional data rather than a panel, (ii) the

relative recency of PMJDY, and (iii) the fact that I must work with the cross-sectional correlates available within the surveys rather than what is first best from an underlying theory. My evidence points to plausible channels rather than pinning down specific causal mechanisms, and should be regarded as an informative pointer towards further work rather than a definitive test that pins down particular economic hypotheses.

For this analysis, I use the pooled annual Financial Inclusion Insights sample (2013-2015). To obtain more distinct results, I split the sample into Savings and Fixed Deposit Accounts (SBFD Accounts) and "All Accounts." SBFD accounts are also known as no-frills accounts, or Basic Savings and Deposit Accounts. Several papers find a positive relationship between minimum or zero balance (savings) accounts and Financial Inclusion (Prina, 2015; Beck, Demirgüç-Kunt and Peria, 2008). Allen, Demirguc-Kunt, Klapper and Peria, 2016). The head 'all accounts', on the other hand, can include any type of account including current-, student-, and public provident- accounts. These can compromise interpretations related to basic accounts. In the sample, SBFD accounts make up 93 percent of all accounts, and include PMJDY accounts. The results for all accounts are presented in Appendix 1. I refer to these estimations when relevant.

5.1. Model

For the main empirical specification, I follow Allen, Demirguc-Kunt, Klapper and Peria (2016), who analyse ownership and use of formal accounts using cross-country survey data. I focus on (i) owning an account (y_{1kt}), and (ii) actively using an account (y_{2ikt}) (defined as any transactions in the past 90 days). Both dependent variables are binary variables. To account for selection bias, I employ a Heckman (1979) probit specification that recognizes that usage is observed only when there is account ownership. In this

model, the first equation (1), a Probit model, captures account ownership if $\gamma^*_{1ikt} > 0$, and the second equation (2), also a Probit model, captures whether the account owners uses the account actively, where y^*_{2ikt} is only observed when y_{1ikt} is greater than 1. The Inverse Mills Ratio controls for the selection effect. I use district fixed effects to clean the estimates to a maximum possible extent. For respondent *i* in district *k*, and in year *t*, the basic regression is of the following form:

$$y^*_{1i,k,t-1} = \mu_{1kt} + x'_{1i,k,t-1}y\beta + \varepsilon_{1i,k,t-1},$$

$$y_{1i,k,t-1} = 1 \quad if\ y^*_{1i,k,t-1} > 0,$$

$$y_{1i,k,t-1} = 0 \quad if\ y^*_{1i,k,t-1} \leq 0$$

$$y^*_{2,i,k,t-1} = \mu_{kt} + x'_{2,i,k,t-1}\beta + \varepsilon_{2,i,k,t-1},$$

$$y_{2,i,k,t-1} = 1 \quad if\ y^*_{2,i,k,t-1} > 0,$$

$$y_{2,i,k,t-1} = 0 \quad if\ y^*_{2,i,k,t-1} \leq 0$$

where y^*_{ikt-1} is a latent variable, and μ_{kt} are the district fixed-effects, $x_{i,k,t-1}$ is a vector of individual-level and household characteristics, β and γ are vector of parameters, and $\varepsilon_{i,k,t-1}$ is a normally distributed error term. Additionally, to assess the robustness of the specification, I also estimate Zero Inflated Poisson and negative binomial specifications on the (active) number of SBFD accounts.[19] Statistical justifications for using the zero inflation models are that variances are not equal to mean, which is implied by non-zero inflated specifications.[20]

[19] This variable was not reported for all types of accounts, reducing the overall sample size.
[20] For textbook expositions of models with count data, see, e.g., Cameron and Trivedi (2005). I estimate the same model for all accounts and find very similar outcomes. The results can be obtained upon request.

5.2. Explanatory Variables

I include a set of individual and household-level characteristics that I anticipate will have an effect on financial inclusion. I mainly use explanatory variables that are present in all three survey rounds. Other specifications are reported later in this study (section 6.3).

I use the dummy variable *female*, which takes the value one if the respondent is a woman, as well as the dummy variable for *rural*, which indicates whether the respondent comes from a rural town (as defined in the Census 2011). I expect *female* and *rural* to have a negative impact on account ownership and use. As I further expect access and use of bank accounts to first increase and the decrease with old age, I include *age* and *age squared.* Both are in years. I further specify being whether the respondent is *married, divorced/widowed* relative to being *single*. Household income is proxied by the Grameen Progress out of Poverty (PPI) score. I divide the PPI score into year-wise quintiles and omit the third income quintile to better visualize the effects at the low and high end tails. The score is made up of ten questions that include household size. For reasons of collinearity, household size cannot be included in the main model.

I further anticipate that the respondent's employment situation influences financial inclusion. Thus, I differentiate between having a job that earns income and the respective main source of income.[21] As main income source I specify *farmer*, *labour and occasional work* (e.g. farm and non-farm labour), working in *services* (e.g. carpenter, driver, etc.), being *self-employed* (e.g. a shop or business owner), being *employed* (e.g. a

[21] In the 2013 survey, having a job refers to any job while in round two and three. This concerns any job held in the past 12 months. Among respondents who do not have a job, I cannot retrieve more information. While all survey rounds asked if the respondent is a student, housewife, or retired. This was administered as having a job in the first survey round, and as not having a job in the consequent survey rounds. Despite adjustments, this had led to vast deviations. Therefore, I only specify *not having a job*.

clerk), or *other*.[22] I omit the latter. This grouping is to reflect the likelihood of receiving a salary. I also expect that higher levels of education have a positive effect. I include whether the respondent is either *illiterate*, has no formal education but is *literate (no Edu.)*, has attended school until 5th grade (*Primary*), 8th grade (*Middle*), 12th grade (*Secondary*), has a technical or non-technical non-degree certificate (*Diploma*), or is a *Graduate or above*. I omit the highest educational category.

To capture a proxy for individual income and technological advancement, I include a dummy for not owning a mobile phone (*no mobile phone)*. This is also in line with the JAM (Jan Dhan-Aadhaar-Mobile) trinity advocated by the Government of India wherein mobile phones are one of the three means used to ensure efficient provision of G2P. I further include a dummy variable for *Aadhaar Card* in both specifications, and a dummy that takes the value one if the respondent receives *G2P,* and *G2P into an account*. The latter is included in the second stage of the model. Whether the respondent saves money was specified differently in 2013, and is therefore added in a subsequent model.

In the model on active account use, I further add two variables that are conditional on owning an account. I include whether the account owner has ever received wage/salary or remittance payments into the bank account (*Receive payments),* or has made current or capital expenditure payments *(Make cur. /cap exp. Payments)* through the account.[23] I expect all payment variables to have a positive impact on use.

[22] The category *other* is evoked when the respondent's income activity is not specified in the questionnaire or, alternatively when the respondent reports having a job but refuses to specify the income activity.
[23] Capital expenditure payments in this case include any investments made through the account, and the payment of school fees. Current expenditure payments include the payment of groceries, medical-, utility-, and government bills, as well as remittance payments made through the account.

To test the effect of formal savings and borrowing, I include a dummy variable for whether the bank account owner is saving (*Formal savings)* or has ever borrowed money (*Formal loan)* through an account. Testing whether the mode of transaction, other than using a counter at a bank, matters, I add dummy variables that take the value of 1 if the account owners *Use ATM,* and/or *Use bank agent*. [24]

In later sections, I explain variables used to the test the effect of the PMJDY scheme, as well as district-level variables used to explain regional variation. A description of all variables is available in appendix 2A.

6. Results

6.1. Bank Account Ownership and Use

Table 12 explores household and individual characteristics and their effect on access to account ownership (column 1), as well as account use, defined as having conducted any transactions with the past 90 days (column 2), after controlling for regional- and year-wise variation using fixed-effects. I control for sample selection in account use (column 3). The cross-sectional nature of this data inherently measures the year-on-year change at the smallest chosen geographical unit. The results cannot be interpreted as causal relationships, but only as significant correlations.

Column 1 shows that the likelihood of account ownership is greater for richer, educated, older, married, formerly-married, and employed individuals. Because the survey only proxies income, I estimate the effect of the lowest relative to the highest household income quintile of the PPI Score. The latter increases the likelihood of owning

[24] The question on transactions methods was only asked to those bank account owners who use their account. Therefore, I assign the value zero if the respondent claims to have never used the account.

an account by 8 percentage points. In accordance with previous studies on the determinants of financial inclusion in India (Kumar, 2013), I also find that income activity has a strong effect. Being full-time employed relative to *not having a job* increases the likelihood of account ownership by nearly 20 percentage points. Education is also an important driver for access; raising the likelihood of account ownership by about 15 percentage points for an individual who was schooled to 12th standard, as compared to an individual who is illiterate.

In terms of mobile telephone, Ghosh (2016) documents a large and statistically significant impact on financial inclusion. I obtain that owning a mobile phone relative to not owning one enhances the likelihood of account ownership by nearly 14 percentage points. Furthermore, owning an Aadhaar card, increases the likelihood of account ownership by nearly 8 percentage points. I note that one interpretation consistent with anecdotal evidence is that individuals may have procured the card when they wish to open an account. Although it is entirely plausible, I cannot test this other direction of causality. I further observe a positive and statistically significant relationship between bank accounts and G2P. Receiving G2P increases the likelihood of account ownership by nearly 17 percentage points. This is in line with the JAM trinity, as well as the notion that government transfers can enhance financial inclusion (Gold, Porteous, Rotman, Parker, 2012), and confirms descriptive findings, which show that receiving or expecting G2P payments is one of the main drivers for account openings.

Unlike my anticipation, I find that living in rural areas is positively associated with account ownership, although only after controlling for demographics. This finding is statistically significant at 1 percent. In other words, the likelihood of having obtained an

account between 2013 and 2015 is nearly 3 percentage points higher for an individual from a rural area relative to an otherwise equal person from an urban area.

The dummy variable *female* is negatively associated with access to SBFD accounts but is no longer statistically significant after controlling for other demographic characteristics (although it is significant at 1% for *all accounts*). I split the sample into rural and urban sub-populations, and I observe that account ownership is negative and statistically significant for urban females but not for rural females (or only at 10% for *all accounts*). This finding suggests that account ownership for rural females has increased more than account ownership for urban females over the course of 2013 to 2015. In section 6.4. I highlight year –wise differences and show that these positive results owe to post-PMJDY years.

Columns 2 and 3 show that the determinants of usage resemble those observed for account ownership. Active account use is higher for richer, educated, older, married, formerly-married, and employed individuals. Conditional upon owning an account, the effects are, however, less substantial. For example, the likelihood of actively using an account is 9 percentage points higher for someone who is employed relative to someone who does not have a job. I recall that marginal effect amount to 20 percentage points regarding account ownership. Furthermore, the effect of education is lessened. The likelihood of actively using the account is about 2 percentage points higher for someone with secondary education, relative to someone who is illiterate. I recall that the same increases account ownership by more than 15 percentage points.

Location and gender have a different, and still negative impact on account use. I find that a *rural* location is negatively associated with account use. Conditional upon having an account, the likelihood of using an account is nearly 3 percentage points lower

for a rural account owner relative to the urban counterpart. For a woman, the likelihood of actively using an account is more than 2 percentage points lower relative to a man, and even 6 percentage points lower for rural women.

I further find that receiving wages, salary, remittance payments, government transfers, making current payments through a bank account, saving formally and borrowing formally are all positively associated with the likelihood of active account use.[25] Receiving G2P into an account, increases the likelihood of use by more than 9 percentage points. This suggest that government transfers are positively associated with both access and use, but have a stronger effect on the former.

Saving formally, on the other hand, increases the likelihood of using an account actively by 13 percentage points, while a formal loan only does so by about 5 percentage points. In India, account use (and access) is mostly driven by savings (which I further substantiate in section 6.3), while the international evidence is mixed. For instance, Cámara, Noelia, and David Tuesta (2015) show that in Peru, the use of formal finance is driven by a need for loans, while Aportela (1999) shows that in Mexico increasing financial access has a positive and significant effect on the savings rate of poor people.

Using an ATM and using a bank agent are both associated positively with active account use. However, while the use of ATMs is statistically significant at 1 percent, the use of bank agents is not statistically significant for SBFD accounts (nor *all accounts*).[26] The coefficient for bank agents is also markedly smaller than that obtained for ATMs. This

[25] In the model on active use of all accounts, making capital payments is positive significant at the 5% level, while the variable is insignificant in the estimation on SBFD accounts. This is likely because all accounts contain current accounts and other types that are more typically used for business transactions.

[26] In an early version of this paper, I used district controls rather than district fixed effects. In this case, the use of bank agents is statistically significant at 10% for SBFD accounts, and at 5% for *all accounts*. Altogether this indicates that the positive association between use of accounts and bank agents is not robust.

corroborates findings from summary statistics; bank agents have helped open accounts but - at the time of the sample period - do not play a significant role in financial transactions. The reason to why that is warrants further research.

In Table 13, I represent the results of estimating a zero inflated Poisson, and a negative binomial regression to ensure the robustness of the obtained results. The respective dependent variable is the number of SBFD accounts and the active number of SBFD accounts. The results mimic those obtained from the Heckman Probit estimation in that male, older, richer and more educated individuals are more financially included. With one significant difference. In the robustness check, a negative association between the female and account ownership is still statistically significant for SBFD accounts.

6.2. PMJDY Effects

Advancing the analysis further, I investigate the year wise effects of the PMJDY scheme. I introduce a *PMJDY Introduction Effect* dummy. Given that the PMJDY scheme was introduced in August 2014, a month before the second survey round was initiated, the dummy takes the value one for both the years 2014 and 2015, and the value zero for the year 2013. I interact the PMJDY introduction dummy with the main explanatory variables, i.e. female, rural, income proxies, mobile, and education. While I assume PMJDY to have a large effect, I cannot exclude cohort-effects, or estimate the impact of other governmental programs that took effect and could have boosted financial inclusion.

Table 14 illustrates the results. Table 15 tests the robustness of these results by comparing the 2013 and 2015 coefficients of the main variables by means of a t-test. Additionally, I use the same robustness checks as before. Table 16 shows that the

estimations from a Zero Inflated Poisson model and a Binomial regression mimic those results obtained from the Heckman Probit and PMJDY-effect interactions.

Table 14, Column 1, shows that in terms of account ownership, PMJDY has had a great impact on the gender-gap. Before the PMJDY scheme, gender parity was negatively associated with account ownership. In 2013, the probability of access is nearly 7 percentage points lower for a female relative to an otherwise equal male. Post 2013, i.e. after the introduction of the PMJDY scheme, this relationship turns positive. In 2015, the likelihood of having obtained an account is about 6 percentage points higher for a female relative to male, given all other variables at means. Very similar results are also obtained after I split the sample into rural and urban subpopulations (column 4-9). In Table 15, using a t-test, I show that the difference of female account ownership in the year 2013 and the year 2015 is statistically significant.

Next I turn to the effects of being female on account use (Column 2). In the full three-year sample being female is negatively associated with active account usage but post-PMJDY, this association is no longer statistically significant. Table 15 highlights that a difference in the 2013 and 2015 coefficients is however statistically significant. In 2013, female account owners are 2 percentage points less likely to use their account actively. In 2015, this has been reversed and female account owners are 3 percentage points more likely to have used their account actively.

I observe similar phenomena for location (urban vs. rural). In the full sample, living in a rural area has a positive effect on account ownership. Yet, interacting the rural variable with post 2013 year effects renders these results insignificant. This is likely due to fluctuations in the year 2014, right after the PMJDY introduction. Table 15 reports more distinct results. In 2013, the likelihood of owning an account was more than 6

percentage points lower for someone from a rural area relative to someone from an urban area. In 2015, this relationship turned positive; a rural individual is 5 percentage points more likely to have obtained an account relative to an otherwise equal urban individual. Table 16 confirms the robustness of these results.

I turn to the effect of location on account use, pre-and post PMJDY. Without controlling for PMJDY effects, living in a rural area is negatively associated with account use. In 2013, an account owner from a rural area is 4 percentage points less likely to actively use an account. Post PMJDY the sign of the coefficient turns positive but statistically insignificant. The *t*-test shows that the difference in 2013 and 2015 coefficients is robust for SBFD accounts but not all accounts. This suggests that active use has not improved for *all bank account* owners in rural areas. Perhaps the results reflect the relative lack of seasoning of accounts. Usage may increase once accounts age. Future survey rounds should shed light on the findings.

As a final test, I examine the effect of the PMJDY scheme on income proxies and education. Not owning a phone has a negative relationship with account ownership overall. Yet, I find that post the year 2013, account ownership is positively associated with phone deprived individuals, even in rural areas. This implies that post PMJDY, previously more disadvantaged individuals are more likely to open an account. Emphasizing this point, all income activities e.g. farmer, labourer, self-employed, have a positive and statistically significant coefficient post-PMJDY. The coefficient for being employed on the other hand turns insignificant. Furthermore, the negative relationship between low education and account ownership turns statistically insignificant after 2013. Only primary education is statistically significant, and highest for urban respondents. Furthermore, I find that account ownership is significantly and positively correlated with

the second lowest income quintile after 2013. Adding to this point, I find that post 2014, account ownership turns significantly negative for the highest income quintile, implying that account ownership did indeed grow less for high income groups. Table 18 confirms the robustness of these results. The t-test yields a statistically significant difference between SBFD account ownership and use in the year 2013 relative to the year 2015 regarding the PPI score, and living Below Poverty Line. It should be noted, though, that this positive and reversing effect does not universally hold for *all accounts*.

The results of post PMJDY effects on account use are more modest. After the introduction of PMJDY accounts, a negative relationship between account use and low education, low income, and no- or occasional income activities is no longer statistically significant.[27] For SBFD accounts, the t-test, measuring the difference in account use for BPL and APL account owners in 2013 relative to the levels in 2015 is statistically significant. Yet, this is again not the case for all accounts.

Table 19 represents the results of accounting for year- fixed effects. I observe that the year 2015 (post-PMJDY) increases the likelihood of having a SBFD account by more than 9 percentage points.[28] While the year 2015 is also positively associated with accounts use, the year 2014, the year in which PMJDY accounts were introduced, has a significantly negative effect on the active use of accounts. This corresponds to reports of initial account dormancy of PMJDY accounts, as well as findings from descriptive

[27] Being a farmer is the exception. After 2014, agriculture work is positively and significantly associated with account ownership and account use.

[28] The year 2014 does not have a statistically significant effect on SBFD accounts. In the model on all accounts, the year 2014 is positively associated with account ownership and is statistically significant at the 1% level. I recall that the FII survey – wave 2, was conducted a month after the introduction of PMJDY accounts in August 2014, which could explain the divergence in results.

statistics illustrating that account activity did not necessarily increase on all reported levels after the introduction of PMJDY accounts.[29]

6.3. Bank Account Ownership and Use: Additional variables

Some variables could not be used for the complete three- year pooled sample as they were not asked in all survey questionnaires, or the questions were drastically altered, making the validity of comparison dubious (Gasparini and others 2004). I run a set of separate regressions for some of these variables. On the household-level, I include a dummy indicating whether the respondent is the household head. Cull and Scoll (2010) show that who you ask in surveys on financial services often matters. I further include the total household size, as well as the ratio of household members that earn income relative to total household size. I substitute the PPI score with the number of household assets. All variables are transformed using the natural logarithm plus one.

On the individual-level, I check the robustness of the income activities used in the main model by including whether the respondent works full-time employed (omitted), part-time or self-employed, looking for a job, out of the workforce, not working because of retirement or disability, a housewife or full time student. Furthermore, I include a dummy variable that takes the value 1 if the respondent is saving or setting aside money (*Saving*), zero otherwise. The survey question on saving money was different in 2013, and is therefore not included in the main model. I also include a dummy variable for whether the respondent *Fully Trusts Banks*, which was no longer asked in 2015. To assess the impact of distance on account access and use, I add the distance in minutes (*15 min.*

[29] The PMJDY website monitors the proportion of zero balance PMJDY accounts. While 45 percent of PMJDY accounts were still dormant in August 2015, this has reduced to 25 percent in September 2016, and stagnated since. http://pmjdy.gov.in/trend-zero, retrieved on September 30, 2016.

or less, more than 15 min. to 30 min., more than 30 min. to 1 hour, more than 1 hour) to the nearest counter at a bank. I omit the first category. This question was only asked to all respondents in 2015.[30] Lastly, with view to use, I add a dummy on whether the bank account owner makes the bank transactions him/herself.

Table 17 represents the results on the household-level. I observe that being the household head is positively associated with account ownership and use. A larger household size, on the other hand, is negatively associated with account ownership and use. Yet, this is only statistically significant at the 10 percent level for the latter, indicating that upon being able to access an account the negative effects a large household are smoothened. A higher ratio of working household members is also negatively associated with account ownership - suggesting an intra-household substitution-effect as observed by Cámara, Noelia, and Tuesta (2015)- but is insignificant for account use.

Table 18 shows the estimation of individual-level variables. Regarding the respondent's occupation, the results mimic those obtained in the main model. A volatile income situation is negatively associated with both account access and use.

Corroborating findings from summary statistics, I observe that access to accounts is largely driven by savings. Saving money increases the likelihood of account ownership by 29 percentage points (even higher than the marginal effect on use). I further observe that trusting banks increases the likelihood of account ownership by more than 15 percentage points but is less relevant for account usage. That trust matters less for account use is also reported by Allen, Demirguc-Kunt, Klapper and Pería, (2016).

[30] While the question of distance was also asked in 2013 and 2014, it was only asked to those who have a bank account and say that they use it, as well as use a counter at a bank branch in their financial transactions. This creates an inherent selection bias. In 2015, the question was asked to all, and is, therefore, preferred. Missing responses in the 2015 sample amount to 2,868 observations.

Moreover, not making one's own transactions reduces the likelihood of active account use by 14 percentage points.[31]

Interestingly, distance to the bank matters more for access than account use. I find that time taken to reach the nearest bank branch is statistically significant for account ownership but not for use. However, relative to *taking 15 minutes or less* to the nearest bank branch, only a time-frame of *1 hour or more* is significant.[32] I further corroborate this finding by analysing the effect of the number of bank branches in the next section.

6.4. Regional Variation

To aid the illustration of residual variation across regions, I use state-fixed effects while controlling for the same demographic characteristics as in the main model. Figure 2 presents the plot of residual variation for the year 2015 for both access (Panel A) and active use of bank accounts (Panel B). I find that the extent of state-wise divergence remains large after controlling demographics. Given India's large cultural and geographical diversity, regional variation appears a common phenomenon, regarding financial inclusion indicators (Reserve Bank of India, 2015, Ghosh and Vinod, 2017), and household finance at large (Badarinza, Balasubramaniam and Ramadorai, 2017).

Panel A suggest that account ownership unexplained by demographics is highest in Himachal Pradesh and lowest in Bihar. Using the FII survey for the year 2014, Ghosh and Günther (forthcoming) show financial literacy is positively associated with access and use of bank accounts. In their analysis, Himachal Pradesh is also the state with the

[31] While nearly 15 percent of women report that they do not make their own transactions (relative to 4 percent of men), the interaction of use patterns with a gender dummy variable is not statistically significant. The results can be obtained from the author upon request.
[32] I interact distance to the nearest bank branch with being rural. The results remain unchanged.

highest share of financially literate individuals, whilst Bihar has the lowest share, potentially explaining the allocation of bank accounts above and beyond demographic characteristics. Panel B suggests that, in terms of active account use, the state with the highest unexplained residual is Haryana, and the lowest is Chhattisgarh.

Figure 2

Residual Variation of Account Ownership and Use across Indian States

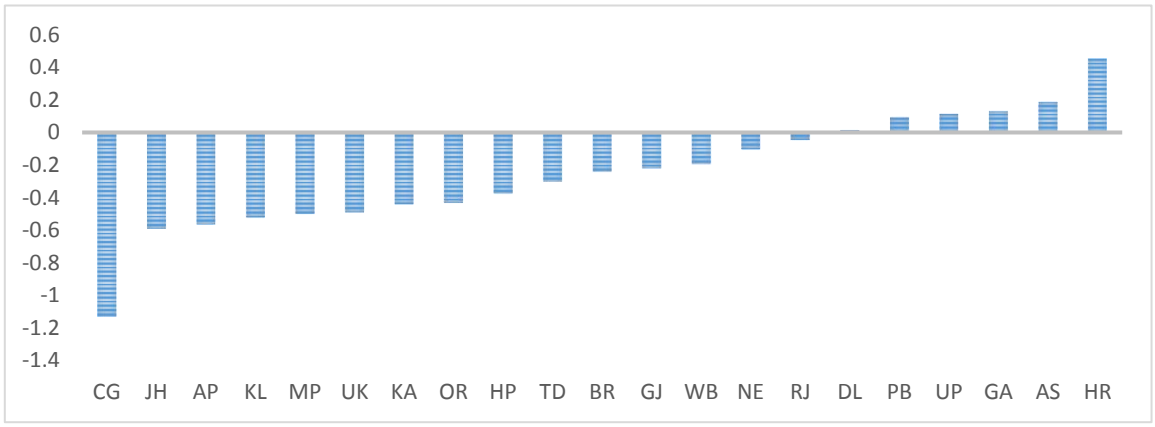
This figure reports estimated μ_k coefficients from the following specification, where y_{2ikt} is only observed when y_{1ikt} is greater than 1:

$$Y_{1i,k} = x_{1i,k}y\beta + \mu_k + \varepsilon_{1i,k,t}$$
$$Y_{2i,k} = x_{2i,k}y\beta + \mu_k + \varepsilon_{2i,k,t}$$

where $Y_{i,k,t}$ is the normalised score of the individual respondent i in state k, μ_k are the state fixed-effects, $X_{i,k}\, y\beta$ are variables capturing individual and household-level socio-economic characteristics, and $\varepsilon_{1i,k,t-1}$ is a normally distributed error term. The state of Maharashtra is taken as reference point, thus omitted. The analysis is only conducted for the most recent year, 2015. Panel A shows the state-fixed effects coefficients from the estimation of account ownership, and Panel B for active account use.

Panel A: Account ownership

Panel B: Active Account Use



Source: Financial Inclusion Insights Survey, wave 3, & Indiastat, Author's Computation

To facilitate the understanding of what drives regional differences in financial inclusion, I include two district-level controls; per capita district domestic product (*DDP per capita*), and the number of bank branches per district per 1000 of population (*Branches/1000 pop*).[33] Both are transformed using the natural logarithm (plus one in case of the latter). The number of bank branches proxies the accessibility of banks (Kumar, 2013, Subba Rao, 2007; Burgess and Pande, 2005; Leeladhar, 2006). In the model on account ownership, I introduce the square of *DDP per capita* to capture non-linearity that may reflect the growth of accounts in poorer regions. A priori, I expect both district controls to have a positive relationship.

Table 19 presents the results. The full sample is reduced to 132,193 observations, which is largely due to data at district level that could not be matched.[34] The number of bank branches is positively associated with access. Yet, when disaggregating the sample by location, I only find a statistically significant effect in rural areas. This is consistent with finding that distance to the bank is a much greater barrier to account ownership in rural areas (Demirguc-Kunt and Klapper, 2012) than in urban ones. Furthermore, I find that the number of bank branches is not statistically significant in the estimation of active account use. As shown in the afore-section, this suggest that distance to the bank matters for account ownership, but upon owning an account, does no not significantly affect active account use (when measured as any transaction in the past 90 days). This could imply

[33] I control at the district level to clean the estimates to a maximum possible extent. The district income data comes from Indicus Analytics, and district bank branch data comes from the RBI.

[34] The Financial Inclusion Insights sample (2013-2015) contains 542 common districts. Four districts could not be matched with bank branch data (n=246). For DDP per capita, the number of districts that could not be matched amounts to 8 (n=2,708). While the FII sample only contains Mumbai semi-urban, the DDP data for the same was only available for Mumbai at large, including Mumbai central. Since the FII sample does not distinguish between Bangalore rural and urban in all years, the average DDP and number of bank branches was taken. For calculation of the population adjusted variables, the Census 2011 was consulted.

that the government's effort to increase bank branches, especially in rural areas, has paid off (Burgess and Pande, 2005), and distance to the bank is no longer the main obstacles to account use.[35] Alternatively, once opened, accounts can be accessed through other means, such as ATMs.

The effect of District Per Capita Income (DDP) on access and use of accounts is reversed. I find that per capita DDP is positively associated with active account usage, but has no statistically significant effect on account ownership. This is consistent with findings from descriptive statistics; growth of account ownership has mostly taken place in low income regions. The same reversing income-effect does not apply to the active use of accounts, at least partially explaining a large and negative residual variation. Yet, neither regional income nor the number of bank branches can fully account for the unexplained regional heterogeneity observed in Figure 2.

7. Conclusion

How the unbanked can be brought into the formal financial system remains a question of policy and academic interest. India lends itself as an interesting case study, being host to a vast exogenous shock (PMJDY). Using large survey data this paper contributes to understanding the progress of financial inclusion between 2013 and 2015. The samples cover the time periods before and after the launch of the PMJDY scheme. I analyse cross-sectional drivers of account ownership and active account use across the whole period, and before and after PMJDY. I display both univariate statistics as well as multivariate

[35] The Committee report on the medium term-path of Financial Inclusion (RBI, 2015), shows that, although still being lower relative to urban ones, the number of bank branches per 100,000 of population has substantially increased in semi-urban and rural areas from 2006 to 2015.

specifications that control for various covariates. The analysis aids to understand whether persistent exclusion reflects a lack of demand for basic bank accounts or whether there is underlying demand but insufficient supply. The analysis can also help inform other countries that consider to increase inclusion.

In sum, I find that access to bank accounts has expanded significantly over the sample period. While geographic and socio-economic asymmetries persist, after the introduction of the PMJDY scheme, growth in account ownership has been greatest in low income states. Also, individual hurdles along the lines of gender, income and the rural-urban divide appear smoothened. Account ownership is largely driven by savings, while government interventions such as benefit transfers and Aadhaar cards furthermore significantly increase the likelihood of account ownership. As a caveat finding, I observe that the fine parameters of PMJDY are less known, which could have implications on the use of such accounts. Furthermore, PMJDY and benefit transfers appear to have led to an increase in duplicate accounts. While positive evidence can be found for Savings and Fixed Deposit accounts, this does not always hold for *all accounts*.

Active account use also expanded, albeit more modestly. I do not observe the same universal reversing effects in account use (measured as any transaction in 90 days) observed under account ownership. Regional variations in account use are wider than those observed for access. While progress along the lines of gender, location, income and education are visible, the effects are not always distinct enough to be statistically significant after controlling for demographic and regional variation.

Furthermore, drivers of account ownership, such as government benefit payments also have a positive but less substantial effect on active account use. On a positive note, inhibitors such as household size, lack of trust and distance to the nearest

bank seems to matter less for active account use. Savings appear to be a larger driver of account use than loans. It further appears that the use of ATMs is rising, although mostly for wealthier account holders, and that it has a significant impact on account activity. While bank agents played a substantial role in account openings, particularly for PMJDY accounts, they seem to play a less significant role in transactions. Bank agents are also least frequently cited as a preferred method. This is a result that deserves further research. For instance, account owners may be more reluctant to share their personal financial details or may feel less secure in using agents for transactions.

Lastly, I find that large unexplained regional variation in financial inclusion remains, even after controlling for demographics. While this could be linked to financial literacy, regional income and the regional number of bank branches only partially explain such heterogeneity.

Access to bank accounts has progressed sufficiently that policy makers should now focus on the breadth and depth of usage, especially in the most disadvantaged states. Firmer conclusions must await future survey rounds.

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Table 1: Sample Distribution

Sample	Total				Rural				Urban			
Year	2013	2014	2015a	2015b	2013	2014	2015a	2015b	2013	2014	2015a	2015b
Bihar	3,645	3,646	3,645	4,060	2,625	2,625	2,625	2,960	1,020	1,021	1,020	1,100
Madhya Pradesh	2,649	2,651	2,650	3,640	1,999	2,001	2,000	2,220	650	650	650	1,420
Odisha	1,691	1,690	1,690	2,900	1,431	1,429	1,430	2,000	260	261	260	900
Uttar Pradesh	7,331	7,332	7,330	5,400	5,151	5,152	5,150	3,420	2,180	2,180	2,180	1,980
#Respondents	15,316	15,319	15,315	16,000	11,206	11,207	11,205	10,600	4,110	4,112	4,110	5,400
Delhi	500	501	500	n/a	n/a	n/a	n/a	n/a	500	501	500	n/a
Himachal Pradesh	305	305	305	n/a	255	255	255	n/a	50	50	50	n/a
Haryana	805	797	795	n/a	665	657	655	n/a	140	140	140	n/a
Punjab	1,173	1,174	1,175	n/a	723	724	725	n/a	450	450	450	n/a
Uttarakhand	405	405	405	n/a	265	265	265	n/a	140	140	140	n/a
Assam	1,219	1,231	1,220	n/a	1,079	1,082	1,080	n/a	140	149	140	n/a
North East	487	490	490	n/a	348	350	350	n/a	139	140	140	n/a
Jharkhand	1,175	1,175	1,175	n/a	915	915	915	n/a	260	260	260	n/a
West Bengal	3,440	3,441	3,442	n/a	2,570	2,571	2,572	n/a	870	870	870	n/a
Rajasthan	2,540	2,552	2,543	n/a	1,941	1,952	1,943	n/a	599	600	600	n/a
Gujarat	2,140	2,140	2,143	n/a	1,390	1,390	1,390	n/a	750	750	753	n/a
Maharashtra	4,290	4,294	4,290	n/a	2,496	2,503	2,500	n/a	1,794	1,791	1,790	n/a
Chhattisgarh	1,030	1,042	1,030	n/a	740	751	740	n/a	290	291	290	n/a
Goa	130	130	131	n/a	80	80	80	n/a	50	50	51	n/a
Andhra Pradesh	3,558	3,572	3,561	n/a	2,469	2,474	2,470	n/a	1,089	1,098	1,091	n/a
Karnataka	2,296	2,301	2,299	n/a	1,554	1,557	1,559	n/a	742	744	740	n/a
Kerala	1,345	1,345	1,346	n/a	1,035	1,035	1,036	n/a	310	310	310	n/a
Tamil Nadu	2,870	2,873	2,871	n/a	1,540	1,541	1,540	n/a	1,330	1,332	1,331	n/a
#Respondents	45,024	45,087	45,036	n/a	31,271	31,309	31,280	n/a	13,753	13,778	13,756	n/a

Table 1 reports on the number of respondents by state and location (rural vs. urban). 2015a refers to the Financial Inclusion Insights Surveys (FII). 2015b refers to the FinScope survey. The FII surveys sample was conducted in nearly all states of India. The FS survey was conducted in Bihar, Odisha, Madhya Pradesh and Uttar Pradesh

Table 2: Survey Demographics

Survey	Financial Inclusion Insights Surveys			FinScope
Year	2013	2014	2015	2015
Below Poverty Line*	77.5%	77.7%	77.5%	63.1%
AAY*	2.7%	7.6%	7.6%	14.1%
Rural	67.5%	67.5%	67.5%	80.1%
Female	48.9%	48.9%	48.9%	47.8%
Married	70.3%	68.8%	69.7%	79.7%
Mean age	36.7	36.7	36.7	38.9
SD Age	15.9	16,0	15.8	15,0
No Education	29.5%	28.6%	29.1%	31.7%
Primary Education (till 5th standard)	13.1%	12.7%	12.8%	19.5%
Secondary Education (till 12th standard)	46.9%	48.2%	47.9%	41.0%
Tertiary Education (Diploma, graduate and above)	10.6%	10.5%	10.3%	7.8%
No. of HH Members under 17 years: 1-2	46.2%	46.4%	46.2%	40.3%
No. of HH Members under 17 years: 3+	21.3%	22.5%	21.6%	40.1%
No. of HH Members under 17 years: 0	32.5%	31.1%	32.2%	19.5%
Mean Household Size	n/a	5	4.8	5.8
SD Household Size	*n/a*	*2.3*	*2.3*	*2.8*
No job that earns income*	49.1%	51.6%	50.5%	36.0%
Farmer	11.9%	13.4%	12.3%	18.6%
Labourer (farm + non-farm)	21.4%	17.4%	19.8%	30.8%
Services (e.g. house help, driver etc.)	7.0%	7.3%	7.3%	n/a
Self-employed (non-farm)	4.7%	3.9%	3.9%	7.8%
Employed (full-time)	4.9%	4.5%	4.4%	6.8%
Other*	1.0%	2.0%	1.9%	n/a
Mean PPI Score	39.1	40.1	39.7	n/a
STD PPI Score	*17.3*	*17*	*16.4*	*n/a*
HH Cooking Arrangement: None	0.1%	0.2%	0.2%	n/a
HH Cooking Arrangement Non-Gas	62.7%	56.9%	59.4%	80.2%
HH Cooking Arrangement Gas	37.2%	43.0%	40.5%	19.8%
Average No. of HH assets	2.5	2.6	2.5	2.3
SD No. of HH assets	1.7	1.7	1.6	1.9
Almirah	34.5%	36.8%	34.1%	19.6%
Thermoware	19.1%	20.2%	17.1%	4.1%
Sewing machine	18.8%	18.2%	17.9%	15.3%
DVD Player or TV	54.3%	58.6%	61.6%	38.9%
DVD & TV	7.5%	4.9%	4.0%	3.0%
Landline	2.0%	1.8%	1.4%	0.4%
Mobile Phone	82.9%	87.0%	89.5%	83.5%
Motorcycle	20.2%	24.6%	22.7%	13.4%
Car	1.9%	2.1%	1.9%	0.7%
None of these	10.8%	7.8%	6.4%	11.2%
#Respondents	45,024	45,087	45,036	16,000

Table 2 reports on socio-economic characteristics in the FII and FS surveys. Poverty is measured differently. The FII surveys use the Grameen Progress out of Poverty Index (PPI) to measure poverty, which sets the poverty line as living below USD 2.50 a day. PPI ranges from 0-100, zero being the lowest, and is made up of 10 questions on household assets, household size, education level of the female head/spouse, as well as the household's cooking arrangement. PPI was only reported in the FII surveys. In the FS survey, households are divided into; above poverty line (APL), below poverty line (BLP) and Antyodaya Anna Yojana (AAY). Being below poverty line corresponds to $1.25/day for rural areas and $1.88/day for urban areas. AAY is reported as being part of below poverty line (BPL) respondents. Participation rate of household assets and cooking arrangement is reported in all surveys. Non-gas includes wood, coal, charcoal, dung cake and kerosene. Gas includes LPG/PNG and electricity. With view to household assets, the mean and media number refers to the here listed assets only. Almirah includes wardrobe or dressing tables, thermoware includes any sort of casseroles and thermos, while motorcycle also includes mopeds and scooters. In 2013, the survey only asked for the number of household members aged 17 years and younger. Therefore, I compare the surveys in this format also. *Other* income source in the FS survey includes remittance, pension, and/or G2P. In the FII survey 'other' refers to any other non-listed job. Having a job that earns income does not differentiate between full time, part-time/informal work, as this was the case in survey wave 1. In wave 2013, this refers to a job currently held, while in 2014 and 2015 this applies to any job held in the past 12 months.

Table 3: Bank Account Ownership

Panel A: Financial Inclusion Insights Surveys

Year	2013	2014	2015
Any Bank Account	47.0%	55.2%	66.1%
Non PMJDY Account	47.0%	49.9%	53.8%
PMJDY Account	n/a	5.3%	12.4%
Basic Financial Service Account	n/a	52.7%	63.8%
Savings & Fixed Deposit Account (SBFD)	44.9%	49.5%	60.7%
Current Account	0.7%	0.7%	0.8%
Student Account	1.6%	2.3%	2.7%
Public Provident Fund Account (PPF)	n/a	n/a	0.10%
Other Bank Account	n/a	0.00%	0.00%
#Respondents	45,024	45,087	45,036
Number of Bank Accounts: Median	1.0	1.0	1.0
Number of Bank Accounts: Mean	1.0	1.0	1.0
Number of Bank Accounts: STD	0.3	0.3	0.3
#Respondents	20,694	23,224	28,462

Panel B: FinScope Survey

Sample	Individual Account		Household Bank Account	
	Bank Account	PMJDY	Bank Account	PMJDY
Ownership	71.8%	16.9%	90.4%	31.4%
#Respondents	16,000	16,000	16,000	16,000
Median No. of Accounts			2.0	1.0
Mean No. of Accounts			2.5	1.6
STD No. of Accounts			1.6	1.0
#Respondents*			14,405	4,926
Double Account	13.6%	50.8%	29.7%	79.2%
Account in respondent's name only	88.7%	100.0%	n/a	n/a
#Respondents*	9,968	2,537	13,319	4,926
Opened in Bank			98.0%	83.5%
Opened through BC			7.9%	19.2%
#Respondents			14,253	4,926
G2P Account			8.0%	n/a
#Respondents*			14,405	n/a

Table 3 reports on Bank Account Ownership in the FII surveys (Panel A) and the FinScope survey (Panel B). *Panel A*: The FII questionnaire specifies "Do you personally have a bank account that is registered in your name?" The term Basic Financial Service Accounts refers to accounts that offer at least one of the following: savings, money transfer, investment and/or insurance. SBFD accounts refer to Savings and Fixed Deposit accounts, also known as no-frills or Basic Savings and Deposit Accounts. Accounts such as SBFD-, current-, student-, PPF-, and other accounts are derived from the respective number of accounts the respondent owns. Therefore, they do not necessarily add up with total account ownership. The number of accounts was only obtained for those who have a basic financial service account, which includes SBFD accounts. PMJDY accounts fall under SBFD accounts. *Panel B:* Contrary to the FII survey, the FinScope questionnaire asks for account ownership that can be in the respondent's name only or joint accounts. Panel B also reports on household account ownership. At least one member in the household must own a bank account. The FS survey only specifies the number of accounts for households. The corresponding number of respondents excludes those who did not know or refused the question. The term 'Double accounts' refers to how many of those who have a non-PMJDY account also have a PMJDY account and vice versa. The table further reports on the way the account was opened. BC refers to business correspondent. G2P account refers to an account that was explicitly opened to receive government transfers. The question was only asked to non-PMJDY account owners.

Table 4: Perceptions of the PMJDY scheme

Bank Account	No-Account			Non-PMJDY			PMJDY		
Response	Agree	Disagree	DK	Agree	Disagree	DK	Agree	Disagree	DK
A lot of documentation required to open a PMJDY account	65.2	15.3	19.5	71.5	20.1	8.4	70.9	27.3	1.8
Min. balance/ deposit required to open a PMJDY account	46.1	29.5	24.5	50.1	39.5	10.4	55.5	39.1	5.4
Bank staff keep opening fees for themselves	14.8	52.7	32.5	14.2	67.1	18.7	15.5	74.2	10.3
Best to open a PMJDY account through a BC	24.5	34.6	40.9	33.7	38.6	27.7	44.8	33.2	22.1
Information (e.g. requirements, benefits, etc.) is clear	22.3	41.7	36.1	46.6	32.9	20.5	49.4	36.1	14.5
When receiving payments best to take them out at once	9.9	50.0	40.1	15.8	58.4	25.8	18.4	58.4	23.3
#Respondents		4,693			8,770			2,537	

Table 4 reports on perceptions of the PMJDY scheme in the FinScope sample. Respondents are divided into those who do not own a bank account, those who own a non-PMJDY account and those who own a PMJDY account. DK stands for 'don't' know'.

Table 5: Drivers and Barriers to Account Ownership

Panel A: Reasons for Opening an Account

Sample	Total			Above Poverty Line			Below Poverty Line		
Year	2013	2014	2015b	2013	2014	2015b	2013	2014	2015b
Receiving G2P	18.7%	19.0%	44.0%	14.4%	14.7%	39.4%	20.5%	20.5%	45.9%
To save	52.0%	50.7%	69.1%	56.9%	57.9%	73.7%	49.9%	48.0%	66.1%
By request (e.g. Gov.)	16.4%	13.3%	n/a	15.2%	12.3%	n/a	16.9%	13.7%	n/a
Advert./Recommend	2.2%	2.2%	n/a	2.5%	2.8%	n/a	2.1%	2.0%	n/a
To make Payments	3.4%	2.0%	4.9%	3.4%	2.2%	6.8%	3.3%	1.9%	4.0%
Insurance, Overdraft.	n/a	3.7%	n/a	n/a	1.9%	n/a	n/a	4.4%	n/a
To get loan	n/a	n/a	5.3%	n/a	n/a	5.6%	n/a	n/a	5.1%
#Respondents	20,695	24,657	11,307	6,179	6,723	4,010	14,516	17,934	6,159

Panel B: Reasons Against Opening an Account

Sample	Total			Above Poverty Line			Below Poverty Line		
Year	2013	2014	2015a	2013	2014	2015a	2013	2014	2015a
Resp. uses someone else's 's account	1.4%	1.6%	1.9%	3.0%	2.7%	3.9%	1.1%	1.4%	1.6%
# Respondents	24,329	24,657	29,826	3,367	2,853	2,152	20,962	17,577	13,058
No money	55.8%	53.8%	46.5%	38.0%	33.9%	28.4%	58.7%	56.9%	49.5%
No transactions	27.1%	28.0%	20.2%	40.4%	43.7%	40.6%	24.9%	25.5%	16.8%
Familiarity with Account	5.6%	3.3%	4.4%	9.0%	5.8%	5.4%	5.0%	2.9%	4.2%
Account Opening	2.3%	4.3%	10.2%	1.5%	3.2%	8.1%	2.4%	4.4%	10.6%
No ID	3.8%	3.4%	6.6%	3.9%	2.9%	5.5%	3.8%	3.5%	6.8%
Registration & Fees	1.7%	1.5%	4.8%	1.2%	1.6%	3.3%	1.8%	1.4%	5.0%
Distance	1.3%	1.9%	3.3%	1.5%	1.3%	2.3%	1.3%	1.9%	3.4%
Cost and ease of use	1.1%	1.1%	1.6%	1.7%	1.4%	2.4%	1.0%	1.1%	1.4%
Bank Services	0.5%	0.3%	0.7%	0.9%	0.7%	1.1%	0.4%	0.2%	0.7%
Trust	0.8%	1.1%	0.9%	1.6%	2.3%	1.1%	0.7%	0.9%	0.8%
Culture	n/a	0.9%	0.7%	n/a	2.1%	1.4%	n/a	0.7%	0.5%
Use someone else's account	n/a	0.2%	0.2%	n/a	0.4%	0.5%	n/a	0.1%	0.2%
#Respondents	23,730	19,190	14,225	3,248	2,573	1,944	20,482	16,617	12,281

Panel C: Identity Cards

Sample	Total				Above Poverty Line				Below Poverty Line			
Year	2013	2014	2015a	2015b	2013	2014	2015a	2015b	2013	2014	2015a	2015b
Aadhaar	45.4%	65.8%	82.3%	85.6%	60.5%	78.7%	87.4%	87.2%	41.1%	62.1%	80.9%	85.7%
Voter	79.6%	84.0%	81.6%	92.3%	83.1%	87.7%	86.0%	93.7%	78.6%	83.0%	80.3%	91.6%
Ration	73.8%	73.8%	70.5%	73.7%	81.2%	80.7%	78.7%	78.2%	71.7%	71.9%	68.1%	81.9%
#Resp.	45,024	45,087	45,036	16,000	9,546	9,576	9,615	5,238	35,478	35,511	35,421	9,067

Table 5 reports on the reasons for (Panel A) and against (Panel B) opening a bank account. Panel C reports on obstacles to account ownership such as not owning an identity card. In panel A, the 2015 data stems from the FinScope Survey, as the same question was not repeated in the FII survey in 2015. In 2013 and 2014, respondents were asked for which purpose they opened an account. In 2015, respondents were asked what they use their account for. In 2013/14, G2P payments, refers to payments at large and can also include salary payments, while in 2015, it includes receiving any type of payments and expecting future benefit payments. The latter allows for multiple responses. 'Familiarity with Account' is a grouped variable. It signifies that the respondent does not know what a bank account is or what to use it for, has never thought about using one or none of the respondent's friends and family have one. 'Account opening' means the respondent does not know how to open a bank account. Registration & Fees consists of document requirements that are too difficult, and/or opening costs and minimum balance that are too high. Distance implies that there are no banks close to where respondent lives. 'Cost and Ease of use' is a compiled variable. The respondent opines that the use of a bank account is too difficult and/or that using fees are too high. 'Bank services' implies that bank agents are not accessible, banks do not offer required services, bank staff are unfriendly, bank hours are inconvenient. 'Trust' refers to the respondent thinking that banks are not reliable, that the money would not be safe at the bank and/or would rather have his/her money close. Lastly, 'Culture' entails that the respondent's family does not approve, it is not approved by the religion and/or that respondent is not allowed to go to the bank alone. In panel C, the 2013- 2015a data refers to the FII survey. 2015b refers to the FinScope Survey.

Table 6: Bank Account Ownership by Socio-Economic Characteristics

Panel A: Financial Inclusion Insights Surveys

Sample	All Accounts			Non-PMJDY Account		PMJDY Account	
Year	2013	2014	2015	2014	2015	2014	2015
All	47.0 %	55.2 %	66.1 %	49.9 %	53.8 %	5.3 %	12.4 %
15-24 years	35.4 %	45.4 %	54.0 %	40.8 %	44.6 %	4.7 %	9.5 %
25-44 years	49.3 %	57.4 %	68.4 %	51.4 %	54.5 %	6.0 %	13.9 %
45-60 years	53.5 %	61.1 %	73.2 %	55.6 %	60.3 %	5.5 %	13.0 %
61-70 years	57.0 %	62.2 %	76.6 %	58.2 %	63.9 %	4.1 %	12.7 %
71 years +	57.6 %	59.4 %	75.9 %	55.4 %	63.9 %	4.0 %	12.0 %
Females	38.7 %	48.1 %	61.0 %	43.3 %	49.3 %	4.8 %	11.8 %
Males	55.0 %	62.1 %	71.1 %	56.2 %	58.2 %	5.9 %	12.9 %
Rural	42.9 %	52.3 %	64.0 %	47.9 %	52.9 %	4.4 %	11.2 %
Urban	55.7 %	61.4 %	70.5 %	54.2 %	55.8 %	7.2 %	14.8 %
Illiterate	33.8 %	41.9 %	57.8 %	38.3 %	46.2 %	3.6 %	11.6 %
Literate (no Edu.)	37.4 %	44.2 %	60.5 %	39.7 %	47.8 %	4.6 %	12.7 %
Below Primary	38.3 %	48.6 %	62.8 %	44.6 %	52.3 %	4.0 %	10.5 %
Primary (till 5th)	39.4 %	50.1 %	61.6 %	45.3 %	49.7 %	4.8 %	12.0 %
Middle(6-8th)	42.1 %	50.8 %	61.6 %	45.9 %	50.1 %	4.9 %	11.5 %
Secondary (till 10th)	51.9 %	59.7 %	69.1 %	54.0 %	56.9 %	5.7 %	12.2 %
Higher Second. (till 12th)	58.8 %	68.0 %	73.5 %	61.6 %	62.0 %	6.5 %	11.6 %
Diploma/Certificate	73.5 %	74.4 %	82.7 %	64.1 %	66.1 %	10.5 %	16.9 %
Graduate	78.4 %	83.2 %	86.3 %	75.0 %	68.4 %	8.3 %	18.0 %
Post Graduate +	87.2 %	89.2 %	93.3 %	77.6 %	76.3 %	11.5 %	17.0 %
Below Poverty Line (BPL)	41.4 %	50.7 %	62.7 %	46.5 %	50.7 %	4.3 %	12.0 %
Above Poverty Line (APL)	66.3 %	70.8 %	77.9 %	61.9 %	64.5 %	9.0 %	13.5 %
HH assets: Two or more	59.7 %	66.0 %	74.2 %	55.4 %	58.2 %	6.5 %	13.1 %
HH assets: Less than two	32.0 %	40.7 %	54.3 %	38.0 %	43.6 %	2.7 %	10.8 %
Lowest 20 % (PPI)	31.1 %	40.4 %	53.6 %	37.2 %	42.1 %	3.2 %	11.6 %
Second 20 % (PPI)	38.5 %	47.2 %	61.4 %	43.8 %	49.6 %	3.4 %	11.8 %
Middle 20 % (PPI)	46.0 %	54.2 %	65.9 %	49.9 %	54.1 %	4.4 %	11.9 %
Fourth 20 % (PPI)	55.4 %	62.6 %	72.2 %	56.3 %	59.5 %	6.3 %	12.8 %
Richest 20 % (PPI)	67.8 %	71.3 %	78.5 %	62.0 %	64.7 %	9.4 %	13.9 %
#Respondents	45,024	45,087	45,036	45,087	45,036	45,087	45,036

Panel B: FinScope Survey

	Individual Accounts			Household Accounts		
Sample	Bank Account	Non-PMJDY	PMJDY	Bank Account	Non-PMJDY	PMJDY
All	71.8 %	63.5 %	16.9 %	90.4 %	83.8 %	31.4 %
18-24 years	58.7 %	53.0 %	14.1 %	73.9 %	66.2 %	22.3 %
25-44 years	72.2 %	62.4 %	18.6 %	87.3 %	78.9 %	30.9 %
45-60 years	77.8 %	69.8 %	17.1 %	92.0 %	86.2 %	33.2 %
61-70 years	79.4 %	71.9 %	15.3 %	91.7 %	85.9 %	29.1 %
71 years +	77.6 %	72.1 %	10.1 %	93.8 %	89.9 %	30.9 %
Females	67.2 %	68.8 %	16.5 %	90.3 %	83.7 %	31.4 %
Males	76.0 %	57.5 %	17.5 %	90.7 %	84.6 %	31.4 %
Rural	71.6 %	63.9 %	16.2 %	89.8 %	83.8 %	29.8 %
Urban	72.6 %	61.8 %	20.0 %	92.5 %	84.0 %	38.0 %
No formal education	64.6 %	53.9 %	16.8 %	84.6 %	76.0 %	30.2 %
Primary Edu till 5th	72.4 %	63.9 %	18.8 %	91.5 %	85.6 %	31.9 %
Middle till 8th	71.9 %	63.4 %	16.6 %	92.2 %	84.9 %	32.6 %
Secondary till 12th	75.0 %	68.2 %	17.4 %	94.1 %	89.2 %	33.0 %
Tertiary education	87.6 %	83.9 %	12.8 %	97.1 %	95.2 %	25.7 %
Below Poverty Line	69.3 %	60.5 %	18.7 %	88.9 %	81.4 %	32.1 %
Above Poverty Line	77.1 %	69.5 %	16.6 %	93.9 %	88.9 %	33.1 %
HH assets: <2	65.6 %	56.3 %	15.7 %	85.7 %	77.6 %	28.4 %
HH assets: 2+	79.1 %	71.8 %	18.4 %	96.2 %	91.6 %	35.1 %

Table 6 reports on bank account ownership by socio-economic characteristics in the FII surveys (Panel A) and the FinScope Survey (Panel B). For household accounts these characteristics refers to the household head.

Table 7: Bank Account Use

Panel A: Financial Inclusion Insights Survey

Sample		Total			Above Poverty Line			Below Poverty Line	
Year	2013	2014	2015	2013	2014	2015	2013	2014	2015
Bank Loan	7.1 %	6.9 %	11.6 %	8.0 %	7.0 %	15.5 %	6.7 %	6.8 %	10.2 %
Save through bank	29.7 %	77.0 %	77.1 %	27.6 %	82.0 %	81.0 %	30.6 %	75.0 %	75.7 %
#Respondents	20,663	23,224	28,499	6,170	6,399	7,143	14,493	16,825	21,356
Know IR savings	n/a	80.7 %	73.9 %	n/a	80.6 %	76.0 %	n/a	80.7 %	73.2 %
Know IR Loan	n/a	87.3 %	83.6 %	n/a	87.0 %	85.6 %	n/a	87.4 %	82.5 %
Ever deposits	89.1 %	86.6 %	92.0 %	91.0 %	86.8 %	94.5 %	88.3 %	86.5 %	91.1 %
Weekly+	n/a	n/a	5.0 %	n/a	n/a	8.0 %	n/a	n/a	3.9 %
Once in 15 days	n/a	n/a	9.9 %	n/a	n/a	12.6 %	n/a	n/a	8.8 %
Monthly	n/a	n/a	30.1 %	n/a	n/a	37.6 %	n/a	n/a	27.2 %
Every 3 -6 months	n/a	n/a	39.2 %	n/a	n/a	32.0 %	n/a	n/a	42.1 %
Once a year	n/a	n/a	14.0 %	n/a	n/a	8.7 %	n/a	n/a	16.1 %
Almost never	n/a	n/a	1.8 %	n/a	n/a	1.1 %	n/a	n/a	2.0 %
Ever withdrawals	84.2 %	90.1 %	93.8 %	86.0 %	90.4 %	97.0 %	83.3 %	90.0 %	92.5 %
Weekly+	n/a	n/a	6.4 %	n/a	n/a	9.9 %	n/a	n/a	5.0 %
Once in 15 days	n/a	n/a	11.9 %	n/a	n/a	16.0 %	n/a	n/a	10.3 %
Monthly	n/a	n/a	32.1 %	n/a	n/a	37.6 %	n/a	n/a	29.9 %
Every 3 -6 months	n/a	n/a	39.1 %	n/a	n/a	30.7 %	n/a	n/a	42.4 %
Once a year	n/a	n/a	9.6 %	n/a	n/a	5.2 %	n/a	n/a	11.3 %
Almost never	n/a	n/a	1.0 %	n/a	n/a	0.6 %	n/a	n/a	1.2 %
#Respondents	19,302	21,501	25,015	5,808	6,025	6,921	11,809	13,321	18,027

Panel B: FinScope Survey – Individual Accounts

Sample	Total	APL	BPL	Total	APL	BPL
Account	All Bank Accounts			PMJDY Accounts		
Borrow through Bank	7.7 %	9.2 %	6.4 %	2.4 %	n/a	2.3 %
Save through bank	98.7 %	99.1 %	98.4 %	94.4 %	n/a	93.3 %
#Respondents	11,307	4,010	6,159	1,339	n/a	825
Bank Kisan Card	11.17 %	15.80 %	8.28 %	n/a	n/a	n/a
#Respondents	2,977	1,112	1,577	n/a	n/a	n/a
RuPay Card	1.4 %	1.5 %	1.4 %	4.9 %	n/a	5.0 %
Debit/ATM Card	15.9 %	20.0 %	13.1 %	8.0 %	n/a	7.5 %
Credit Card	0.8 %	1.4 %	0.5 %	0.3 %	n/a	0.2 %
#Respondents	11,307	4,010	6,159	1,339	n/a	825
Use Bank Counter	99.2 %	99.1 %	99.3 %	97.7 %	n/a	98.1 %
Use ATM	4.6 %	5.9 %	3.5 %	1.8 %	n/a	2.4 %
Use BC/Bank Agent	0.2 %	0.2 %	0.2 %	0.0 %	n/a	0.0 %
#Respondents	10,394	3,796	5,545	1,035	n/a	614

Panel C: FinScope Survey - Household Accounts

Sample	**Total**	**APL**	**BPL**	**Total**	**APL**	**BPL**
Account	**All Bank Accounts**			**PMJDY Accounts**		
Bank Credit/debit Card	20.7%	27.1%	17.3%	24.8%	28.5%	23.2%
Borrow through Bank	7.4%	9.5%	5.6%	7.2%	9.1%	6.0%
#Respondents	14,405	4,905	8,047	4,926	1648	2,906
Bank Kisan Card	16.5%	22.3%	12.3%	19.1%	23.6%	15.9%
#Respondents	7,514	2,842	3,955	2,353	922	1,272

Table 7 reports on use of bank accounts in the Financial Inclusion Insights survey (Panel A), and the FinScope Survey (Panel B and C). Kisan Credit cards are only reported for individuals and households working in the agricultural sector. Household's bank and or credit cards includes RuPay cards. FinScope asks for the most commonly used method of transaction, thus differing from the FII survey where general use is asked.

Table 8: Bank Transactions

Panel A: Bank Payments

Sample	Total			Above Poverty Line			Below Poverty Line		
Year	2013	2014	2015	2013	2014	2015	2013	2014	2015
Receive: G2P	12.1 %	20.9 %	26.5 %	10.3 %	14.3 %	26.8 %	12.6 %	22.8 %	26.3 %
#Respondents	45,024	45,087	45,036	9,546	9,576	9,615	35,478	35,511	35,421
Receive: G2P into account	19.2 %	40.9 %	59.5 %	30.8 %	46.9 %	79.9 %	16.4 %	39.8 %	53.5 %
#Respondents	5,644	9,695	12,020	1,019	1,425	2,612	4,625	8,270	9,408
Remittance	2.8 %	4.0 %	2.8 %	3.5 %	4.0 %	3.7 %	2.5 %	4.0 %	2.5 %
Send money	2.5 %	2.2 %	1.7 %	3.7 %	3.5 %	3.5 %	1.9 %	1.6 %	1.1 %
#Respondents	20,695	24,657	29,826	6,179	6,723	7,463	14,516	17,934	22,363
Receive: Salary/wage into account	9.9 %	9.8 %	2.9 %	15.7 %	15.8 %	5.7 %	7.4 %	7.5 %	1.9 %
#Respondents	12,195	12,828	15,127	3,415	3,282	3,503	8,780	9,546	11,624
Pay: Shop/groceries	7.6 %	2.4 %	2.8 %	9.9 %	3.6 %	3.9 %	6.5 %	1.9 %	2.4 %
Pay: Utility Bills	3.6 %	2.0 %	1.5 %	6.7 %	3.7 %	3.4 %	2.2 %	1.3 %	0.8 %
Pay: Medical Bills	4.3 %	1.4 %	1.2 %	5.4 %	1.8 %	2.2 %	3.8 %	1.2 %	0.9 %
Pay: College/School fees	2.6 %	1.4 %	1.4 %	3.6 %	2.1 %	2.4 %	2.1 %	1.2 %	1.0 %
Pay: acquisition	1.1 %	0.5 %	0.4 %	0.6 %	0.4 %	0.7 %	1.3 %	0.5 %	0.4 %
Pay: Gov. bill	1.0 %	0.3 %	0.5 %	2.4 %	0.8 %	1.1 %	0.3 %	0.1 %	0.2 %
#Respondents	20,695	24,657	29,826	6,179	6,723	7,463	14,516	17,934	22,363

Panel B: Method of Transactions

Sample	Total			Above Poverty Line			Below Poverty Line		
Year	2013	2014	2015	2013	2014	2015	2013	2014	2015
Self-Transactions	n/a	92.0 %	90.7 %	n/a	92.5 %	91.9 %	n/a	91.8 %	90.2 %
#Respondents	n/a	24,657	26,681	n/a	6,723	7,463	n/a	17,934	22,363
Bank Counter	90.3 %	83.3 %	87.9 %	89.8 %	82.6 %	89.7 %	90.6 %	83.6 %	87.2 %
ATM	23.8 %	30.1 %	35.3 %	44.7 %	52.5 %	59.9 %	14.1 %	21.1 %	26.4 %
Retail Store	n/a	1.1 %	2.3 %	n/a	1.5 %	4.9 %	n/a	0.9 %	1.3 %
Bank Agent	0.2 %	0.4 %	0.1 %	0.2 %	0.6 %	0.1 %	0.2 %	0.3 %	0.1 %
Mobile banking	0.2 %	0.2 %	0.3 %	0.5 %	0.7 %	1.0 %	0.0 %	0.1 %	0.1 %
#Respondents	20,695	24,658	29,827	6,244	6,769	7,509	14,538	17,934	22,365
Preferred Method									
Counter at Bank	78.0 %	76.8 %	75.7 %	59.7 %	57.1 %	55.1 %	86.6 %	84.9 %	83.5 %
ATM	21.6 %	22.5 %	23.8 %	39.5 %	41.5 %	44.2 %	13.2 %	14.6 %	16.2 %
Retail Store	0.2 %	0.3 %	0.3 %	0.5 %	0.7 %	0.3 %	0.0 %	0.1 %	0.3 %
Mobile Banking	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.1 %	0.0 %	0.0 %	0.0 %
Bank Agent	0.2 %	0.4 %	0.0 %	0.2 %	0.5 %	0.0 %	0.1 %	0.3 %	0.1 %
#Respondents	19,045	21,282	26,549	5,731	5,973	6,869	13,314	15,309	19,680

Table 8, Panel A, reports on the payments bank account owners receive into their account. Here, G2P includes pro-poor benefit payments e.g. through the National Rural Employment Act (NREGA), but also government pension, disability and elderly assistance, as well as other subsidies. G2P received in a bank account refers only to those respondents who receive G2P. *Remittance* can include money from family members, friends, workmates or other acquaintances for regular support/allowances or to help with emergencies, or for other reasons. Send money can contain remittance or other family payments. The table also reports on which payments are made through the bank account. Utility bills include electricity bills. Government bills includes taxation, fines and other payments. Panel B, reports on the methods of transaction that account owners use and prefer. Both questions were only asked to those respondents who use their account (i.e. who do not say that they never use it). For the means of bank transaction, a zero (not using) was assigned whenever the bank owner claims to never use the account, in order to represent the full sample. Respondents under 'most preferred method' only refer to those bank account owners who use their account. All data comes from the Financial Inclusion Insights surveys.

Table 9: Account use

Panel A: Last Use of Account (Financial Inclusion Insights Surveys)

Sample	Total			Above Poverty Line			Below Poverty Line		
Year	2013	2014	2015	2013	2014	2015	2013	2014	2015
Account use: Past week	7.4 %	8.3 %	8.6 %	11.0 %	13.8 %	14.6 %	5.7 %	6.1 %	6.5 %
Account use: Past 30 days	30.6 %	29.5 %	34.0 %	40.0 %	37.5 %	44.1 %	26.2 %	26.2 %	30.3 %
Account use: Past 90 days	15.9 %	17.0 %	24.1 %	14.8 %	16.4 %	21.2 %	16.5 %	17.2 %	25.1 %
Account use: Over 90 days ago	39.7 %	37.1 %	27.0 %	28.5 %	25.8 %	16.6 %	44.9 %	41.7 %	30.7 %
Account use: Never	6.4 %	8.1 %	6.4 %	5.7 %	6.5 %	3.6 %	6.7 %	8.7 %	7.4 %
#Respondents	20,663	24,657	28,499	6,170	6,399	7,143	14,493	16,825	21,356
PMJDY use: Past week	n/a	10.6 %	8.4 %	n/a	17.8 %	16.2 %	n/a	6.3 %	5.9 %
PMJDY use: Past 30 days	n/a	33.4 %	32.5 %	n/a	40.8 %	45.0 %	n/a	29.0 %	28.4 %
PMJDY use: Past 90 days	n/a	14.0 %	22.6 %	n/a	15.2 %	20.2 %	n/a	13.3 %	23.4 %
PMJDY use: Over 90 days ago	n/a	19.1 %	24.9 %	n/a	18.5 %	13.9 %	n/a	19.5 %	28.5 %
PMJDY use: Never	n/a	22.9 %	11.6 %	n/a	7.9 %	4.6 %	n/a	32.0 %	13.9 %
#Respondents	n/a	2,350	5,568	n/a	831	1,281	n/a	1,519	4,287

Panel B: Active Account Use by Socio-Economic Characteristics

Sample	All Accounts			Non-PMJDY Account		PMJDY Account	
Year	2013	2014	2015	2014	2015	2014	2015
All	53.8 %	51.7 %	63.8 %	51.0 %	63.8 %	58.0 %	63.5 %
15-24 years	46.9 %	46.9 %	58.4 %	45.5 %	58.4 %	45.5 %	58.4 %
25-44 years	56.5 %	54.6 %	65.3 %	54.1 %	65.5 %	54.1 %	65.5 %
45-60 years	54.3 %	51.4 %	65.2 %	51.0 %	65.3 %	51.0 %	65.3 %
61-70 years	53.9 %	50.2 %	66.4 %	50.3 %	66.4 %	50.3 %	66.4 %
71 years +	59.6 %	52.7 %	64.4 %	51.7 %	64.4 %	51.7 %	64.4 %
Female	46.3 %	47.2 %	60.7 %	43.8 %	58.1 %	48.5 %	56.8 %
Male	58.7 %	60.1 %	71.5 %	56.3 %	68.5 %	65.4 %	69.4 %
Rural	47.7 %	49.3 %	61.6 %	46.1 %	59.0 %	53.8 %	57.0 %
Urban	63.1 %	64.3 %	75.8 %	60.0 %	73.4 %	63.3 %	73.7 %
Illiterate	40.2 %	40.2 %	54.5 %	37.4 %	52.9 %	34.8 %	48.6 %
Literate (no Edu.)	42.2 %	42.5 %	59.3 %	40.4 %	56.9 %	36.3 %	56.0 %
Below Primary	47.8 %	48.7 %	65.1 %	44.7 %	60.4 %	57.3 %	71.2 %
Primary (till 5th)	50.8 %	48.4 %	65.8 %	44.1 %	63.0 %	52.0 %	60.4 %
Middle(6-8th)	52.1 %	53.7 %	65.0 %	50.6 %	63.0 %	52.8 %	59.8 %
Secondary (till 10th)	56.3 %	58.4 %	71.2 %	54.8 %	67.3 %	63.0 %	69.1 %
Higher Secondary (till 12th)	55.4 %	58.0 %	71.5 %	53.8 %	67.3 %	68.6 %	71.6 %
Diploma/Certificate	64.6 %	66.3 %	75.3 %	62.2 %	72.9 %	75.6 %	72.4 %
Graduate	69.4 %	72.1 %	77.9 %	68.6 %	75.6 %	78.7 %	79.4 %
Post Graduate +	73.6 %	72.5 %	85.5 %	70.4 %	84.5 %	73.4 %	84.3 %
Below Poverty Line	48.3 %	46.6 %	59.1 %	46.4 %	59.5 %	48.5 %	57.7 %
Above Poverty Line	65.7 %	64.5 %	76.7 %	63.2 %	75.7 %	73.7 %	81.5 %
Poorest 20 % (PPI)	41.3 %	40.1 %	50.8 %	38.3 %	49.1 %	35.2 %	46.5 %
Second 20 % (PPI)	43.4 %	46.2 %	58.5 %	43.6 %	56.2 %	39.6 %	56.1 %
Middle 20 % (PPI)	49.8 %	52.1 %	64.9 %	48.7 %	62.1 %	52.2 %	60.5 %
Fourth 20 % (PPI)	57.8 %	57.5 %	72.4 %	53.5 %	68.9 %	59.0 %	70.1 %
Richest 20 % (PPI)	66.2 %	67.7 %	81.2 %	63.4 %	77.2 %	74.6 %	82.1 %
HH assets: Less than two	39.8 %	38.6 %	50.1 %	39.0 %	50.8 %	62.6 %	69.2 %
HH assets: Two or more	58.0 %	55.6 %	68.3 %	54.8 %	68.0 %	34.0 %	47.3 %
#Respondents	20,695	24,657	29,826	22,318	24,284	2,350	5,568

Table 9 reports on the last use of accounts (Panel A) and active accounts by individual and household characteristics (Panel B). Account activity is defined as having used the account within the past 90 days – for any financial transaction. PPI refers to the Grameen Progress out of poverty score that measures household poverty by means of assets owned, household size, education of the female head/spouse and the household's cooking arrangement. All data comes from the Financial Inclusion Insights surveys.

Table 10: Account Use

Panel A: Last Use of Account (FinScope Survey)

Account Type	Non-PMJDY Accounts			PMJDY- Accounts		
Poverty Line	Total	APL	BPL	Total	APL	BPL
Past week	5.5 %	6.7 %	5.0 %	3.5 %	4.1 %	2.9 %
Past 30 days	36.1 %	41.1 %	32.9 %	23.6 %	27.4 %	20.8 %
Past 90 days	26.2 %	25.8 %	26.7 %	29.2 %	27.2 %	31.9 %
6 months ago	18.4 %	15.7 %	20.3 %	22.5 %	20.6 %	23.5 %
More than one year ago	13.8 %	10.7 %	15.1 %	21.3 %	20.8 %	20.9 %
#Respondents	9,968	3,618	5,334	2,537	856	1,474

Panel B: Account Use by Socio-Economic Characteristics

Sample	Non-PMJDY Accounts	PMJDY- Accounts
Active use (within 90 days)	67.8 %	56.3 %
18-24 years	63.6 %	51.9 %
25-44 years	68.7 %	54.5 %
45-60 years	66.7 %	60.0 %
61-70 years	73.0 %	63.0 %
71 years +	71.4 %	67.7 %
Females	64.2 %	54.5 %
Males	70.5 %	57.9 %
Rural	66.1 %	55.0 %
Urban	75.0 %	60.4 %
No formal education	58.9 %	53.8 %
Primary Edu till 5th	66.2 %	53.2 %
Middle till 8th	69.9 %	59.1 %
Secondary till 12th	73.0 %	59.1 %
Tertiary education	75.9 %	59.9 %
Below Poverty Line (BPL)	64.6 %	55.6 %
Above Poverty Line (APL)	73.6 %	58.7 %
HH assets: Less than two	62.7 %	49.9 %
HH assets: Two or more	72.5 %	62.5 %
#Respondents	9,968	2,537

Table 10 reports on the last use of accounts (Panel A) by socio-economic characteristics (Panel B). The data comes from India's first FinScope Survey.

Table 11: State-wise Bank Account Ownership

Sample	Account Ownership (all)			PMJDY Ownership		Active Account Use (all)		
Year	2013	2014	2015	2014	2015	2013	2014	2015
All	47.0%	55.2%	66.1%	5.3%	12.4%	53.7%	54.6%	63.5%
Bihar	32.1%	36.1%	49.0%	2.1%	7.4%	48.1%	59.7%	63.4%
Madhya Pradesh	39.0%	43.0%	50.1%	1.8%	11.1%	55.2%	43.5%	61.1%
Odisha	32.9%	48.5%	69.0%	2.8%	13.3%	59.3%	58.6%	56.2%
Uttar Pradesh	50.8%	58.0%	71.2%	5.4%	15.3%	42.4%	34.6%	52.2%
Delhi	57.2%	66.1%	77.0%	1.2%	15.8%	65.2%	63.7%	85.1%
Himachal Prad.	57.4%	77.0%	81.8%	12.4%	1.4%	56.6%	63.0%	87.4%
Haryana	48.0%	46.0%	63.9%	7.9%	19.8%	52.6%	84.5%	61.7%
Punjab	53.6%	70.3%	67.0%	13.3%	7.4%	46.5%	62.1%	80.6%
Uttarakhand	51.9%	64.8%	67.0%	3.4%	6.8%	55.0%	52.0%	79.0%
Assam	32.3%	32.1%	48.7%	0.8%	3.9%	66.0%	62.6%	79.3%
North East	29.5%	54.0%	67.5%	3.3%	10.7%	60.0%	60.2%	78.7%
Jharkhand	40.2%	47.1%	53.1%	2.5%	7.2%	49.8%	55.9%	51.4%
West Bengal	41.4%	55.7%	61.5%	1.7%	8.0%	60.4%	59.5%	68.3%
Rajasthan	39.3%	56.0%	71.8%	3.9%	13.5%	50.8%	48.2%	72.2%
Gujarat	43.9%	50.9%	58.0%	4.9%	16.2%	58.5%	69.3%	72.5%
Maharashtra	55.0%	64.8%	71.2%	4.3%	20.6%	64.1%	66.6%	80.5%
Chhattisgarh	38.9%	25.7%	56.2%	0.6%	8.4%	53.5%	53.5%	82.0%
Goa	68.2%	73.1%	83.9%	13.5%	5.3%	66.0%	85.5%	92.6%
Andhra Pradesh	56.5%	65.4%	76.7%	5.6%	13.6%	49.8%	41.9%	58.6%
Karnataka	48.9%	64.6%	69.4%	5.3%	9.7%	64.2%	76.6%	76.2%
Kerala	65.2%	54.6%	73.4%	2.3%	2.2%	50.4%	71.3%	68.5%
Tamil Nadu	61.9%	69.6%	79.9%	23.9%	15.3%	55.2%	52.5%	71.9%
#Respondents	45,024	45,087	45,036	45,087	45,036	20,695	24,657	29,826

Table 11 reports on state-wise account ownership and use in the Financial Inclusion Insights surveys (2013-2015). Active use is defined in terms of any financial transactions in the past 90 days. This measure is only reported for all accounts, as the survey question does not allow to disentangle the last use of a PMJDY account or another account the respondent has.

Table 12: SBFD Accounts
Access and Use of Accounts on Individual and Household Characteristics

Dependent Var.	Access	Active Use		Access	Active Use		Access	Active Use	
Estimation Technique	Probit	Heckman		Probit	Heckman		Probit		Heckman
District & Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sample		All			Rural			Urban	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Female	-0.021	-0.080***	-0.109***	0.001	-0.050**	-0.071***	-0.075***	-0.141***	-0.191***
	(0.014)	(0.016)	(0.015)	(0.018)	(0.020)	(0.019)	(0.022)	(0.029)	(0.028)
Rural	0.085***	-0.075***	-0.077***						
	(0.018)	(0.021)	(0.022)						
Poorest 20 % (PPI)	-0.080***	-0.085***	-0.111***	-0.096***	-0.092***	-0.111***	-0.084**	-0.089*	-0.119**
	(0.015)	(0.021)	(0.021)	(0.017)	(0.023)	(0.024)	(0.037)	(0.052)	(0.052)
Second 20 % (PPI)	-0.051***	-0.055***	-0.059***	-0.078***	-0.062***	-0.063***	0.019	-0.024	-0.035
	(0.014)	(0.019)	(0.018)	(0.016)	(0.021)	(0.021)	(0.027)	(0.041)	(0.040)
Fourth 20 % (PPI)	0.051***	0.021	0.024	0.035**	0.021	0.024	0.090***	0.017	0.026
	(0.013)	(0.017)	(0.017)	(0.016)	(0.020)	(0.020)	(0.023)	(0.032)	(0.031)
Richest 20 % (PPI)	0.177***	0.059***	0.081***	0.104***	0.076***	0.093***	0.264***	0.039	0.071*
	(0.018)	(0.022)	(0.022)	(0.022)	(0.025)	(0.026)	(0.028)	(0.038)	(0.038)
No phone	-0.430***	-0.199***	-0.188***	-0.417***	-0.204***	-0.197***	-0.471***	-0.185***	-0.166***
	(0.011)	(0.014)	(0.014)	(0.013)	(0.018)	(0.017)	(0.023)	(0.026)	(0.027)
No job	-0.363***	-0.226***	-0.215***	-0.339***	-0.267***	-0.273***	-0.392***	-0.173**	-0.140**
	(0.041)	(0.045)	(0.044)	(0.057)	(0.060)	(0.060)	(0.061)	(0.070)	(0.069)
Farmer	-0.070	-0.189***	-0.176***	-0.045	-0.205***	-0.202***	-0.083	-0.197*	-0.152
	(0.043)	(0.046)	(0.046)	(0.059)	(0.060)	(0.061)	(0.081)	(0.100)	(0.102)
Labour/occ. work	-0.248***	-0.210***	-0.197***	-0.239***	-0.254***	-0.249***	-0.250***	-0.124*	-0.118*
	(0.041)	(0.044)	(0.045)	(0.058)	(0.060)	(0.060)	(0.059)	(0.067)	(0.068)
Services	-0.092**	-0.080*	-0.081*	-0.063	-0.126*	-0.133**	-0.119**	-0.014	-0.014
	(0.041)	(0.048)	(0.048)	(0.060)	(0.066)	(0.065)	(0.058)	(0.071)	(0.072)
Self-employed	0.110**	-0.068	-0.055	0.126*	-0.129*	-0.126*	0.076	0.005	0.018
	(0.046)	(0.050)	(0.050)	(0.068)	(0.071)	(0.070)	(0.063)	(0.075)	(0.075)
Employed	0.270***	0.139***	0.145***	0.316***	0.171**	0.165**	0.225***	0.132*	0.144*
	(0.044)	(0.051)	(0.051)	(0.066)	(0.070)	(0.070)	(0.059)	(0.074)	(0.074)
Illiterate	-0.939***	-0.221***	-0.136***	-0.919***	-0.183***	-0.114***	-0.922***	-0.305***	-0.196***
	(0.026)	(0.026)	(0.026)	(0.036)	(0.037)	(0.037)	(0.038)	(0.047)	(0.045)
Literate (no Edu.)	-0.832***	-0.241***	-0.182***	-0.781***	-0.233***	-0.187***	-0.908***	-0.193***	-0.118*
	(0.028)	(0.031)	(0.031)	(0.039)	(0.042)	(0.043)	(0.046)	(0.066)	(0.064)
Primary	-0.812***	-0.172***	-0.121***	-0.767***	-0.140***	-0.104***	-0.842***	-0.228***	-0.144***
	(0.027)	(0.027)	(0.026)	(0.037)	(0.039)	(0.039)	(0.040)	(0.039)	(0.038)
Middle	-0.691***	-0.169***	-0.147***	-0.651***	-0.122***	-0.108***	-0.713***	-0.257***	-0.221***
	(0.025)	(0.024)	(0.023)	(0.035)	(0.036)	(0.036)	(0.036)	(0.034)	(0.033)
Secondary	-0.448***	-0.105***	-0.101***	-0.399***	-0.066*	-0.067*	-0.486***	-0.162***	-0.152***
	(0.024)	(0.023)	(0.023)	(0.033)	(0.035)	(0.035)	(0.032)	(0.032)	(0.030)
Diploma	-0.096***	-0.055	-0.064	-0.061	-0.012	-0.025	-0.125***	-0.113*	-0.131**
	(0.035)	(0.041)	(0.041)	(0.053)	(0.059)	(0.059)	(0.048)	(0.060)	(0.061)
Age	0.058***	0.012***		0.060***	0.013***		0.056***	0.012**	
	(0.002)	(0.003)		(0.002)	(0.003)		(0.004)	(0.005)	
Sq.(Age)	-0.000***	-0.000***		-0.001***	-0.000***		-0.000***	-0.000	
	(0.000)	(0.000)		(0.000)	(0.000)		(0.000)	(0.000)	
Married	0.223***	0.002	0.111***	0.249***	-0.008	0.095***	0.182***	0.009	0.147***
	(0.017)	(0.022)	(0.019)	(0.021)	(0.028)	(0.026)	(0.031)	(0.039)	(0.032)
Divorced/widowed	0.347***	0.122***	0.279***	0.359***	0.092***	0.229***	0.357***	0.191***	0.407***
	(0.024)	(0.029)	(0.027)	(0.029)	(0.035)	(0.032)	(0.044)	(0.058)	(0.052)
Aadhaar card	0.251***	0.075***	0.134***	0.237***	0.069***	0.126***	0.293***	0.080***	0.132***
	(0.015)	(0.019)	(0.020)	(0.017)	(0.024)	(0.026)	(0.029)	(0.028)	(0.026)
G2P	0.535***	0.349***	0.368***	0.555***	0.331***	0.330***	0.506***	0.436***	0.491***
	(0.021)	(0.033)	(0.036)	(0.025)	(0.041)	(0.044)	(0.039)	(0.059)	(0.061)
Receive payments		0.347***	0.313***		0.350***	0.310***		0.391***	0.396***
		(0.038)	(0.039)		(0.046)	(0.047)		(0.066)	(0.068)
Make cur. exp. payments		0.228***	0.258***		0.118**	0.144***		0.374***	0.406***
		(0.037)	(0.036)		(0.049)	(0.047)		(0.057)	(0.055)
Make cap. exp. payments		0.031	0.044		-0.041	-0.021		0.082	0.077
		(0.072)	(0.074)		(0.094)	(0.094)		(0.125)	(0.128)
Formal savings		0.411***	0.383***		0.411***	0.372***		0.414***	0.435***
		(0.022)	(0.022)		(0.027)	(0.028)		(0.042)	(0.040)
Formal loan		0.159***	0.217***		0.118***	0.157***		0.302***	0.372***
		(0.028)	(0.029)		(0.028)	(0.030)		(0.073)	(0.072)
Use ATM		0.536***	0.549***		0.502***	0.515***		0.573***	0.577***
		(0.025)	(0.024)		(0.029)	(0.029)		(0.045)	(0.043)
Use bank agent		0.146	0.109		0.211	0.141		0.105	0.117
		(0.149)	(0.143)		(0.176)	(0.176)		(0.276)	(0.253)
Constant	-0.441***	-0.487***	-0.384***	-0.498***	-0.437***	-0.298***	-0.311***	-0.791***	-0.637***
	(0.069)	(0.110)	(0.104)	(0.077)	(0.088)	(0.072)	(0.107)	(0.125)	(0.097)
Observations	135,052	69,681	69,681	93,765	46,167	46,167	41,287	23,514	23,514

Standard errors in parentheses. ***, ** and * denote statistical significance at 1, 5 and 10 %, respectively

Table 13: Robustness Check – Number of SBFD Accounts

Dependent Variable	Number of SBFD Accounts			Number of active SBFD Accounts		
Estimation Technique	Zero Inflated Poisson			Negative Binomial Regression		
Sample	Full	Rural	Urban	Full	Rural	Urban
District FE	YES	YES	YES	YES	YES	YES
YR FE	YES	YES	YES	YES	YES	YES
	(1)	(2)	(3)	(4)	(5)	(6)
Female	-0.019**	-0.010	-0.041***	-0.045***	-0.035***	-0.062***
	(0.009)	(0.012)	(0.013)	(0.009)	(0.013)	(0.014)
Rural	0.055***			-0.036***		
	(0.011)			(0.012)		
Poorest 20 % (PPI)	-0.077***	-0.083***	-0.098***	-0.074***	-0.075***	-0.073**
	(0.012)	(0.013)	(0.031)	(0.015)	(0.018)	(0.035)
Second 20 % (PPI)	-0.037***	-0.054***	0.005	-0.043***	-0.048***	-0.024
	(0.010)	(0.011)	(0.019)	(0.012)	(0.015)	(0.022)
Fourth 20 % (PPI)	0.033***	0.018*	0.064***	0.018*	0.018	0.011
	(0.008)	(0.010)	(0.016)	(0.010)	(0.013)	(0.016)
Richest 20 % (PPI)	0.099***	0.048***	0.159***	0.040***	0.044***	0.031*
	(0.011)	(0.013)	(0.019)	(0.011)	(0.015)	(0.017)
No phone	-0.323***	-0.306***	-0.361***	-0.160***	-0.163***	-0.137***
	(0.009)	(0.011)	(0.018)	(0.011)	(0.014)	(0.017)
No job	-0.194***	-0.203***	-0.176***	-0.116***	-0.159***	-0.081***
	(0.019)	(0.029)	(0.025)	(0.020)	(0.031)	(0.026)
Farmer	-0.015	-0.030	-0.013	-0.078***	-0.106***	-0.073
	(0.019)	(0.030)	(0.036)	(0.021)	(0.031)	(0.050)
Labour/occ. work	-0.122***	-0.145***	-0.093***	-0.109***	-0.150***	-0.067**
	(0.019)	(0.030)	(0.024)	(0.021)	(0.032)	(0.027)
Services	-0.031	-0.036	-0.016	-0.046**	-0.086**	-0.012
	(0.019)	(0.031)	(0.023)	(0.021)	(0.034)	(0.027)
Self-employed	0.034*	0.035	0.035	-0.033	-0.063*	-0.004
	(0.019)	(0.032)	(0.023)	(0.022)	(0.037)	(0.028)
Employed	0.069***	0.083***	0.067***	0.015	0.024	0.020
	(0.018)	(0.030)	(0.021)	(0.020)	(0.032)	(0.025)
Illiterate	-0.500***	-0.507***	-0.459***	-0.153***	-0.152***	-0.146***
	(0.015)	(0.021)	(0.024)	(0.015)	(0.022)	(0.026)
Literate (no Edu.)	-0.430***	-0.410***	-0.450***	-0.156***	-0.176***	-0.093***
	(0.017)	(0.022)	(0.029)	(0.020)	(0.026)	(0.035)
Primary	-0.425***	-0.409***	-0.415***	-0.107***	-0.109***	-0.101***
	(0.015)	(0.020)	(0.023)	(0.014)	(0.022)	(0.020)
Middle	-0.357***	-0.341***	-0.348***	-0.100***	-0.089***	-0.122***
	(0.013)	(0.017)	(0.020)	(0.012)	(0.020)	(0.016)
Secondary	-0.211***	-0.186***	-0.221***	-0.066***	-0.059***	-0.076***
	(0.011)	(0.016)	(0.015)	(0.011)	(0.018)	(0.014)
Diploma	0.009	0.055**	-0.029	-0.026	-0.014	-0.039*
	(0.018)	(0.027)	(0.022)	(0.017)	(0.029)	(0.021)
Age	0.042***	0.044***	0.037***	0.007***	0.009***	0.005**
	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Sq.(Age)	-0.000***	-0.000***	-0.000***	-0.000**	-0.000***	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Married	0.119***	0.160***	0.071***	-0.000	0.002	-0.004
	(0.013)	(0.016)	(0.018)	(0.011)	(0.017)	(0.016)
Divorced/separated	0.115***	0.084**	0.178***	0.041	-0.005	0.100**
	(0.033)	(0.042)	(0.050)	(0.035)	(0.050)	(0.048)
Widowed	0.226***	0.258***	0.204***	0.077***	0.073***	0.092***
	(0.016)	(0.021)	(0.025)	(0.017)	(0.023)	(0.028)
Aadhaar card	0.181***	0.175***	0.195***	0.061***	0.060***	0.048***
	(0.011)	(0.013)	(0.021)	(0.012)	(0.017)	(0.013)
G2P	0.278***	0.315***	0.215***	0.174***	0.199***	0.149***
	(0.011)	(0.013)	(0.016)	(0.017)	(0.024)	(0.025)
Receive payments				0.144***	0.171***	0.127***
				(0.013)	(0.022)	(0.016)
Make cur. exp. payments				0.099***	0.064***	0.128***
				(0.014)	(0.025)	(0.018)
Make cap. exp. payments				0.006	-0.011	0.019
				(0.022)	(0.044)	(0.026)
Formal savings				0.234***	0.267***	0.204***
				(0.015)	(0.020)	(0.022)
Formal loan				0.079***	0.081***	0.089***
				(0.015)	(0.017)	(0.025)
Use ATM				0.270***	0.258***	0.275***
				(0.014)	(0.015)	(0.024)
Use bank agent				0.161*	0.165	0.156
				(0.083)	(0.107)	(0.128)
Constant	-1.242***	-1.298***	-1.094***	-1.010***	-1.004***	-1.059***
	(0.038)	(0.047)	(0.057)	(0.052)	(0.055)	(0.056)
lnalpha				-22.694	-22.2001	-23.6104
N. Observations	135,147	93,860	41,287	69,681	46,167	23,514

Standard errors in parentheses. ***, ** and * denote statistical significance at 1, 5 and 10 %, respectively.

Table 14: SBFD Accounts with post PMJDY Interaction

Sample	Full sample			Rural sample			Urban sample		
Dependent variable	Access	Use		Access	Use		Access	Use	
Estimation technique	Probit		Heckman	Probit		Heckman	Probit		Heckman
HH & Ind. Characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
District & Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Female* post PMJDY	0.106***	0.001	0.001	0.088***	-0.007	-0.006	0.142***	0.002	-0.002
	(0.026)	(0.035)	(0.035)	(0.031)	(0.041)	(0.041)	(0.048)	(0.062)	(0.062)
Rural* post PMJDY	-0.011	-0.039	-0.039						
	(0.041)	(0.057)	(0.057)						
Poorest 20 %* post PMJDY	0.034	-0.067	-0.070	0.028	-0.054	-0.055	0.079	-0.070	-0.090
	(0.035)	(0.051)	(0.051)	(0.038)	(0.056)	(0.056)	(0.083)	(0.132)	(0.130)
Second 20 %* post PMJDY	0.059**	0.026	0.024	0.041	0.053	0.052	0.119*	-0.062	-0.062
	(0.029)	(0.043)	(0.043)	(0.032)	(0.047)	(0.047)	(0.065)	(0.098)	(0.099)
Fourth 20 % * post PMJDY	-0.022	-0.060	-0.063	-0.007	-0.032	-0.034	-0.043	-0.123	-0.128*
	(0.029)	(0.039)	(0.038)	(0.034)	(0.044)	(0.044)	(0.054)	(0.075)	(0.075)
Richest 20 %* post PMJDY	-0.111***	0.001	-0.004	-0.155***	0.045	0.042	-0.054	-0.068	-0.077
	(0.035)	(0.045)	(0.045)	(0.045)	(0.056)	(0.055)	(0.056)	(0.077)	(0.077)
No phone post* post PMJDY	0.054**	0.054*	0.050	0.075**	0.043	0.041	0.003	0.082	0.075
	(0.024)	(0.032)	(0.032)	(0.029)	(0.035)	(0.035)	(0.044)	(0.068)	(0.068)
No job post* post PMJDY	0.226**	0.148	0.156	0.315**	0.158	0.160	0.106	0.103	0.117
	(0.094)	(0.114)	(0.116)	(0.124)	(0.141)	(0.141)	(0.108)	(0.122)	(0.124)
Farmer post* post PMJDY	0.304***	0.233*	0.244**	0.395***	0.240*	0.245*			
	(0.099)	(0.120)	(0.122)	(0.126)	(0.143)	(0.144)			
Labour/occ. work* post PMJDY	0.245***	0.126	0.137	0.329***	0.142	0.146	0.138	0.066	0.080
	(0.094)	(0.116)	(0.118)	(0.124)	(0.142)	(0.143)	(0.113)	(0.132)	(0.133)
Services* post PMJDY	0.248**	0.101	0.114	0.322**	0.111	0.116	0.139	0.054	0.076
	(0.098)	(0.121)	(0.123)	(0.128)	(0.155)	(0.155)	(0.117)	(0.137)	(0.139)
Self-employed* post PMJDY	0.343***	0.125	0.136	0.452***	0.154	0.162	0.200	0.064	0.076
	(0.105)	(0.120)	(0.123)	(0.138)	(0.159)	(0.159)	(0.128)	(0.135)	(0.137)
Employed* post PMJDY	0.166	0.083	0.096	0.282*	0.016	0.013	0.024	0.083	0.104
	(0.120)	(0.124)	(0.126)	(0.152)	(0.154)	(0.155)	(0.140)	(0.136)	(0.139)
No Edu post* post PMJDY	0.080	0.000	-0.004	0.045	0.029	0.025	0.139*	-0.021	-0.027
	(0.050)	(0.056)	(0.056)	(0.071)	(0.079)	(0.078)	(0.071)	(0.100)	(0.100)
Primary* post PMJDY	0.117**	-0.013	-0.018	0.055	0.037	0.034	0.240***	-0.096	-0.114
	(0.052)	(0.059)	(0.059)	(0.073)	(0.084)	(0.084)	(0.075)	(0.095)	(0.095)
Middle* post PMJDY	0.092*	-0.013	-0.018	0.079	-0.018	-0.024	0.092	0.010	0.004
	(0.048)	(0.058)	(0.058)	(0.067)	(0.080)	(0.080)	(0.074)	(0.088)	(0.088)
Secondary* post PMJDY	0.057	0.042	0.035	0.037	0.091	0.085	0.071	-0.015	-0.025
	(0.044)	(0.049)	(0.049)	(0.065)	(0.073)	(0.073)	(0.061)	(0.067)	(0.067)
Diploma* post PMJDY	-0.038	-0.084	-0.083	-0.030	-0.057	-0.054	-0.040	-0.129	-0.132
	(0.074)	(0.093)	(0.092)	(0.105)	(0.128)	(0.128)	(0.106)	(0.138)	(0.136)
Constant	2.568	-1.305***	-1.031***	-1.810	-1.325***	-1.016***	6.323*	-1.466**	-1.274*
	(3.154)	(0.365)	(0.367)	(3.922)	(0.382)	(0.383)	(3.627)	(0.691)	(0.701)
N. Observations	135,052	69,681	69,681	93,765	46,167	46,167	41,287	23,514	23,514

Standard errors in parentheses. ***, ** and * denote statistical significance at 1, 5 and 10 %, respectively

Table 15: SBFD Accounts and pre-and post PMJDY effects

Dependent Variable	Access				Use							
Estimation Technique	Probit				Probit	Heckman	Probit	Heckman	Probit	Heckman	Probit	Heckman
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2014 YR Dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual & HH determinants	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Rural	0.084*				-0.046	-0.060						
	(0.048)				(0.058)	(0.059)						
Rural * YR 2013	-0.153***				-0.110*	-0.104*						
	(0.048)				(0.061)	(0.061)						
Rural * YR 2015	0.136***				0.014	0.019						
	(0.050)				(0.060)	(0.060)						
Female		-0.012					-0.080***	-0.081***				
		(0.019)					(0.025)	(0.025)				
Female* YR 2013		-0.174***					-0.053*	-0.053*				
		(0.023)					(0.032)	(0.032)				
Female * YR 2015		0.154***					0.094***	0.096***				
		(0.024)					(0.031)	(0.031)				
PPI Score			0.006***						0.002**	0.004***		
			(0.001)						(0.001)	(0.001)		
PPI Score * YR 2013			-0.003***						-0.001	-0.001		
			(0.001)						(0.001)	(0.001)		
PPI Score * YR 2015			0.002*						0.003**	0.003**		
			(0.001)						(0.001)	(0.001)		
BPL				-0.158***							-0.050	-0.080**
				(0.031)							(0.034)	(0.035)
BPL * YR 2013				-0.129***							-0.094**	-0.092**
				(0.038)							(0.042)	(0.042)
BPL * YR 2015				0.180***							0.032	0.030
				(0.037)							(0.043)	(0.043)
Constant	2.111	2.605	3.107	1.439	-1.268***	-1.006***	-1.274***	-1.255***	-1.450***	-1.238***	-1.311***	-1.040***
	(3.190)	(3.190)	(3.152)	(3.202)	(0.341)	(0.343)	(0.344)	(0.343)	(0.343)	(0.344)	(0.342)	(0.343)
t-test of difference (p-Value)												
Rural * YR 2013= Rural * YR 2015	0.0000				0.0007	0.0007						
Female*YR 2013=Female*YR 2015		0.0000					0.0000	0.0000				
PPI Score*YR 2013 = PPI Score * YR 2015			0.0000						0.0000	0.0000		
BPL * YR 2013 = BPL * YR 2015				0.0000							0.0001	0.0002
N. Observations	135,052	135,052	135,052	135,052	69,681	69,681	69,681	69,681	69,681	69,681	69,681	69,681

Standard errors in parentheses. ***, ** and * denote statistical significance at 1, 5 and 10 %, respectively.

Table 16: Robustness Check: Number of SBFD Accounts and PMJDY Interaction

Dependent Variable	Number of Accounts			Number of active Accounts		
Estimation Technique	Zero Inflated Poisson			Negative Binomial Regression		
Sample	Full	Rural	Urban	Full	Rural	Urban
HH & Ind. Characteristics	YES	YES	YES	YES	YES	YES
District FE	YES	YES	YES	YES	YES	YES
YR FE	YES	YES	YES	YES	YES	YES
	(1)	(2)	(3)	(4)	(5)	(6)
Female* post PMJDY	0.062***	0.050**	0.076**	0.003	0.004	-0.005
	(0.019)	(0.024)	(0.030)	(0.022)	(0.030)	(0.033)
Rural* post PMJDY	-0.017			-0.059**		
	(0.024)			(0.028)		
Poorest 20 %* post PMJDY	0.081***	0.074**	0.136*	-0.030	-0.017	-0.033
	(0.027)	(0.029)	(0.074)	(0.039)	(0.044)	(0.099)
Second 20 %* post PMJDY	0.070***	0.055**	0.109**	0.053	0.076**	-0.028
	(0.022)	(0.024)	(0.053)	(0.033)	(0.038)	(0.066)
Fourth 20 % * post PMJDY	-0.040**	-0.042*	-0.028	-0.042	-0.018	-0.073*
	(0.019)	(0.024)	(0.035)	(0.025)	(0.031)	(0.043)
Richest 20 %* post PMJDY	-0.081***	-0.113***	-0.040	-0.033	-0.017	-0.056
	(0.020)	(0.028)	(0.031)	(0.025)	(0.033)	(0.037)
No phone post* post PMJDY	0.103***	0.114***	0.064*	0.095***	0.080***	0.135***
	(0.019)	(0.023)	(0.033)	(0.024)	(0.028)	(0.043)
No job post* post PMJDY	0.131***	0.226***	0.061	0.100*	0.133*	0.091
	(0.044)	(0.064)	(0.051)	(0.054)	(0.080)	(0.061)
Farmer post* post PMJDY	0.050	0.129**		0.148**	0.182**	
	(0.047)	(0.064)		(0.060)	(0.082)	
Labour/occ. work* post PMJDY	0.108**	0.191***	0.042	0.063	0.103	0.033
	(0.046)	(0.064)	(0.058)	(0.056)	(0.082)	(0.067)
Services* post PMJDY	0.078*	0.115*	0.053	0.020	0.054	0.009
	(0.047)	(0.066)	(0.056)	(0.057)	(0.088)	(0.065)
Self-employed* post PMJDY	0.099**	0.156**	0.053	0.056	0.086	0.044
	(0.046)	(0.069)	(0.054)	(0.055)	(0.090)	(0.061)
Employed* post PMJDY	0.033	0.096	-0.018	-0.000	0.027	-0.015
	(0.045)	(0.069)	(0.051)	(0.051)	(0.078)	(0.055)
No Edu post* post PMJDY	0.080***	0.066*	0.113***	0.026	0.053	0.003
	(0.028)	(0.039)	(0.042)	(0.034)	(0.051)	(0.061)
Primary* post PMJDY	0.105***	0.077*	0.155***	-0.005	0.051	-0.083
	(0.027)	(0.040)	(0.039)	(0.036)	(0.054)	(0.053)
Middle* post PMJDY	0.091***	0.107***	0.048	-0.010	-0.009	-0.005
	(0.025)	(0.033)	(0.039)	(0.031)	(0.049)	(0.043)
Secondary* post PMJDY	0.031	0.036	0.020	0.027	0.069	0.001
	(0.021)	(0.033)	(0.027)	(0.024)	(0.044)	(0.027)
Diploma* post PMJDY	-0.056	-0.022	-0.077*	-0.053	-0.042	-0.081
	(0.036)	(0.061)	(0.044)	(0.044)	(0.072)	(0.057)
Constant	-1.122***	-1.097***	-1.045***	-0.982***	-0.868***	-1.078***
	(0.051)	(0.074)	(0.068)	(0.073)	(0.085)	(0.082)
lnalpha				-44.21099	-43.25029	-23.61041
N. Observations	135,147	93,860	41,287	69,681	46,167	23,514

Standard errors in parentheses. ***, ** and * denote statistical significance at 1, 5 and 10 %, respectively.

Table 17: SBFD Accounts - Additional Variables: Household Level

Dependent Var.	Access		Use	Access		Use	Access		Use	Access		Use
Estimation	Probit		Heckman	Probit		Heckman	Probit		Heckman	Probit		Heckman
District FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
YR Dummy/Fe	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual & HH determinants	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sample Year(s)		2015			2013-2015			2014-2015			2014-2015	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Household Head	0.165***	0.067**	0.066**									
	(0.026)	(0.031)	(0.031)									
Number of Household assets (ln+1)				0.826***	0.267***	0.263***						
				(0.062)	(0.067)	(0.067)						
Household size (ln+1)							-0.063***	-0.046*	-0.047*			
							(0.020)	(0.025)	(0.025)			
Working HH members /total HH (ln+1)										-0.112*	-0.049	-0.046
										(0.062)	(0.067)	(0.067)
Constant	-1.071	-2.323***	-2.323***	0.873	-1.906***	-1.893***	1.988	-2.119***	-2.105***	0.819	-2.179***	-2.170***
	(4.037)	(0.476)	(0.472)	(3.235)	(0.435)	(0.441)	(3.492)	(0.501)	(0.506)	(3.488)	(0.415)	(0.420)
N. Observations	44,096	26,991	26,991	135,147	68,198	68,198	88,269	48,782	48,782	88,265	48,780	48,780

Standard errors in parentheses. ***, ** and * denote statistical significance at 1, 5 and 10 %, respectively

Table 18: SBFD Accounts - Additional Variable: Individual-Level

Dependent Variable	Access	Use		Access	Use		Use		Access	Use	
Estimation Technique	Probit	Heckman		Probit	Heckman		Probit	Heckman	Probit	Heckman	
District Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
YR Dummy/Fe	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes
Individual & HH determinants	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sample Year(s)	2014-2015		2013-2014			2015			2014-2015		
	(1)	(2)	(3)	(4)	(5)	(6)	(6)	(7)	(8)	(9)	(10)	(11)
Saving	0.930***											
	(0.045)											
Full Trust in Banks		0.384***	0.053*	0.060**								
		-0.024	-0.029	-0.028								
Counter at Bank: > 15 min to 30 min					-0.032	0.002	0.002					
					-0.034	-0.03	-0.03					
Counter at Bank: > 30 min to 1h					-0.048	0.038	0.037					
					-0.036	-0.039	-0.039					
Counter at Bank: > 1h					-0.159***	-0.025	-0.024					
					-0.051	-0.059	-0.059					
Makes Own Transactions								0.370***	0.361***			
								-0.035	-0.035			
Part-time employment										-0.160***	-0.142***	-0.146***
										-0.026	-0.035	-0.035
Seasonal work										-0.038	-0.088**	-0.078**
										-0.032	-0.038	-0.038
Self-employed										0.049	-0.066*	-0.058
										-0.033	-0.037	-0.037
Not working but looking for a job										-0.311***	-0.233***	-0.249***
										-0.029	-0.036	-0.036
Housewife/houseman										-0.242***	-0.209***	-0.234***
										-0.027	-0.034	-0.033
Full-time student										-0.253***	-0.064	-0.085*
										-0.034	-0.045	-0.043
Not working										-0.255***	-0.021	0.014
										-0.041	-0.047	-0.045
Constant	-1.304***	4.165	-0.878**	-0.697	-3.703	-1.984***	-1.612***	4.189	5.173	1.279	-2.165***	-1.766***
	(0.089)	-3.51	-0.413	-0.425	-4.167	-0.387	-0.378	-3.645	-3.693	-3.525	-0.421	-0.426
N. Observations	90,098	88,097	41,207	41,207	41,313	26,719	26719	48,782	48,782	88,269	48,782	48,782

Standard errors in parentheses. ***, ** and * denote statistical significance at 1, 5 and 10 %, respectively. Note: Where only one year (e.g. 2015) is concerned, no year dummies or fixed effects were used. Standard errors in parentheses. Testing the distance to nearest counter at a bank branch, the total number of district bank branches per 1000 population was left out. Where the number of household members is concerned, Household assets and cooking arrangement are used instead of the PPI Score, which already contains the number of household members. The omitted category is not having a cooking arrangement. Where only one year (e.g. 2015) is concerned, no year dummies or fixed effects were used. In 2013, the survey only asked for the number of household members aged 17 years and younger. Therefore, we compare the three surveys in this format also.

Table 19: SBFD Accounts - Year Fixed Effects and District Controls

Sample	Full sample			Rural sample			Urban sample		
Dependent variable	Access	Use		Access	Use		Access	Use	
Estimation technique	Probit		Heckman	Probit		Heckman	Probit		Heckman
Individual & HH determinants	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
YR 2014	0.032	-0.173***	-0.174***	0.043	-0.165***	-0.165***	0.004	-0.193***	-0.194***
	(0.023)	(0.033)	(0.033)	(0.027)	(0.037)	(0.037)	(0.041)	(0.065)	(0.065)
YR 2015	0.275***	0.166***	0.162***	0.299***	0.155***	0.153***	0.227***	0.184***	0.174***
	(0.024)	(0.033)	(0.033)	(0.027)	(0.037)	(0.037)	(0.045)	(0.063)	(0.063)
Branches/ 1000 pop	1.143***	-0.659	-0.597	2.533***	-0.795	-0.702	-0.050	-0.585	-0.540
	(0.437)	(0.508)	(0.517)	(0.528)	(0.503)	(0.504)	(0.604)	(0.856)	(0.883)
DDP per capita	-0.577	0.116***	0.116***	0.312	0.117***	0.114***	-1.315*	0.122*	0.125*
	(0.596)	(0.035)	(0.035)	(0.743)	(0.037)	(0.037)	(0.672)	(0.068)	(0.070)
Sq. (DDP per cap.)	0.026			-0.020			0.063**		
	(0.028)			(0.035)			(0.031)		
Constant	2.443	-1.382***	-1.103***	-1.968	-1.462***	-1.146***	6.157*	-1.463**	-1.267*
	(3.178)	(0.348)	(0.350)	(3.938)	(0.367)	(0.366)	(3.636)	(0.676)	(0.690)
N. Observations	132,193	69,681	69,681	92,105	45,390	45,390	40,088	22,808	22,808

Standard errors in parentheses. ***, ** and * denote statistical significance at 1, 5 and 10 %, respectively

Appendix 1.A: All Accounts

Sample	All			Rural			Urban		
Dependent Var.	Access	Active Use		Access	Active Use		Access	Active Use	
Estimation Technique	Probit		Heckman	Probit		Heckman	Probit		Heckman
District & Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Female	-0.051***	-0.069***	-0.099***	-0.031*	-0.040**	-0.063***	-0.092***	-0.136***	-0.184***
	(0.014)	(0.015)	(0.015)	(0.017)	(0.020)	(0.018)	(0.023)	(0.027)	(0.027)
Rural	0.102***	-0.077***	-0.079***						
	(0.016)	(0.021)	(0.022)						
Poorest 20 % (PPI)	-0.078***	-0.082***	-0.110***	-0.088***	-0.089***	-0.111***	-0.086**	-0.099**	-0.130**
	(0.015)	(0.020)	(0.020)	(0.016)	(0.023)	(0.023)	(0.038)	(0.050)	(0.050)
Second 20 % (PPI)	-0.053***	-0.048***	-0.055***	-0.074***	-0.059***	-0.063***	0.003	-0.012	-0.028
	(0.014)	(0.018)	(0.018)	(0.016)	(0.021)	(0.020)	(0.029)	(0.041)	(0.039)
Fourth 20 % (PPI)	0.046***	0.016	0.020	0.032**	0.016	0.018	0.079***	0.011	0.022
	(0.013)	(0.016)	(0.016)	(0.015)	(0.020)	(0.020)	(0.023)	(0.031)	(0.030)
Richest 20 % (PPI)	0.158***	0.044**	0.073***	0.098***	0.053**	0.072***	0.240***	0.031	0.073**
	(0.017)	(0.021)	(0.021)	(0.021)	(0.026)	(0.027)	(0.028)	(0.037)	(0.036)
No phone	-0.414***	-0.197***	-0.188***	-0.396***	-0.204***	-0.199***	-0.463***	-0.173***	-0.154***
	(0.011)	(0.014)	(0.014)	(0.013)	(0.017)	(0.017)	(0.022)	(0.026)	(0.026)
No job	-0.303***	-0.232***	-0.220***	-0.264***	-0.266***	-0.274***	-0.350***	-0.174**	-0.139**
	(0.042)	(0.043)	(0.043)	(0.056)	(0.057)	(0.057)	(0.064)	(0.068)	(0.068)
Farmer	-0.064	-0.183***	-0.166***	-0.033	-0.191***	-0.185***	-0.006	-0.209**	-0.159
	(0.045)	(0.045)	(0.045)	(0.059)	(0.058)	(0.058)	(0.086)	(0.097)	(0.100)
Labour/occ. work	-0.253***	-0.201***	-0.182***	-0.233***	-0.240***	-0.232***	-0.255***	-0.124*	-0.104
	(0.042)	(0.043)	(0.043)	(0.057)	(0.058)	(0.058)	(0.061)	(0.065)	(0.066)
Services	-0.089**	-0.092*	-0.089*	-0.068	-0.124*	-0.128**	-0.108*	-0.036	-0.028
	(0.042)	(0.047)	(0.047)	(0.058)	(0.065)	(0.065)	(0.062)	(0.070)	(0.071)
Self-employed	0.143***	-0.066	-0.045	0.136**	-0.109	-0.098	0.136**	-0.003	0.020
	(0.047)	(0.049)	(0.048)	(0.068)	(0.069)	(0.068)	(0.066)	(0.072)	(0.073)
Employed	0.319***	0.111**	0.127**	0.356***	0.164**	0.165**	0.282***	0.096	0.118
	(0.045)	(0.050)	(0.050)	(0.066)	(0.067)	(0.068)	(0.063)	(0.073)	(0.073)
Illiterate	-1.066***	-0.213***	-0.132***	-1.045***	-0.189***	-0.121***	-1.037***	-0.277***	-0.181***
	(0.026)	(0.026)	(0.025)	(0.037)	(0.036)	(0.035)	(0.039)	(0.046)	(0.046)
Literate (no Edu.)	-0.956***	-0.231***	-0.176***	-0.909***	-0.233***	-0.191***	-1.021***	-0.177***	-0.108*
	(0.029)	(0.031)	(0.031)	(0.040)	(0.040)	(0.041)	(0.047)	(0.066)	(0.064)
Primary	-0.923***	-0.162***	-0.116***	-0.880***	-0.142***	-0.109***	-0.952***	-0.199***	-0.125***
	(0.027)	(0.026)	(0.025)	(0.038)	(0.038)	(0.037)	(0.039)	(0.037)	(0.037)
Middle	-0.802***	-0.156***	-0.139***	-0.769***	-0.119***	-0.111***	-0.806***	-0.234***	-0.204***
	(0.025)	(0.023)	(0.022)	(0.036)	(0.034)	(0.034)	(0.037)	(0.033)	(0.033)
Secondary	-0.482***	-0.110***	-0.111***	-0.434***	-0.076**	-0.081**	-0.520***	-0.161***	-0.158***
	(0.023)	(0.022)	(0.022)	(0.034)	(0.034)	(0.033)	(0.032)	(0.030)	(0.029)
Diploma	-0.090**	-0.048	-0.058	-0.002	-0.013	-0.029	-0.157***	-0.100*	-0.114*
	(0.039)	(0.038)	(0.039)	(0.056)	(0.054)	(0.054)	(0.054)	(0.058)	(0.059)
Age	0.052***	0.014***		0.055***	0.015***		0.048***	0.013***	
	(0.002)	(0.002)		(0.002)	(0.003)		(0.004)	(0.005)	
Sq.(Age)	-0.000***	-0.000***		-0.000***	-0.000***		-0.000***	-0.000	
	(0.000)	(0.000)		(0.000)	(0.000)		(0.000)	(0.000)	
Married	0.092***	0.028	0.152***	0.095***	0.036	0.153***	0.095***	0.004	0.154***
	(0.017)	(0.020)	(0.017)	(0.021)	(0.026)	(0.023)	(0.030)	(0.036)	(0.029)
Divorced/widowed	0.189***	0.142***	0.316***	0.182***	0.134***	0.287***	0.224***	0.176***	0.407***
	(0.024)	(0.028)	(0.025)	(0.030)	(0.034)	(0.030)	(0.043)	(0.055)	(0.048)
Aadhaar card	0.280***	0.065***	0.094***	0.264***	0.058**	0.088***	0.322***	0.073**	0.103***
	(0.014)	(0.019)	(0.020)	(0.017)	(0.024)	(0.026)	(0.028)	(0.029)	(0.026)
G2P	0.714***	0.339***	0.352***	0.717***	0.311***	0.306***	0.746***	0.451***	0.491***
	(0.024)	(0.032)	(0.034)	(0.029)	(0.039)	(0.042)	(0.045)	(0.058)	(0.060)
Receive payments		0.366***	0.330***		0.370***	0.325***		0.407***	0.424***
		(0.038)	(0.039)		(0.046)	(0.047)		(0.065)	(0.067)
Make cur. exp. payments		0.268***	0.314***		0.156***	0.198***		0.420***	0.463***
		(0.038)	(0.037)		(0.052)	(0.049)		(0.057)	(0.057)
Make cap. exp. payments		0.064	0.098		-0.003	0.031		0.109	0.137
		(0.069)	(0.069)		(0.091)	(0.091)		(0.119)	(0.119)
Formal savings		0.472***	0.407***		0.466***	0.395***		0.483***	0.460***
		(0.022)	(0.022)		(0.027)	(0.028)		(0.039)	(0.037)
Formal loan		0.100***	0.159***		0.052*	0.091***		0.273***	0.350***
		(0.027)	(0.029)		(0.028)	(0.030)		(0.068)	(0.068)
Use ATM		0.625***	0.633***		0.589***	0.597***		0.662***	0.659***
		(0.025)	(0.024)		(0.030)	(0.030)		(0.041)	(0.039)
Use bank agent		0.240	0.186		0.243	0.159		0.289	0.288
		(0.148)	(0.142)		(0.173)	(0.175)		(0.269)	(0.246)
Constant	-0.064	-0.516***	-0.416***	-0.146**	-0.514***	-0.356***	0.134	-0.730***	-0.647***
	(0.091)	(0.092)	(0.090)	(0.074)	(0.085)	(0.070)	(0.103)	(0.120)	(0.091)
Observations	135,147	75,144	75,144	93,860	49,973	49,973	41,287	25,171	25,171

Standard errors in parentheses. ***, ** and * denote statistical significance at 1, 5 and 10 %, respectively

Appendix 1.B: All Accounts with post PMJDY Introduction Interactions-

Sample	Full sample			Rural sample			Urban sample		
Dependent variable	Access	Use		Access	Use		Access	Use	
Estimation technique	Probit		Heckman	Probit		Heckman	Probit		Heckman
HH & Ind. Characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
District Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Female* post PMJDY	0.077***	-0.005	-0.002	0.060*	-0.013	-0.010	0.114**	0.000	0.001
	(0.026)	(0.033)	(0.033)	(0.032)	(0.039)	(0.038)	(0.046)	(0.059)	(0.059)
Rural* post PMJDY	-0.018	-0.018	-0.018						
	(0.037)	(0.057)	(0.057)						
Poorest 20 %* post PMJDY	-0.003	-0.040	-0.040	-0.007	-0.027	-0.024	0.042	-0.059	-0.078
	(0.033)	(0.050)	(0.050)	(0.036)	(0.055)	(0.054)	(0.080)	(0.131)	(0.130)
Second 20 %* post PMJDY	0.046	0.041	0.040	0.029	0.070	0.071	0.093	-0.070	-0.068
	(0.028)	(0.042)	(0.042)	(0.031)	(0.046)	(0.046)	(0.061)	(0.101)	(0.101)
Fourth 20 % * post PMJDY	0.005	-0.071*	-0.073**	0.018	-0.044	-0.046	-0.015	-0.131*	-0.136*
	(0.028)	(0.037)	(0.037)	(0.034)	(0.042)	(0.042)	(0.052)	(0.073)	(0.073)
Richest 20 %* post PMJDY	-0.098***	-0.016	-0.020	-0.122***	-0.001	-0.003	-0.060	-0.052	-0.061
	(0.034)	(0.043)	(0.043)	(0.044)	(0.054)	(0.053)	(0.054)	(0.073)	(0.073)
No phone post* post PMJDY	0.068***	0.048	0.044	0.094***	0.033	0.029	0.002	0.089	0.083
	(0.023)	(0.031)	(0.031)	(0.028)	(0.034)	(0.034)	(0.043)	(0.065)	(0.064)
No job post* post PMJDY	0.259***	0.174	0.183	0.365***	0.201	0.205	0.099	0.109	0.120
	(0.097)	(0.113)	(0.115)	(0.128)	(0.138)	(0.138)	(0.107)	(0.121)	(0.123)
Farmer post* post PMJDY	0.315***	0.250**	0.266**	0.417***	0.272*	0.281*			
	(0.101)	(0.119)	(0.121)	(0.131)	(0.143)	(0.143)			
Labour/occ. work* post PMJDY	0.271***	0.145	0.159	0.367***	0.169	0.175	0.134	0.098	0.115
	(0.096)	(0.116)	(0.117)	(0.128)	(0.142)	(0.141)	(0.110)	(0.129)	(0.130)
Services* post PMJDY	0.256***	0.124	0.141	0.323**	0.153	0.160	0.134	0.062	0.085
	(0.098)	(0.121)	(0.123)	(0.132)	(0.154)	(0.154)	(0.116)	(0.135)	(0.137)
Self-employed* post PMJDY	0.339***	0.171	0.184	0.423***	0.228	0.239	0.198	0.081	0.088
	(0.108)	(0.121)	(0.123)	(0.144)	(0.157)	(0.158)	(0.129)	(0.135)	(0.137)
Employed* post PMJDY	0.245**	0.069	0.083	0.323**	0.020	0.018	0.114	0.053	0.073
	(0.118)	(0.123)	(0.125)	(0.155)	(0.154)	(0.154)	(0.141)	(0.134)	(0.137)
No Edu post* post PMJDY	0.006	-0.004	-0.009	-0.008	0.024	0.018	0.064	-0.015	-0.020
	(0.049)	(0.055)	(0.055)	(0.073)	(0.075)	(0.075)	(0.065)	(0.099)	(0.099)
Primary* post PMJDY	0.064	-0.034	-0.037	0.030	0.015	0.013	0.162**	-0.107	-0.125
	(0.050)	(0.058)	(0.057)	(0.075)	(0.080)	(0.079)	(0.068)	(0.094)	(0.094)
Middle* post PMJDY	0.006	-0.021	-0.024	0.014	-0.021	-0.024	-0.004	0.001	-0.005
	(0.047)	(0.057)	(0.057)	(0.070)	(0.077)	(0.077)	(0.068)	(0.088)	(0.088)
Secondary* post PMJDY	0.033	0.026	0.021	0.039	0.076	0.068	0.026	-0.026	-0.034
	(0.045)	(0.048)	(0.048)	(0.070)	(0.070)	(0.070)	(0.058)	(0.067)	(0.067)
Diploma* post PMJDY	-0.069	-0.035	-0.030	0.071	-0.004	-0.001	-0.203*	-0.069	-0.065
	(0.079)	(0.088)	(0.088)	(0.112)	(0.115)	(0.116)	(0.113)	(0.139)	(0.138)
Constant	-1.241	-1.230***	-0.929***	-5.754	-1.249***	-0.916**	3.011	-1.359**	-1.146*
	(3.069)	(0.342)	(0.345)	(3.845)	(0.376)	(0.376)	(3.055)	(0.634)	(0.644)
Observations	135,147	75,144	75,144	93,860	49,973	49,973	41,287	25,171	25,171

Standard errors in parentheses. ***, ** and * denote statistical significance at 1, 5 and 10 %, respectively

Appendix 1.C: All Accounts with pre-and post PMJDY effects

Dependent Variable	Access				Use							
Estimation Technique	Probit				Probit	Heckman	Probit	Heckman	Probit	Heckman	Probit	Heckman
District Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2014 YR Dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual & HH determinants	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Rural	0.058				-0.024	-0.036						
	(0.037)				(0.059)	(0.059)						
Rural * YR 2013	-0.124***				-0.095	-0.092						
	(0.040)				(0.063)	(0.062)						
Rural * YR 2015	0.228***				-0.047	-0.044						
	(0.042)				(0.062)	(0.062)						
Female		-0.037**					-0.066***	-0.066***				
		(0.019)					(0.024)	(0.024)				
Female* YR 2013		-0.187***					-0.016	-0.017				
		(0.022)					(0.031)	(0.031)				
Female * YR 2015		0.188***					0.048	0.051*				
		(0.023)					(0.030)	(0.030)				
PPI Score			0.005***						0.000	0.001		
			(0.001)						(0.001)	(0.001)		
PPI Score * YR 2013			0.002*						0.002*	0.002*		
			(0.001)						(0.001)	(0.001)		
PPI Score * YR 2015			0.007***						0.002*	0.003***		
			(0.001)						(0.001)	(0.001)		
BPL				-0.139***							-0.044	-0.076**
				(0.029)							(0.033)	(0.033)
BPL * YR 2013				-0.142***							-0.051	-0.052
				(0.036)							(0.042)	(0.042)
BPL * YR 2015				0.220***							0.000	-0.003
				(0.036)							(0.042)	(0.042)
Constant	-1.815	-1.173	-0.599	-2.518	-1.272***	-0.980***	-1.289***	-1.269***	-1.441***	-1.205***	-1.319***	-1.019***
	(3.105)	(3.097)	(3.062)	(3.113)	(0.322)	(0.325)	(0.323)	(0.323)	(0.323)	(0.325)	(0.322)	(0.324)
t-test of difference (p-Value)												
Rural * YR 2013= Rural * YR 2015	0.000				0.191	0.186						
Female*YR 2013=Female*YR 2015		0.000					0.044	0.033				
PPI Score*YR 2013 = PPI Score * YR 2015			0.000						0.039	0.047		
BPL * YR 2013 = BPL * YR 2015				0.000							0.107	0.128
Observations	135,147	135,147	135,147	135,147	73,529	73,529	73,529	73,529	73,529	73,529	73,529	73,529

Standard errors in parentheses. ***, ** and * denote statistical significance at 1, 5 and 10 %, respectively

Appendix 1.D: All Accounts: Year Fixed Effects and District Controls

Sample	Full sample			Rural sample			Urban sample		
Dependent variable	Access	Use		Access	Use		Access	Use	
Estimation technique	Probit		Heckman	Probit		Heckman	Probit		Heckman
Individual & HH determinants	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
YR 2014	0.108***	-0.272***	-0.269***	0.102***	-0.243***	-0.242***	0.121***	-0.327***	-0.326***
	(0.021)	(0.033)	(0.033)	(0.025)	(0.037)	(0.037)	(0.035)	(0.067)	(0.067)
YR 2015	0.342***	0.066**	0.065**	0.365***	0.070*	0.069*	0.292***	0.054	0.048
	(0.021)	(0.033)	(0.033)	(0.026)	(0.038)	(0.038)	(0.037)	(0.063)	(0.063)
Branches/ 1000 pop	0.994**	-0.510	-0.442	2.435***	-0.584	-0.481	-0.265	-0.468	-0.423
	(0.396)	(0.494)	(0.506)	(0.478)	(0.514)	(0.514)	(0.521)	(0.831)	(0.863)
DDP per capita	0.196	0.100***	0.099***	1.125	0.099***	0.096***	-0.666	0.104*	0.107*
	(0.580)	(0.033)	(0.033)	(0.729)	(0.036)	(0.036)	(0.571)	(0.062)	(0.065)
Sq. (DDP per cap.)	-0.010			-0.057*			0.033		
	(0.027)			(0.034)			(0.026)		
Constant	-1.400	-1.331***	-1.039***	-5.994	-1.409***	-1.081***	2.957	-1.371**	-1.163*
	(3.097)	(0.328)	(0.330)	(3.870)	(0.357)	(0.357)	(3.072)	(0.624)	(0.640)
N. Observations	132,193	73,529	73,529	92,105	49,111	49,111	40,088	24,418	24,418

Standard errors in parentheses. ***, ** and * denote statistical significance at 1, 5 and 10 %, respectively

Appendix 2.A: Variable Description and Data Sources

Variable	Obs.	Mean	SD	Min	Max	Description
SBFD Account	135147	0.52	0.50	0	1	Respondent has a Savings Bank Fixed Deposit Account. The variable was created based on the number of savings or fixed deposit/recurring accounts the respondent holds.
No. of SBFD Accounts	135147	0.53	0.52	0	2	The number of SBFD account the respondent holds. Winsorized.
Active SBFD Account	69681	0.59	0.49	0	1	Respondent uses SBFD account actively, i.e. has conducted any financial transactions in the past 90 days.
No. of active SBFD accounts	69681	0.61	0.53	0	2	Number of accounts respondent owns if SBFD account is active, i.e. used in the past 90 days. Winsorized.
Bank Account	135147	0.56	0.50	0	1	Respondent owns a registered bank account in his or her name (includes Savings, Current, Fixed Deposit, Recurring or Student Account)
No. of Accounts	132287	0.56	0.53	0	2	Number of bank accounts that the respondent owns. Winsorized.
Active Bank Account	75178	0.56	0.50	0	1	Respondent uses bank account actively, i.e. has conducted any financial transactions in the past 90 days.
Number of Active Bank Accounts	75144	0.58	0.54	0	2	Number of bank accounts the respondent owns if the bank account he uses most is active, i.e. used for any financial transaction in the past 90 days. Winsorized.
Female	135147	0.58	0.49	0	1	Dummy that takes the value 1 if the respondent is female and 0 otherwise.
Rural	135147	0.70	0.46	0	1	Dummy that takes the value 1 if the respondent comes from a rural town, classified as anything below and including town class 5 as listed in the Census 2011. Zero otherwise.
Poorest 20 % (PPI 1)	135147	0.21	0.41	0	1	Dummy that takes the value 1 if the respondent's household belongs to one of the respective five income quintile. Zero otherwise. Winsorized. Based on the year-wise Grameen's Progress out of Poverty Score (PPI).
Second 20 % (PPI 2)	135147	0.20	0.40	0	1	
Middle 20 % (PPI 3)	135147	0.21	0.40	0	1	
Fourth 20 % (PPI 4)	135147	0.20	0.40	0	1	
Richest 20 % (PPI 5)	135147	0.19	0.40	0	1	
No mobile phone	135147	0.50	0.50	0	1	Dummy that take the value 1 if respondent does not own his own a mobile phone. Zero otherwise.
No job	135147	0.54	0.50	0	1	Dummy that takes the value 1 if the respondent has no job that earns income, irrespective of whether it is a full-time, part-time job or occasional work. Zero otherwise.
Farmer	135147	0.12	0.33	0	1	Dummy that takes the value 1 if respondent derives the primary income from farming, zero otherwise. "What is your primary job (i.e., the job where you spend most of your time)?"
Labour/Occ. Work	135147	0.19	0.39	0	1	Dummy that takes the value 1 if respondent derives primary income from labour (farm/non-farm) or other occasional work. "What is your primary job (i.e., the job where you spend most of your time)?"
Services	135147	0.06	0.24	0	1	Dummy that takes the value 1 if the respondent derives the primary income from working in the service sector. "What is your primary job (i.e., the job where you spend most of your time)?"
Self-employed	135147	0.04	0.19	0	1	Dummy that takes the value 1 if the respondent derives the primary income from being self-employed. "What is your primary job (i.e., the job where you spend most of your time)?"
Employed	135147	0.04	0.20	0	1	Dummy that takes the value 1 if the respondent derives the primary income from being employed. "What is your primary job (i.e., the job where you spend most of your time)?"
illiterate	135147	0.25	0.43	0	1	Dummy that takes the value 1 if respondent has not attended formal education. Zero otherwise.
Literate (no Edu.)	135147	0.07	0.26	0	1	Dummy that takes the value 1 if respondent has not attended formal education but is literate. zero otherwise
Primary	135147	0.14	0.34	0	1	Dummy that takes the value 1 if the respondent has attended schooling till 5th standard, zero otherwise.
Middle	135147	0.18	0.38	0	1	Dummy that takes the value 1 if the respondent has attended schooling till 8th standard, zero otherwise.
Secondary	135147	0.27	0.45	0	1	Dummy that takes the value 1 if the respondent has attended schooling till 12th standard, zero otherwise.
Diploma	135147	0.02	0.14	0	1	Dummy that takes the value 1 if the respondent has a technical or non-technical diploma, zero otherwise.

Graduate and above	135147	0.07	0.26	0	1	Dummy that takes the value 1 if the respondent has attended tertiary education.
Age	135147	38.12	15.61	15	80	Age in years. Winsorized.
Sq. Age	135147	1696.39	1358.12	225	6400	Age in years, squared. Winsorized.
Single	135147	0.18	0.38	0	1	Dummy that takes the value 1 if the respondent is single, zero otherwise.
Married	135147	0.74	0.44	0	1	Dummy that takes the value 1 if the respondent is married, zero otherwise.
Divorced/separated	135147	0.01	0.08	0	1	Dummy that takes the value 1 if the respondent is divorced or separated, zero otherwise.
Widowed	135147	0.08	0.27	0	1	Dummy that takes the value 1 if the respondent is a widow/widower, zero otherwise.
Aadhaar Card	135147	0.65	0.48	0	1	Dummy that takes the value 1 if the respondent owns an Aadhaar card, zero otherwise.
G2P	135147	0.20	0.40	0	1	Dummy that takes the value 1 if the respondent receives any type of Government transfers, zero otherwise.
G2P in bank	75178	0.06	0.24	0	1	Dummy that takes the value 1 if the respondent receives G2P into the bank account, zero otherwise.
Receive payments	75178	0.06	0.24	0	1	Dummy that takes the value 1 if respondent receives salary/wage or remittance into the account, zero otherwise.
Make cur. exp. Payments	75178	0.06	0.24	0	1	Dummy that takes the value 1 if the respondent makes current payments through the bank account, i.e. paying grocery, utility, and medical, government bills and/or send remittance, zero otherwise.
Make cap. exp. Payments	75178	0.02	0.12	0	1	Dummy that takes the value 1 if the respondent makes capital payments through the bank account, i.e. paying school fees or making investments, zero otherwise.
Formal savings	75178	0.64	0.48	0	1	Dummy that takes the value 1 if the respondent has ever saved money through a bank account, zero otherwise.
Formal loan	75178	0.08	0.28	0	1	Dummy that takes the value 1 if respondent has ever borrowed through a bank account, zero otherwise.
Use Bank Counter	75178	0.87	0.34	0	1	Dummy that takes the value 1 if respondent uses a bank counter for any financial transactions, zero otherwise.
Use ATM	75178	0.28	0.45	0	1	Dummy that takes the value 1 if the respondent uses an ATM for any financial transactions, zero otherwise.
Use bank agent	75178	0.00	0.05	0	1	Dummy that takes the value 1 if the respondent uses a bank agent (BC) for financial transactions, zero otherwise.
DDP per capita	132389	10.55	0.69	9.23	12.10	District Domestic Product per capita (2012/13) at constant prices. Winsorized and natural logarithm taken. Source: Indicus Analytics.
Sq. (DDP per cap.)	132389	111.68	14.63	85.25	146.30	District Domestic Product per capita (2012/13) at constant prices, squared. Winsorized and natural logarithm taken. Source: Reserve Bank of India
Branches/ 1000 pop	134901	0.09	0.05	0.04	0.25	Total number of district bank branches per 1000 of population, as per March 2015. Winsorized and natural logarithm + 1 taken. Source: Census 2011

Variable	Obs.	Mean	SD	Min	Max	Description	Survey Year
Household Head	45036	0.338	0.473	0	1	Dummy variable that takes the value 1 if the respondent is the household head, zero otherwise.	2015
HH no cooking arrangement	135147	0.001	0.038	0	1	Dummy variable that takes the value 1 if the respondent's household does not have a cooking arrangement, zero otherwise.	2013-2015
HH cooking with non-gas	135147	0.603	0.489	0	1	Dummy variable that takes the value 1 if the respondent's household cooks with firewood/chips, dung cake or kerosene, zero otherwise.	2013-2015
HH cooking with gas	135147	0.395	0.489	0	1	Dummy variable that takes the value 1 if the respondent's household cooks with gas or electricity, zero otherwise.	2013-2015
HH Assets	135147	1.129	0.522	0	2.08	The total number of household assets the respondent's household owns, being kitchen thermoware, TV, VCR/VCD/DVD, mobile phone, landline, sewing machine, bicycle, scooter/motorcycle, and/or a car. Winsorized and 1+ natural logarithm taken.	2013-2015
HH members aged 17 years or younger: 0	135147	0.312	0.463	0	1	Dummy variable that takes the value 1 if the respondent's household contains respectively zero, one, two, three, or four and more household members that are aged 17 years or younger, zero otherwise.	2013-2015
HH members aged 17 years or younger: 1	135147	0.222	0.415	0	1		2013-2015
HH members aged 17 years or younger: 2	135147	0.242	0.428	0	1		2013-2015

HH members aged 17 years or younger: 3	135147	0.119	0.324	0	1		2013-2015
HH members aged 17 years or younger: 4 +	135147	0.105	0.307	0	1		2013-2015
Household size	90123	1.696	0.372	0.69	2.64	The total number of household members in the respondent's household. Winsorized and 1+ natural logarithm taken.	2014-2015
Working HH members	90119	0.295	0.145	0	0.69	The number of household members that earn an income, divided by the total household members. Winsorized and 1+ natural logarithm taken.	2014-2015
Full Trust in Banks	90111	0.799	0.401	0	1	A dummy variable that takes the value 1 if the respondent fully trusts banks - including state banks, private banks, foreign banks, regional rural banks, and cooperative banks -, zero otherwise. "Tell me if you fully trust, rather trust, rather do not trust or do not trust at all the following institutions."	2013-2014
Nearest Bank: < 15 min	45036	0.312	0.463	0	1	A dummy variable that takes the value 1, given the respondent's time needed to reach the nearest counter at a bank branch, with the typical mode of transportation, including walking and riding a bicycle, zero otherwise.	2015
Nearest Bank: more than 15- 30 min	45036	0.317	0.465	0	1		2015
Nearest Bank: More than 30 -60 min	45036	0.243	0.429	0	1		2015
Nearest Bank: > 1h	45036	0.064	0.245	0	1		2015
Makes Own Transactions	54483	0.901	0.299	0	1	A dummy variable that takes the value 1 if the respondent owns a bank account and makes the financially transactions her/himself. "Do you usually make transactions with your bank account yourself or does somebody else do them on your behalf?"	2014-2015
Full-time employed	90123	0.167	0.373	0	1	A dummy variable that takes the value 1 if in the past 12 months the respondent was working full-time for a regular salary, working part-time or irregularly, working seasonally, is self-employed, or nor working but looking for a job, not working due to retirement or sickness, a housewife, or full time student. Zero otherwise.	2014-2015
Part-time employment	90123	0.120	0.325	0	1		2014-2015
Seasonal work	90123	0.105	0.307	0	1		2014-2015
Self-employed	90123	0.077	0.266	0	1		2014-2015
Looking for a job	90123	0.199	0.400	0	1		2014-2015
Housewife/houseman	90123	0.235	0.424	0	1		2014-2015
Full-time student	90123	0.060	0.237	0	1		2014-2015
Not working	90123	0.037	0.189	0	1		2014-2015

Note: If not stated otherwise, all data stems from Intermedia, Financial Inclusion Insights Survey – wave 1-3.

Appendix 2.C: Correlation Matrix
Individual and District-level Determinants

		A	B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Female	-0.13*	-0.12*	1															
2	Rural	-0.07*	-0.12*	-0.01*	1														
3	PPI Score	0.21*	0.18*	-0.06*	-0.35*	1													
4	No phone	-0.26*	-0.2*	0.32*	0.18*	-0.33*	1												
5	Income Activity	0.18*	0.14*	-0.43*	-0.09*	0.09*	-0.26*	1											
6	Education	0.17*	0.18*	-0.2*	-0.25*	0.49*	-0.39*	0.13*	1										
7	Age	0.16*	0.02*	-0.07*	0.02*	0.05*	0.11*	0.04*	-0.33*	1									
8	Single	-0.11*	0.02*	-0.15*	-0.06*	0.1*	-0.06*	-0.06*	0.32*	-0.49*	1								
9	Married	0.06*	-0.01*	0.04*	0.05*	-0.07*	-0.01*	0.07*	-0.15*	0.21*	-0.77*	1							
10	Divorced/separated	0.00	0.00	0.01*	0.00	0.00	0.00	0.02*	-0.02*	0.01*	-0.04*	-0.14*	1						
11	Widowed	0.06*	-0.01	0.15*	0.01*	-0.03*	0.11*	-0.04*	-0.21*	0.34*	-0.13*	-0.48*	-0.02*	1					
12	Aadhar card	0.16*	0.09*	-0.03*	-0.09*	0.18*	-0.12*	0.07*	0.1*	0.05*	-0.01*	0.01	0.00	0.00	1				
13	G2P	0.16*	0.05*	-0.02*	0.03*	-0.03*	0.02*	-0.02*	-0.07*	0.2*	-0.03*	-0.1*	0.00	0.21*	0.06*	1			
14	Year	0.14*	0.11*	-0.01	0.00	0.02*	-0.09*	-0.01	0.01	0.00	0.00	-0.01*	0.01*	0.00	0.32*	0.14*	1		
15	Branches/1000 pop	0.13*	0.12*	0.01*	-0.3*	0.38*	-0.19*	0.06*	0.22*	0.03*	0.03*	-0.03*	0.01*	0.01*	0.25*	-0.01*	0.09*	1	
16	DDP per capita	0.1*	0.13*	0.00	-0.28*	0.37*	-0.18*	0.08*	0.22*	0.03*	0.02*	-0.03*	0.02*	0.01	0.28*	-0.06*	0.01*	0.69*	1
17	Sq(DDP per capita)	0.1*	0.13*	0.00	-0.29*	0.37*	-0.18*	0.08*	0.22*	0.03*	0.02*	-0.03*	0.01*	0.01	0.28*	-0.06*	0.01*	0.7*	1,00*

Pairwise correlation of Account Ownership of SBFD Accounts (A) and Active Use of SBFD Accounts (B). * denotes significance at the 1 % level.

Active Account Use Variables

		B	1	2	3	4	5	6	7	8
1	G2P in Account	0.04*								
2	Receive payments	0.1*	0.04*							
3	Make cur. exp. payments	0.1*	-0.16*	0.32*						
4	Make cap. exp. payments	0.05*	0.01*	0.12*	0.04*					
5	Formal savings	0.14*	0.06*	0.02*	0.03*	0.01*				
6	Formal loan	0.07*	0.00	0.02*	0.09*	0.03*	0.05*			
7	Use bank counter	0.27*	0.09*	0.08*	0.08*	0.04*	0.23*	0.01*		
8	Use ATM	0.27*	-0.02*	0.11*	0.13*	0.07*	0.1*	0.05*	0.11*	
9	Use bank agent	0.00	-0.01	0.00	0.03*	0.00	-0.01	-0.01	-0.06*	-0.01

* denotes significance at the 1 % level. B refers to Active SBFD Accounts, used within the past 90 days.