Furthering the Financial Inclusion Agenda in India
How Important Is Gender?

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Exploiting household level survey data, this paper analyses the interface between gender and financial inclusion. The multivariate regressions that take on board several household and state-level controls suggest significant disparities in both the access to as well as the use of finance. More specifically, female-headed households are 10% less likely to access formal finance as compared to households that are headed by males. Similar evidence carries over to the use of finance as well. From a policy standpoint, the paper highlights several policy interventions which can serve the cause of greater financial inclusion of women in the country.

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1 Introduction

The relevance of financial inclusion in improving economic growth has been widely discussed in the literature. Financial inclusion carries several benefits for poor households. First, it provides them with opportunities to build savings, make investments and access credit (Ellis et al 2010). In addition, it also enables them to successfully handle income shocks and tide over unforeseen emergencies such as illness or loss of employment (Collins et al 2009). Macroeconomic evidence suggests that more inclusive economies tend to grow faster (Beck et al 2007). Currently, over 60% of banking regulators out of a total of 143 countries are actively engaged in promoting financial inclusion (Cihak et al 2012; Demirgüç-Kunt and Klapper 2013).

Notwithstanding its beneficial effects and despite exhortations by the G-20 leaders in September 2013, finance does not appear to have adequately permeated vast segments of the population.[1] In 2014, only 62% of adults globally had an account with a formal financial institution as compared to 51% in 2011 (Demirgüç-Kunt et al 2015). What this suggests is a discernible gap between the availability of finance and its accessibility and use.

One area where the disparity is quite pervasive and is receiving increasing attention is the gender gap in access to finance. In this context, the paper analyses the interface between gender and financial inclusion. This assumes relevance because as the recent literature suggests, gender matters for broader macroeconomic outcomes, including economic development (Duflo 2012).

According to the recently released FINDEX database, out of the two billion adults globally who did not have bank accounts in 2014, over 1 billion were women. Cross-country evidence by Demirgüç-Kunt et al (2015) suggests that globally, 58% of women and 65% of men have an account at a formal (for example, bank, credit union, cooperative, post office or microfinance) financial institution. These numbers mask the wide difference across countries. By way of example, the gender gap in account ownership is negligible in high-income OECD countries. As compared to this, in developing economies, 59% of men had an account while 50% women had an account.

Similar evidence is manifest on the credit side as well. In South Asia, for example, women access less than 10% of formal finance. When we look across countries, the differences are quite prominent. In Bangladesh, for example, women access to bank credit is just 2%, although their deposits account for a

quarter of total bank deposits (Pitt et al 2003). In Africa, women access less than 10% of the credit to small farmers. Focusing exclusively on small and medium enterprises (SMEs) also points to similar conclusions: among emerging markets, of the roughly 35% of women-owned SMEs, close to a third face disproportionately high and differentiated barriers than male entrepreneurs, including to finance (IFC 2011). Even in advanced economies, barriers in access to finance are no less acute for women. In the US, companies with a women as the CEO received only 3% of venture capital dollars invested (NWBC 2015).

In fact, as early as 2000, the United Nations (UN) had advocated gender equality and women empowerment as a crucial plank of the Millennium Development Goals (MDGs) that was agreed to by all countries as well as leading global development institutions. More specifically, the avowed objective of MDG3 which emphasised the promotion of gender equality and women empowerment called on governments to "eliminate gender disparity in primary and secondary education in all levels of education no later than 2015."

Some progress has been made on this front. Evidence suggests that the gender parity in school enrolment has largely been achieved in primary education. In 2013, the gross enrolment ratio in primary education across both sexes was 101.2 in the developed economies and 108.9 in the developing economies as compared to a global average of 108. Gaps still persist in secondary and tertiary education, especially in the developing world where the 2013 ratios for women and men were 71 and 27 as compared to 105 and 74, respectively, for developed economies (UNESCO 2015).

Looked at from a broader perspective, progress has been slow and uneven. For example, according to a report prepared for the G-20 Labour and Employment Ministerial Meeting (OECD 2014), since 1980, the global rate of female labour force participation has increased by 2 percentage points to 52% in 2012. On the other hand, the gender gap in labour force participation for the working age population has declined from 23% in 1990 to 13% in 2012. Not only participation, but the difference in terms of wages is also quite pervasive. The International Labour Office (2010) estimated that the gender wage differentials across all occupations and all skills in most countries ranged from 10% to 30%. Likewise, political participation of women has also increased. For instance, women now hold a fifth of parliamentary seats in at least one chamber in over 140 countries (as of November 2015), up from 11% in 1995 (UN Women 2015). In their assessment on the progress made with regard to the MDGs, the United Nations (2014) observed that women presently hold more "hard" ministerial portfolios—such as defence, foreign affairs and the environment—in addition to so-called "soft" portfolios such as social affairs, education and women affairs.

More recently, the 2030 agenda of Sustainable Development Goals (SDGs), adopted by the UN General Assembly in September 2015 (valid till 2030), listed gender equality (SDG 5) for achieving "gender equality and empower(ing) all women and girls." In particular, SDG 5 focuses on eliminating gender discrimination in all economic and social spheres and providing women with equal rights and opportunities to economic resources backed by sound policies and enforceable legislation (United Nations 2015).

The fact that gender equality also matters for broader macroeconomic goals has been emphasised by the IMF. At the W-20 Summit in September 2015, Christine Lagarde, Managing Director of the IMF remarked:

> ...it is [also] an absolute economic no-brainer...that empowering women boosts economic growth. For example, we have estimates that, if the number of female workers were to increase to the same level as the number of men, GDP in the US would expand by 5%, by 9% in Japan, and by 27% in India.

Against this background, this paper first provides an overview of the evidence, highlighting the possible channels through which gender affects broader economic outcomes, with emphasis on financial inclusion. Second, it analyses the empirical evidence for India and highlights a few policy concerns.

2 Gender and Financial Inclusion

It is possible to envisage several channels through which gender can have an impact on finance.

First, gender equality increases the stock of human capital. A more educated female labour force entails greater accumulation of skills and expertise, and raises the overall demand for finance. Additionally, more educated women are likely to have fewer children and possibly spend more time on work. Not only is this likely to lower the dependency ratio and engender a demographic dividend, but also improve their use of finance. A number of studies in recent times have examined these causal relationships. Klasen and Lamanna (2008) show that gender equality may account for 40% of the growth gap between East Asia and the Pacific. In the case of India, the evidence suggests that increasing the ratio of female to male managers by 10% could improve per capita output by 2% (Esteve-Volart 2004).

A second channel by which gender equality matters is through its impact on capacity enhancement. By improving the overall skill set of the labour force, gender equality raises labour productivity and promotes investment. In addition to investment, improving women's income can improve domestic savings. This can increase the propensity of women to enter the formal financial system. Seguino and Floro (2003) find that a one percentage point rise in the female share of wages raises aggregate savings by 0.25% of GDP. This could indicate a higher female propensity to save, which can cause domestic savings to rise if income is redistributed from men to women. Higher domestic savings can be channelled through the financial sector, making capital available for firms.

Third, gender equality can improve agricultural output. According to the Food and Agriculture Organization (FAO 2011), greater access to farming resources for females can improve agricultural production on women farms in developing countries by as much as 4%. Provided that some of the income derived thereof also accrue to women, this is likely to empower them to access the formal financial system.

Internationally, an emerging strand of literature has focused on the interface between gender and financial inclusion.

Using country level data, Beck et al (2015) identify a gender bias in the interest rate on microcredit loans: borrowers matched to a loan officer of the opposite gender on an average pay 26–28 basis points higher rates as compared to when they are matched to a loan officer of the same gender. Using survey data from the Philippines, Malapit (2012) shows that women are 11% more credit-constrained as compared to men. Thereafter, within a cross-country framework focused on sub-Saharan Africa, Aterido et al (2013) provide evidence in support of a gender gap in use of financial services. More generally, Demirgüç-Kunt et al (2013) show that countries with laws favouring ownership of assets by women exhibit greater ownership of accounts by women.[2]

Studies have begun to emerge in the Indian context as well. Using data from the Rural Finance Access Survey, Basu (2006) shows that women-centric Self-Help Group-Bank models have performed considerably well in terms of their savings and repayment habits. Of late, employing the 59th round of the National Sample Survey Office (NSSO) data, Rajeev et al (2011) document that the incidence of indebtedness for female-headed households is 4–10 percentage points higher as compared to male-headed households, although they do not undertake any formal empirical analysis. Bhattacharjee and Rajeev (2013) demonstrate that households headed by women pay nearly 5 percentage points higher interest cost and have 7–10 percentage points lower access to formal sources of credit as compared to households headed by males. These results are also mirrored in cross-country research (Demirgüç-Kunt et al 2013). Utilising data from over 148 countries, the authors find that women are less likely to own bank accounts.

On the access side, women-owned enterprises face a significant credit gap. Of the estimated $158 billion of finance needed for the 3 million women-owned enterprises across industries in India, formal sources were able to provide only $42 billion, leaving an unfinanced gap of $116 billion, or 73% of total demand (IFC 2014). Our analysis, however, does not focus on this issue but, instead, examines the access to and use of finance for women at the household level.

3 Gender and Financial Inclusion: Indian Experience

3.1 Motivation

Article 15 of the Indian Constitution deals, among others, with the issue of gender. More specifically, as per Article 15(3) of the Constitution:

> Nothing in this article shall prevent the State from making any special provision for women and children.

In addition, Article 39 of the Directive Principles of State Policy, embodied in part IV of the Constitution, lays down certain principles of policy to be followed by the state, which includes, among others, equal pay for equal work for men and women.

Mainstreaming gender in the growth agenda has a long history in India. To drive the holistic development of women and children in the country, the Department of Women and Child Development was established under the Ministry of Human Resource Development in 1985. In 2006, the department was given the status of a ministry, with the powers to formulate plans, policies and programmes, enact/amend legislation, guiding and coordinating the efforts of both governmental and non-governmental organisations working in the field of women and child development.

3.2 Policy Measures

The government has made inclusive growth a key element of their policy platform. In its vision for the Eleventh Five Year Plan, the Planning Commission (Government of India 2008) had observed:

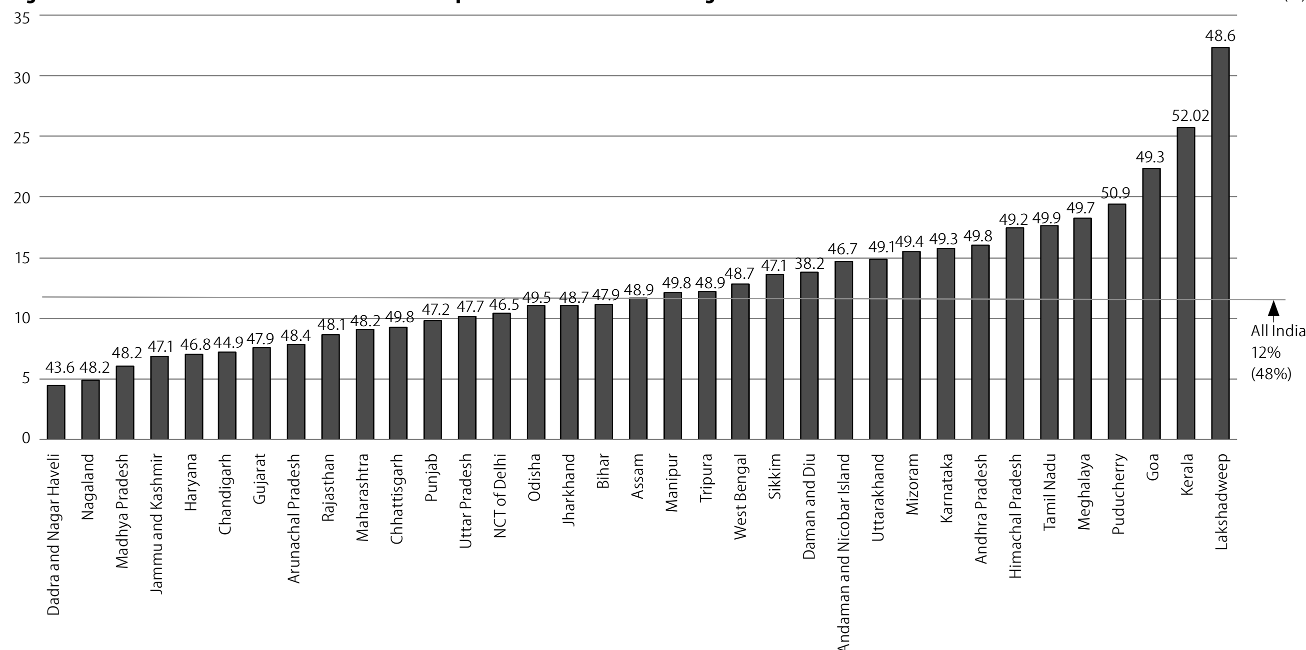
> ...the target is not just faster growth but also inclusive growth, that is, a growth process which yields broad-based benefits and ensures equality of opportunity for all (p 2).

Both the government and the Reserve Bank of India (RBI) have undertaken several steps over the years to foster inclusive growth. A prominent policy initiative in this respect is the priority sector lending by banks, which requires them to extend 40% of their credit to designated sectors. The self-help group–bank linkage programme (SHG–BLP), Kisan Credit Card scheme for farmers, Rashtriya Swasthya Bima Yojana, Atal Pension Yojana, refinancing of cooperative banks, regional rural banks and public sector banks that extend credit to rural clients and various state-level credit programmes for provision of credit to the rural population are examples of more direct efforts. In addition to commercial banks, cooperative and regional rural banks have achieved impressive branch penetration, especially in rural areas (RBI 2015a). The "in principle" approval granted to a multitude of players in the financial ecosystem by the RBI in recent times to establish payments banks and small finance banks provides additional push for inclusion.

The Pradhan Mantri Jan-Dhan Yojana (PMJDY) introduced in August 2014 is a landmark effort in the quest for universal financial access. The scheme has set ambitious targets, such as to provide a bank account to every household within 12 months. As of December 2015, a total of over 196 million accounts have been opened, with total deposits aggregating Rs 280 billion. The government is also focusing on direct benefit transfers to push the inclusion agenda further. Not only will this entail substantial cost savings for the government,[3] but also ensure that a larger proportion of the accounts opened under various schemes, which are presently dormant, witness movement, thereby integrating access with use.[4]

Recognising the importance of women empowerment, the government has initiated several schemes in the recent past. The Rajiv Gandhi Scheme for Empowerment of Adolescent Girls—*Sabla*—was initiated in 2011. It targeted the girl child in the age group of 11–18 years and covered a total of 9.8 million beneficiaries during 2014–15. More recently, the Beti Bachao, Beti Padhao (Save Girl Child, Educate Girl Child) scheme was initiated in January 2015 with an initial corpus of Rs 100 crore. The programme aims to generate awareness and improve the efficiency of welfare services for women (Government of India 2014a). As part of this process, a government-backed

Figure 1: Female-headed Households and Female Proportion—Statewise Percentages



savings scheme targeted at the parents of the girl child—Sukanya Samriddhi Yojana Account—was launched. The scheme incentivises parents to build a fund for the future education and marriage expenses by encouraging them to open an account for the girl child anytime between her birth and the time she attains 10 years of age.

Such efforts at the central level have had their echo at the state level as well. To illustrate, the Government of Maharashtra launched the Mazi Kanya Bhagyashree scheme in 2015, a cumulative income scheme for the girl child of below the poverty line (BPL) population for her education and marriage. In Andhra Pradesh likewise, the Bangaru Talli scheme initiated in 2013 supports a girl child of the BPL family from her birth till her graduation. The Government of West Bengal runs a conditional cash transfer scheme, Kanyashree Prakalpa. Under the scheme, zero-balance bank accounts are opened in the name of girls through simplified account opening procedures and fund transfer occurs directly in the account of the intended beneficiary.

3.3 Policy Reports

The interface between gender and financial inclusion had received less attention. The Rangarajan Committee on Financial Inclusion dwelt in detail on regional, social and occupational aspects of financial inclusion, but did not explicitly focus on the gender aspect. As recent as 2015, the Committee on Medium-Term Path on Financial Inclusion examined this issue in some detail. The committee observed that, although the deposit account density for females has trebled during 2006–15, it still was much lower than that for males (RBI 2015b). The committee also proposed an inclusion-driven, forward-looking scheme for the girl child—Sukanya Shiksha—that integrates education and banking habits by crediting a nominal amount in the name of each girl child belonging to the lower income group who enrols in middle school. In addition to providing a financial cushion, the scheme is expected to empower the girl child and minimise dropout rates.

Against this backdrop, we examine the empirical evidence regarding the interface between gender and financial inclusion.

4 The Database and Variables

4.1 Database

We exploit the All India Debt and Investment Survey (hereafter, AIDIS) database for our study. Initiated in the 1950s, the current survey on the asset, debt and investment status of households was carried out as a part of the 70th round survey of NSSO during January–December 2013. The survey is conducted through household interviews from a random sample of households selected through a scientific design and covers practically the entire geographical area of the country (Government of India 2014b).

We analyse the information contained in several blocks of the survey. Our focus is primarily on the access to and use of cash loans by households. We also use several other government and private data sources, such as the *Statistical Abstract* and IndiaStat.com, a private data service aggregator which provides socio-economic statistical data on Indian states. Table 1 (p 130) provides a description of the major variables, data sources and summary statistics.

4.2 Descriptive Statistics

Figure 1 plots the percentage of female-headed households (FHHs) across states (in increasing order) along with the percentage of women population in the state. Among states, the proportion of FHHs is the highest in Kerala at 25% as compared to an all-India figure of 12%. As compared to this, the proportion of female population in Kerala is 52%, the highest across

all states and union territories. States with higher proportion of females tend to have higher percentage of FHHs. The bivariate correlation between these two series is 0.38 and is statistically significant at the 5% level.

4.3 Access to and Use of Finance

We employ both formal and informal finance as the key dependent variables. Formal finance comprises the following sources: (a) government; (b) cooperative bank; (c) commercial/regional rural banks; (d) insurance companies; (e) provident funds, financial corporations or institutions; (f) financial company; (g) SHG (bank or NBFC-linked). Within formal sources, we focus on bank finance (comprising items b, c and g above). On the other hand, informal finance consists of borrowings from moneylenders, friends and relatives.

Table 1 shows that 68% of male-headed households have access to formal finance as compared to 57% for female-headed households. Looking at use, the cash loan outstanding from formal agencies was nearly 5% higher for male-headed as compared to female-headed households. This gender gap in the use of finance is consistent with Demirgüç-Kunt et al (2013), who find that on average, there exists a gender gap of 4 percentage points in the use of finance.

4.4 Explanatory Variables

We analyse household level data on gender and other household characteristics available in the AIDIS database. We also utilise indicators on income as well as proxies for educational, physical and health infrastructure.

The household level characteristics include whether a household is headed by a woman, its size, age of the household head, immovable (building and other construction) asset status and educational qualification of the household head.[5] Table 1 suggests that 12% of the households are headed by a female.

We also take into account several state-level characteristics. These include per capita income, literacy rate, proportion of female population and controls for physical (for example, roads) and social (for example, number of primary healthcare centres) infrastructure. On average, the literacy rate across states is 78% and the female population in a state is 53%.

5 Empirical Methodology

To investigate the gender differences in the access to and use of finance, we employ a multivariate regression model. For household h in state s, the empirical specification is:

$$FI_{h,s} = \alpha\,[FEMALE]_h + \beta\,[Characteristics]_h + \gamma\,[State]_s + \varepsilon_{h,s} \quad ...(1)$$

where *FI* captures the dimensions of financial inclusion discussed earlier. The coefficient of interest is α, which identifies the response of the female-headed households to financial inclusion; *Characteristics* is a set of household characteristics such as education (illiterate, up to Class 12, above Class 12 and up to graduate), work status (salaried, self-employed or casual labourer), place of residence (rural *versus* urban), age profile (up to 25 years, above 25 years, up to 55 years and above 55 years), and household immovable (building and other construction) asset status (disaggregated into four quartiles);[6] *State* is a vector of state-specific variables such as per capita income, literacy, proportion of female population; ε represents the normally distributed error term.

When access to finance is the dependent variable, we employ a Probit model. When the dependent variable is use of finance, we employ a double-hurdle model (Cragg 1971). In this model, the stage I dependent variable equals one, if the household uses formal finance, or zero, if not; in stage II, the regression is estimated only for non-zero numbers. This enables us to segregate the probability of use from its level, and therefore provides a better interpretation of household

Table 1: Variable Definition and Summary Statistics

Variable	Definition					
Relating to Access		Data Source	N Obs	Male	N Obs	Female
Panel A: Financial Inclusion Related						
Formal	Dummy=1 if a household has access to cash loans from formal sources, else zero	AIDIS	97,433	0.68 (0.47)	13,367 7	0.57 (0.50)
Bank	Dummy=1, if a household has access to cash loans from bank/NBFC, else zero	AIDIS	66,154	0.99 (0.04)	7,564	0.98 (0.06)
Informal	Dummy=1, if a household has access to finance from informal sources such as moneylenders, friends, relatives, etc.	AIDIS	66,154	0.36 (0.84)	7,564	0.29 (0.90)
Relating to use						
Formal	Amount of cash loans outstanding from formal sources (in logarithm)	AIDIS	39,487	7.27 (5.52)	3,881	6.90 (5.44)
Informal	Amount of cash loans outstanding from informal sources (in logarithm)	AIDIS	25,662	5.40 (5.27)	3,533	5.45 (5.23)
		Data Source	N Obs	Mean (SD)		
Panel B: Others						
Female	Dummy=1, if household head is female, else zero	AIDIS	1,10,800	0.12 (0.33)		
PCNSDP	Log (per capita state income)	Statistical Abstract	32	11.09 (1.58)		
Road	Log (road length/1,000 sq km)	Statistical Abstract	35	4.90 (1.14)		
Literacy	State literacy rate	Census 2011	35	77 .9 (8.59)		
Proportion	Proportion of female population in the state	IndiaStat	35	52.45 (2.91)		

behaviour towards finance. We cluster the standard errors at the state level.

6 Results and Discussion

Table 2 reports the results of access to and use of finance. With regard to access to formal finance, we find that FHHs are less likely to have access to formal finance as compared to men. Based on the estimated coefficient of -0.23, the marginal effect equals -0.086. In other words, the probability of access to formal finance for a FHH is 8.6 percentage points lower and the effect is statistically significant.

Table 2: Access to and Use of Finance

Variable	Access			Use			
	Formal	Bank	Informal	Formal		Informal	
Estimation Technique	Probit			Double Hurdle			
				Stage I	Stage II	Stage I	Stage II
	(1)	(2)	(3)	(4A)	(4B)	(5A)	(5B)
Female	−0.23***	−0.09	0.29***	0.03	−0.20***	0.05	0.05
	(0.05)	(0.14)	(0.11)	(0.09)	(0.04)	(0.12)	(0.09)
Characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Household size FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R^2/log-likelihood	0.085	0.104	0.102	−4,065		−2,610	
Observations	74,742	52,257	52,257	16,778		8,888	

Standard errors (clustered by state) within parentheses.
***p <0.01; ** p <0.05; * p<0.10.

Next, we examine the access to bank finance and informal finance. Based on the point estimates in Columns (2) and (3), it appears that female households are more inclined to access informal finance. The magnitude of the coefficient on informal finance is roughly equal to, but opposite in sign to that of formal finance.

Coming to use, the coefficient on FEMALE is statistically significant only in Column (4B), with a point estimate equal to -0.2. In other words, even though FHHs are less likely to borrow cash (the coefficient on FEMALE in Column 4A), in case they do so, their borrowings are 20% lower as compared to male-headed households (the coefficient on FEMALE in Column 4B).

Summing up, these results suggest that the gender gap in access to finance remains significant in India.

7 Policy Ideas

As the aforesaid discussion suggests, women face several constraints that impede their access to and use of financial services. Such constraints can emanate from demand or supply factors or both. As regards demand, it is possible to envisage that women do not have either the skills or the confidence to manage their finances. On the supply side, service delivery might not be attuned to their requirements. Alternately, paucity of sufficiently granular data, particularly by gender, further limits a meaningful assessment on what products and services they want and need. This calls for policy responses that can address this gap. The possible policy interventions can be categorised under five heads: (a) data-related; (b) technology-related; (c) institution-related; (d) information utilities-related; and finally (e) product-related.

As regards data-related intervention, one possible way is through better data quality. In the case of Zambia, for example, the central bank has engaged with financial institutions to persuade them to collate gender-disaggregated data so as to better target their financial products and services. Such an approach can prove useful going forward in addressing the financial inclusion of women.

As regards technology-related interventions, one possibility could be to have less stringent account opening requirements with proactive emphasis on customer due diligence. More versatile identification documents based on innovative technology solutions such as biometrics and eye scanning offer a route towards eliminating barriers for inclusion of women.

New and dedicated institutions can also make a difference. Perhaps the best known example is the Wells Fargo Bank in the United States, which serves women-owned businesses with lines of credit up to $100,000. Banco Santender Santiago in Chile has also mainstreamed gender considerations in its loan extension strategy. It operates a microfinance affiliate (Banefe) for whom women make up to 54% of borrowers and 60% of loan officers. BRAC, a reputed NGO in Bangladesh, helps women build financial independence through access to finance by targeting female entrepreneurs and extends business loans to women with legally registered businesses for periods ranging from three to 24 months. In India, there are several cooperative organisations that are run exclusively by women—the Mahila Sewa Sahakari Bank and Mann Deshi Mahila Sahakari Bank. However, their geographical presence and operations would need to be significantly scaled up so as to reach out to a wider populace.

Information utilities related solutions can empower women in their choice of products. Economically, financial counselling can inform women regarding the suitability of financial products for their personal and business needs. Evidence from Peru suggests that such counselling prior to loan extension can perceptibly improve the performance of women-owned businesses (Martín and Karlan 2010). More specifically, strategies such as division of money for personal and business purposes, reinvestment of money in business and keeping track of business income and expenditures are critical for strengthening financial capabilities of women-owned entrepreneurs.

Finally, product-related interventions can also be a way forward. As Klapper (2015) observes, 80% of women in low-income countries still receive their wages in cash. Switching to digital financial services can provide women with greater privacy, flexibility and control over their finances. The Jipange KuSave experiment in Kenya, that synergises both lending and savings within a simple framework, is instructive in this regard (Parker et al 2012).

8 Concluding Remarks

In the quest for financial inclusion, the role and relevance of gender has come into prominence in recent times. Economies, both emerging and developed, are engaged in devising

policy responses to address this challenge. In this context, the paper provides an overview of this issue, drawing upon extant evidence.

Subsequently, it analyses the evidence for India, using AIDIS data. The findings suggest that on average, households with female heads are less inclined to access formal finance and more inclined to access informal finance. These results are robust in multivariate regressions that take on board several household and state-level characteristics.

With gender concerns in financial inclusion beginning to be explored more systematically, there is scope for greater focus on such issues. Intensifying this focus holds the promise of more effective policy, which can serve the cause of greater financial inclusion of Indian women.

NOTES

1 G-20 Leaders' Declaration, September 2013.

2 There are also studies which show that microcredit to women might not necessarily be welfare-enhancing (Fafchamps et al 2011; Karlan and Zinman 2011; Mel et al 2012).

3 Based on a hypothetical social transfer programme that pays a monthly amount of $40 to 1 million recipients, it was estimated that the benefits overwhelmed the costs beginning from 2015–16, touching $203 billion (at constant prices) in 2020–21 (NIPFP 2012).

4 Data reported on the PMJDY website (www.pmjdy-gov.in) shows that, as on 3 February 2016, there were 30.8% zero balance accounts under PMJDY across public, private and regional rural banks.

5 Data on financial assets of households is scanty. As a result, we control for the immovable asset status.

6 For each of the household level variables, we employ a control category. Accordingly, we use illiterate, casual employment, rural, age of the household head less than 25 years, first quartile with respect to assets as the reference groups for education, work status, place of residence, age profile and household asset respectively.

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