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# FinTech – Will it Contribute to Financial Inclusion?

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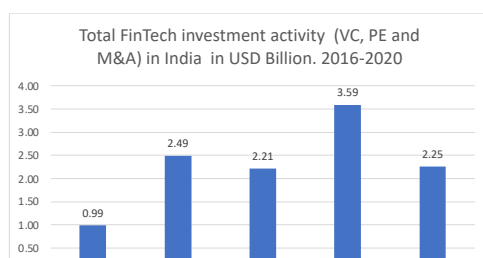
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Over the last quarter of a century, developments in technology and infrastructure have brought about a sea change in the way financial transactions are carried out – worldwide and in India. Recent times have seen a lot of conversation about FinTech – its adoption, range of services provided, and the investments attracted by service providers. The overarching theme of this article is whether the current FinTech boom contributes to financial inclusion in India.

The issues highlighted here can be refined further to answer specific research questions and formulate policies to ensure that FinTech becomes an effective enabler for greater financial inclusion. The concept of FinTech in the article encompasses all financial transactions transacted through non-brick and mortar channels.

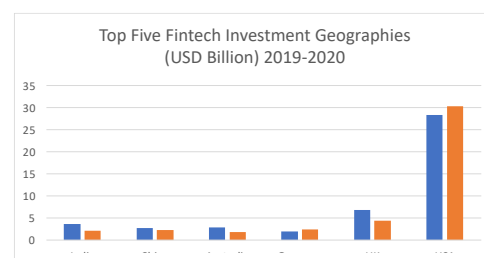
## *Dashboard of Fintech in India*

Over the last five years or so, FinTech has grown exponentially both on the demand and the supply sides. According to Boston Consulting Group (BCG, 2021), 67% of the 2100+ FinTechs in India today were set up during this period while the industry raised more than USD 10 billion (see figure 1). The total valuation of the sector in 2020 is estimated to be between USD 50-60 billion. Figure 2 shows that India has overtaken Australia to reach the top 5 FinTech investment destinations (BCG, 2021).



**Figure 1: Total FinTech Investment Activity**

Source: Pulse of FinTech .KPMG.  
home.kpmg/fintechpulse

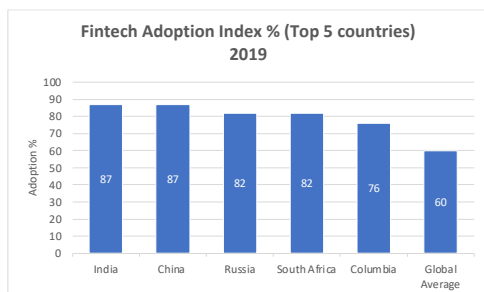


**Figure 2: Top Five Investment Geographies**

Source: India FinTech: A USD 100 Billion Opportunity.

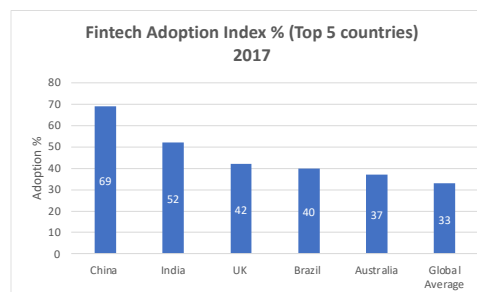
Figures 3 and 4 indicate Fintech adoption rates among the top 5 countries based on data from EY (2019). India's FinTech Adoption Rate in 2019, along with China, is the highest globally, up by about 25% from 2017 (EY, 2019, p. 7; 2017, p. 7).

My first question was whether this surge in technology use trickles down to the bottom of the pyramid.



**Figure 3: Fintech Adoption Index 2019**

Source: Global FinTech Adoption Index 2019.EY.



**Figure 4: Fintech Adoption Index 2017**

Source: Global FinTech Adoption Index 2017.EY.

### *The concept and relevance of financial inclusion*

Financial inclusion broadly covers universal access to a range of useful and affordable financial products and services that meet the needs of individuals and businesses – transactions, payments, savings, credit and insurance, pension, and equity – delivered responsibly and sustainably. In India, the access to these services by vulnerable groups has been particularly emphasised.

Various studies have established a direct correlation between financial exclusion and poverty and its strong positive impact on overall economic development at the national level. It also supports seven of the seventeen Sustainable Development Goals (SDG). The World Bank Group set an agenda for Universal Financial Access by 2020 (UFA2020), providing access to financial services to an additional one billion adults.<sup>1</sup>

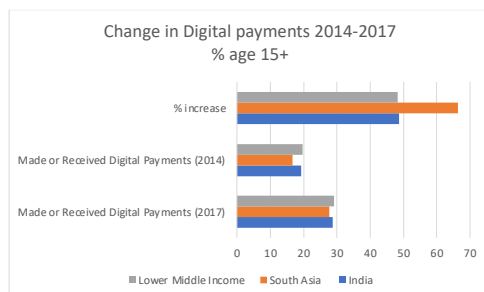
### *Financial Inclusion in India*

Although there is no composite index for financial inclusion, the Global Findex Database uses a set of select metrics to provide ‘a rigorous, multidimensional picture of where we stand and how far we have come in expanding access *for all* to the basic financial services people need to protect themselves against hardship and invest in their futures’ (Demirgüç-Kunt et al., 2018, p.xi).<sup>2</sup>

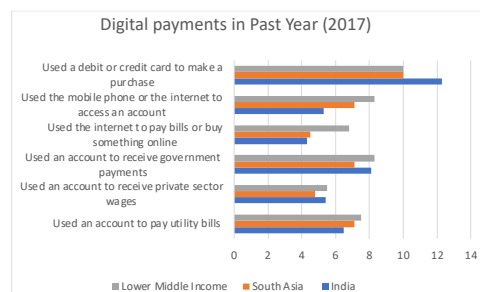
<sup>1</sup> ufa.worldbank.org

<sup>2</sup> The database, the full text of the report, and the underlying country-level data for all figures—along with the questionnaire, the survey methodology, and other relevant materials—are available at <http://www.worldbank.org/globalindex>. *The Little Data Book on Financial Inclusion 2018* (World Bank Group, 2018) presents key findings from the Global Findex database.

The Digital payments metric, one of the critical indicators, shows that Financial Inclusion in India should improve significantly to achieve its stated policy objectives. Figure 5 indicates that India's digital payments are growing at a rapid pace of about 50% per year, on par with Lower middle-income countries but behind South Asian countries. About 30% of Indians and the two reference groups had access to digital payments by 2017. Figure 6 indicates the different uses of digital payments.



**Figure 5: Change in Digital payments 2014-2017**  
Source: *The Little Data Book on Financial Inclusion, 2018*



**Figure 6: Digital payments in Past Year 2017**  
Source: *The Little Data Book on Financial Inclusion, 2018*

My overall question was whether Fintech can help in closing the gap between the aspirations and achievements. Since only 30% were using fintech in 2017, my second question was who are the segments of the 70% of Indians excluded from Fintech?

### *The people FinTech have bypassed*

To explore the width and depth of financial inclusion, I have considered three cohorts that should be included in the mainstream for well-distributed economic growth. The key concern is whether the “FinTech Revolution” in India contributes to the financial inclusion of these cohorts in the technology-enabled space. In the present context, financial inclusion also involves operational convenience for easier access and usage through technology platforms.

First, the population at the Base of the Pyramid. For the sake of benchmarking, the filter of 2 Dollars a day would be a good starting point. It roughly translates to Indian Rupees 4,500 per month at current exchange rates – an income level at which people would carry out a reasonable number of financial transactions. However, the Global Findex database shows that in 2017 only 3% of the poorest 40% used a mobile phone or the internet to access an account against 7% for the richest 60%. For debit card ownership, the gap is even wider and has increased over time (see Table 1).

Table 1: The income divide of debit card ownership (global)

Year	Debit card ownership, income, poorest 40% (% age 15+)	Debit card ownership, income, richest 60% (% age 15+)
2011	3	12
2014	11	30
2017	17	43

*Source: The Global Findex Database. 2017*

The methodology for the FinTech Adoption Index comprises a survey of a sample of 27,103 consumers in 27 markets. A FinTech adopter is someone who has used two or more “buckets” of services, since this indicates a habitual change in behaviour in a way that use of a single service does not. A bucket consists of a major FinTech service, or two or more related services, such as online stockbroking and online investment advice (EY, 2019, pp. 6,18,19).<sup>3</sup>

The adopters, therefore, are consumers with adequate financial means for using multiple buckets of services. Clearly, this does not include those at the bottom of the pyramid who would not have the means to use more than one bucket. Therefore, the level of FinTech adoption in this cohort needs to be looked into and adoption accelerated to promote financial inclusion.

Second, the women constituting 56% of the unbanked globally and overrepresented among the unbanked in most economies (Demirgüç-Kunt et al., 2017, p. 4). They are excluded from the mainstream of financial transactions though often having independent incomes of their own. A spinoff from empowering women through appropriate enablers to carry out their own financial transactions would allow them an agency in household expenditures. This in turn would facilitate the achievement of SDG (5) of achieving Gender Parity.

As part of the COVID stimulus package, three instalments of Rs. 500 each were transferred to women holding basic savings accounts opened under an initiative to promote financial inclusion. It has been reported that “During

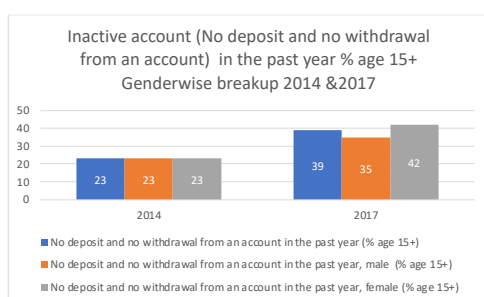
<sup>3</sup> The bucket categories are Money transfer and payments; Budgeting and financial planning; Savings and investments; Borrowing; and Insurance. It’s worth noting that the Savings and Investments bucket does not include the usual plain vanilla savings and deposit accounts but more sophisticated products such as Lending on peer-to-peer platforms; Investment via crowdfunding platforms; Online investment advice and investment management; Online stock broking; and Online spreadbetting. (EY, 2019, p. 19).

April (2020) as many as 20.05 crore such account holders received Rs 500 each in their accounts as the first instalment.”

However, of the Rs. 10,300 crore deposited in April and May, on an average, only Rs 3,000 to Rs 4,000 crore was withdrawn each month. This resulted from accounts being inactivated since these were not being used. The most common reasons for this have been limited connectivity to accounts, physical and online, due to which transactions could not be carried out, and non-renewal of Know Your Customer (KYC) formalities. Obviously, FinTech has not helped much in this context.

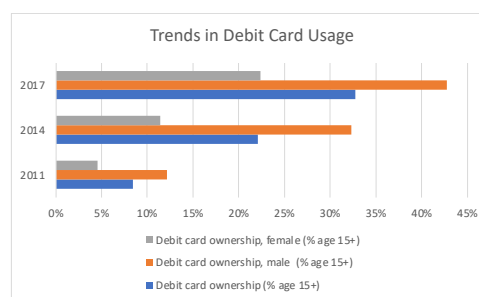
Other Direct Benefit Transfer (DBT) schemes, existing and intended, for Indian women have been conceived to provide them with a corpus of their own, thereby giving them an agency in household expenditures. For that to take effect, women need to be financially empowered through appropriate enablers for executing financial transactions.

Interestingly, inactivity in accounts is higher in the case of women, increasing the gender gap on this count. This confirms previous trends. Figure 7 shows that women have more inactive accounts than men in 2017. Figure 8 shows that though the female ownership of Debit Cards has increased, the skew favouring male ownership has been growing.



**Figure 7: Inactive Accounts. 2014-2017**

Source: *The Global Findex Database. 2017*



**Figure 8: Debit Card Usage. 2014-2017**

Source: *The Global Findex Database. 2017*

Third, the seniors who need to manage their own finances because of sociodemographic issues. Typically, their needs include managing household finances for payment of utilities, provisions, maintenance, and taxes; obtaining life certification for pensioners; and tax-related compliance. While FinTech support is not available for some of these, seniors are often unable to use existing solutions. The reason is not slow adaptation but various age-related physical challenges – the dexterity and visual acuity required for carrying out transactions on a smartphone decline with age. The Millennials and the generations thereafter will face the same problems when they become old unless technology and processes scale up to address these issues.

Not much attention has been paid to this segment in traditional literature dealing with financial inclusion, gender parity being more of a focus area – the welfare of seniors does not figure among the SDGs. The EY (2017, p. 16)

observation that adoption of FinTech is much lower in higher age groups of 55 does not enquire whether the ease of handling technology is a barrier. The special needs for technology-enabled financial inclusion for seniors merit closer attention.

The people at the base of the pyramid, women, seniors, and the rural population (particularly those who belong to the previous three categories) have special needs that should be addressed by technology. The technology currently available seems to be inadequate to meet these special needs and innovations are necessary if the objective of universal financial inclusion is to be achieved. Therefore, my third question is, what are the bottlenecks that are keeping them from inclusion?

### *Innovations for inclusive benefits*

The existing body of literature and research is more focused on aggregated volume-based dimensions of the developments in FinTech and does not look into any metadata that would provide greater insights into the above matters. Most of the information and analysis are more focused on the supply side.

Currently the National Payments Corporation of India (NPCI), a not-for-profit umbrella organisation, is the sole entity operating the retail payments and settlement systems in India and providing the infrastructure to the entire Banking system in India for physical as well as electronic payment and settlement systems. The Reserve Bank of India (RBI) has invited applications for granting licenses to set up an alternate for-profit digital payment framework called National Umbrella Entities (NUE) to strengthen the retails payments and settlement systems. While the Reserve Bank of India (RBI, 2019, p. 3) envisages four goalposts of Competition, Cost, Convenience and Confidence, there is no specific goal for promoting inclusion. Further, the Reserve Bank of India (RBI, 2017, p. 7) has highlighted that innovations in the payments sector are targeted broadly at improving the speed and efficiency of payment systems.

### *The Bottlenecks*

From the supply side, FinTech's failure to reach out to the financially excluded has been affected by several factors. One critical success factor is a complete ecosystem of players from governments, technology firms, FinTech start-ups, and telecoms firms working together to make it happen (Skinner, 2018, Section 4+4 Success Factors, para. 3). In India, such an ecosystem is yet to reach a matured stage.

Vodafone's mobile wallet service, M-Pesa, was created in 2007 for Kenya and was extremely successful in providing millions with access to mobile-based financial services. However, M-Pesa could not replicate its success in India. Creating awareness and driving behaviour change amongst the rural segment of the population

requires tremendous resources in terms of time, money, and human capital that Vodafone would have to divert from its core business in India, i.e., cell phone service. (Lott & Sinha, 2019).

From the demand side, financial literacy, which allows people to make informed financial decisions, is the *sine qua non* for all users. Many studies have established the strong correlation between financial literacy and inclusion. A study in India, confirmed that financial counselling leads to improvements in the continued usage of a formal bank account. (Carpena et al., 2017). A 2019 survey conducted by the National Centre for Financial Education (NCFE) in India estimated the financial literacy level at 27.18%. Of this, the literacy level for the female population was 21% (16% in 2013) against 29% (23% in 2013) for the male population. (National Centre, pp 10-11).

The above bottlenecks are primarily responsible for the digital divide, which inhibits financial inclusion through FinTech.

### *Overcrowding in the FinTech space?*

The invitation for application by the RBI for granting licenses to set up an alternate digital payment framework called NUE can lead to many changes in the FinTech operating environment. Apart from the existing players operating in the market, there are several FinTech Accelerators and Incubators, and a proliferation of new entrants is likely. FinTech operations become profitable only in the long run, and many of the current players have deep pockets for sustaining initial losses. Strict compliance norms should be put in place to ensure that skewed competition does not lead to unfair business practices and loss to the consumer, further extending financial exclusion.

The RBI acknowledges that, “Regulators have a difficult role to play as their decisions have both a direct and indirect impact on competition between incumbent firms and newcomers. They have to provide a level playing field for all participants, but at the same time foster an innovative, secure and competitive financial market.” (RBI, 2017, p. 58).

### *Special concerns in post COVID era*

The post COVID era has seen a spurt in fraudulent transactions on online platforms. Regulatory and supervisory bodies must be extra vigilant to prevent such incidents by ensuring that all participants have necessary checks and balances in place. Simultaneously, a robust advocacy campaign must be carried out to sensitise all users.

Given the job losses, reducing income due to falling returns on investments in fixed return debt instruments, and other economic hardships such as the death of the sole earning member in a family, retail borrowers may try to



meet current expenditures through borrowing. According to various reports, digital lending is projected to increase exponentially in the coming days. It is important to ensure that FinTech organisations do not go overboard and engage in predatory lending practices that could lead to disastrous socioeconomic consequences in their eagerness to garner business.

### *Policy Implications*

Harnessing FinTech for financial inclusion requires ongoing collaborative effort by policymakers and implementation agencies. The Department of Economic Affairs, Ministry of Finance (2019, pp. 106-110) recommends adopting approaches such as Advisory Council for Regulators and Inter-ministerial Group for Monitoring Fintech Adoptions based on global practices.

#### 1. Demand Side

Financial services regulators should develop and strengthen the confidence in FinTech system by putting in place consumer protection measures. They should also ensure that financial service providers make available user-friendly technology enablers so that seniors need not carry out onerous activities for complying with regulatory requirements. Government departments responsible for the welfare of women and seniors should carry out advocacy and support programs with the help of Civil Society. The objectives would be to encourage the use of FinTech through handholding and mitigating risks associated with online transactions. Handholding would also include the involvement of trusted third-party intermediaries for facilitating transactions, analogous to the Citizen Service Centres.

#### 2. Supply Side

Financial service regulators and the government should ensure that Fintech is universally accessible and promote advocacy and the infrastructure to achieve this. Last-mile connectivity must be addressed on a war footing. The India Post Payments Bank network could play an influential role in achieving this.

Financial services regulators should also ensure that user-friendly and adequately secure processes are available to facilitate easy navigation, and consumers are adequately protected by providing measures mentioned for demand-side promotion. They should also mandate Service Level Agreements, monitor transactions failures and frauds, and prevent predatory lending practices and develop an ethos of responsible finance.

The government and institutions such as the Institute for Development and Research in Banking Technology should promote R&D for more inclusive FinTech platforms using AI with natural language support, voice and biometric-enabled transactions, and similar facilitators to help people with special needs navigate online transactions without difficulty. Current support from technology-enabled processes such as Chatbots are extremely straitjacketed.

### Concluding Remarks

This article can, at best, scratch the surface of a highly complex and challenging problem for which there is no silver bullet. Amid all the fervour and excitement about Fintech, the amount of investment it is bringing in, and predictions about the future, policymakers should not lose sight of the primary objective of any innovation in finance – that of financial inclusion.

Future research can attempt to identify the extent to which FinTech is used by the cohorts mentioned earlier and other financially excluded people; and the enablers and inhibitors impacting the usage. The next step would be to focus on enhancing the enablers and neutralising the inhibitors. Going forward, a key final output could be the design and development of prototypes/proofs of concept with more inclusive customer-centricity.

A mere increase in FinTech adoption does not achieve financial inclusion. Nor does a top-down commoditized approach using one size fits all technology. Globally, the recommended approach has been to build an ecosystem of stakeholders comprising the government, financial institutions, civil society, utility providers, regulators, telecom operators, FinTech, and consumers that can complement each other's efforts and create a synergy. It is a model worth exploring for India as well.

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