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How Fintech is Influencing Financial Inclusion in India

Dr Samrat Ray, Frank Lamadoku Attila, Ayush Lohiya, Pragati Rai, Souvik Datta

Dean and Head of International Relations, International Institute of Management Studies, Pune, India

College of Education Studies, University of Cape Coast, Cape Coast, Ghana

Research Associate, PGDM Student, IIMS, Pune, India

Research Associate, PGDM Student, IIMS, Pune, India

Research Associate, PGDM Student, IIMS, Pune, India

ABSTRACT: Fintechs have enable the provision of financial services in India by greatly revolutionizing the country's economy after the global financial crisis of 2008. The new companies have come up to replace the traditional banking ways through which financial services are delivered to the relevant customers. This paper discusses how the emergence of fintech impacts the state of financial inclusion with specific reference to India, the Unified Payment Interface (UPI), and government programs including the Pradhan Mantri Jan Dhan Yojana (PMJDY) and the Pradhan Mantri Mudra Yojana (PMMY). The research findings show that fintech has led to increased financial inclusion because of technological advancement that ensure clients reach a large number of demographics.

KEYWORDS: Fintech, Financial Inclusion, UPI

I. INTRODUCTION

Today India is among the leading major economies with a high rate of annual growth, yet, significant portion of population remains financially unserved. However, 11% of the Indian population is still either under-banked or unbanked, which presents huge opportunities for the industry. The emergence of financial technology, also known as 'fintech', came after the global financial crisis of 2008 and has significantly supported the recent drive for financial transformation. By the use of sophisticated tools, the emergence of fintech has been found to operate banking and other financial services to the unserved and underserved clientele, thus evolving the gap of economic development and financial access. The fintech market in India is predicted to be in a range of \$150 to \$160 billion by 2025, which is evidence of its increasing expansion and importance. This growth has helped to support a number of government programs relating to the financial sector including Digital India, Pradhan Mantri Jan Dhan Yojana (PMJDY), and the Unified Payments Interface (UPI). Such measures have paved way for the increased penetration of digitally enabled financial services across the country with a view to enhancing banking services to the door step of the population particularly within the rural and semi urban zones.

This paper explores the efficacy of fintech in India today and the important contribution that it makes towards enhancing financial access. It looks at the effects of the technologicistic changes that have been brought about by fintech firms and assesses the results of interventional action. Through the identification of the use of fintech in increasing the level of financial inclusion in India, this research contributes to the body of knowledge on how technological advancement is revolutionizing the financial sector to create a financially inclusive economy.

II. REVIEW OF LITERATURE

Asif et al. (2023), Concerning the relationship between financial inclusion and economic growth, examined the effect of financial inclusion on the Indian economy during the period of seven consecutive years. Through their study, which employed secondary data analysis to develop multiple regression models they observed a positive relationship between bank branches, credit-deposit ratio and GDP growth rate. They stated that the increase in the number of branch networks deepened the financial system hence expanding access to financial services hence spurring the economy. According to the study, increased access to banking services enhances the opportunities to save and invest hence enhancing the degrees of economic growth. Also, the improvement of credit-deposit ratios showed that there was a better deployment of financial resources in the country to facilitate the promotion of economic activities.



Goswami et al, (2022), comprehensively examined the role of fintech in financial accessibility in India. Specifically, her study pointed out that fintech firms have greatly improved financial inclusion through mobile money, E-wallets, and P2P lending solutions. He underscored such novelties made financial operations to be easy hence increasing the access of banking services to the general public especially in the peripheral regions. The research also established that the use of technology in the financial services industry has led to the cutting of transaction costs, enhancement of the quality of the financial services, and democratization of access to banking by including customers who were previously locked out. This has not only facilitated access to financial services but has also boosted economic stability and economic development.

Ratnawati, (2020), looked at how financial innovation impacts on financial inclusion level in 22 Arab countries for the year 2004 to 2020. His study shows a positive association between a number of innovations in the financial sector including ATMs and the number of the bank depositors and thus an increase in the level of financial liberalization. In the study, Abruzzian treated financial inclusion as a dependent variable and adopted other related potential variables such as ATM and bank depositors as independent variables and established that the introduction of these financial innovations prominently enhanced financial inclusion. This increase in deposit money banks and the establishment of ATMs was equally found to have an impact in enhancing the access to financial services hence economic participation and inclusion. This was so as far as the selected Arab countries were concerned and therefore the conclusion that financial innovation is a global tool can be made.

Erlando et al. (2020) gave a conceptual discussion on the importance of fintech for financial inclusion in India with due respect to COVID-19 impact. It was a descriptive study in which she provided a general perspective of how fintech has been instrumental in recurring and enhancing financial accessibility through universal digital promotion. MS Datta further pointed out that the COVID-19 pandemic caused an increase in the use of digital financial services due to challenges affecting the traditional banking industry. Fintech companies, therefore, wasted no time in developing innovations that could allow the continuation of financial services provision. Such innovations include digital payment systems, online banking platforms and mobile based financial solutions that in one way or the other raised the level of financial inclusion. Specifically, the study recognized the importance of fintech in this perspective through the provision of economic inclusion of the banked and the unbanked towards economic sustenance and recovery.

Collectively, these works highlight the importance of and need for fintech and financial innovativeness in financial access and economic development. The reviewed technologies and innovations make it easier to access financial services, so they promote increased economic engagement and contribute to more effective economic growth.

III. NEED FOR THE STUDY

Fintech is a relatively young sector in India, but has been gaining ground as an important player in the financial business. Modern technology has played a key role in availing the financial services through Fintech, it has ably filled the gap between the rural and the urban markets. Pros. This technological revolution has brought changes in the original banking functions, which has led to the extension of the banking facilities to the unserved public. This paper's relevance comes from a discussion of the ways in which various fintech solutions are impacting the financial sector in India (Arun, 2021). Thus, using technology advancements, many more services have been created and offered by the fintech companies that target different population categories, including those who were previously underserved by the existing financial system. The purpose of this research is to provide some clearer ideas on the massive roles played by fintech for better financial inclusion in the Indian context. It looks at how technology is being harnessed in order to give people equal opportunities in owning bank accounts and other essential financial products, hence contributing to economic activity.

IV. OBJECTIVES

1. To assess the current status of fintech and financial inclusion in India.
2. To evaluate the role of fintech in enhancing financial inclusion.

V. METHODOLOGY

The research used a quantitative and descriptive research approach and collected data from different journals, government reports, and other reading materials that focus on the fintech industry in India. The research method entails the gathering of data through the identification of articles and official reports that contain information or documents



that would offer an understanding of the current state of fintech and its contribution to financial inclusion. To enrich the given analysis, the study uses statistical data and case that demonstrates the relevant tendencies and changes in the field of financial technology. The data presentation consists of the detailed tables and figures that are employed to achieve the objectives of the study. These kinds of graphics enable the explanation of trends and effects of fintech on financial access in a better way, especially when working with large datasets that would otherwise be hard to explain to the audience. When similar data is processed systematically and analyzed, the purpose is to present its findings in a simple and coherent manner to raise awareness about the contribution of the fintech sector towards increasing the access to financial services in India.

VI. RESULTS AND DISCUSSIONS

Current Status of Fintech and Financial Inclusion

Over the last decade, there has been a tremendous increase of fintech's in India especially due to the 2008 financial crisis. The industry has brought another series of the new technologies such as digital payments, mobile banking, and a wide range of financially innovative products that have been instrumental in enhancing financial inclusion across the country. These technologies have increased access, efficiency and ease of use of financial services and thus increased the demographic of the target market for Financial Institutions, including the less privileged. In 2023, the penetration of fintech in India stands at a tad over 87 percent and this is way above the global average of slightly over 64 percent. This high rate of adoption has further emphasized the fact that fintech solutions have gained considerable traction in people's lives in India. The country has 22 fintech startups that are valued at more than \$1 billion and 33 soon corns, which are companies that are expected to reach the unicorn status shortly (Bankers Institute of Rural Development, 2022). Currently, there are fintech startups that are rapidly growing with the leading cities being Bengaluru, Delhi NCR, and Mumbai these three cities attract the highest investments and funding of 77.8% of its total investment in this sector. This focused approach has paid off and brought developments and innovations that have placed India at the forefront of fintech nations. These startups are not only challenging the existing conventional banking system but are opening new avenues for banking services and inclusion where the existing monopoly was a big barrier, fulfilling the dreams of making banking services available in the urban as well as the rural areas of the country. The exponential growth witnessed in the Fintech sector of India is a clear indication of the importance of the Fintech in the economic growth and financial inclusion.

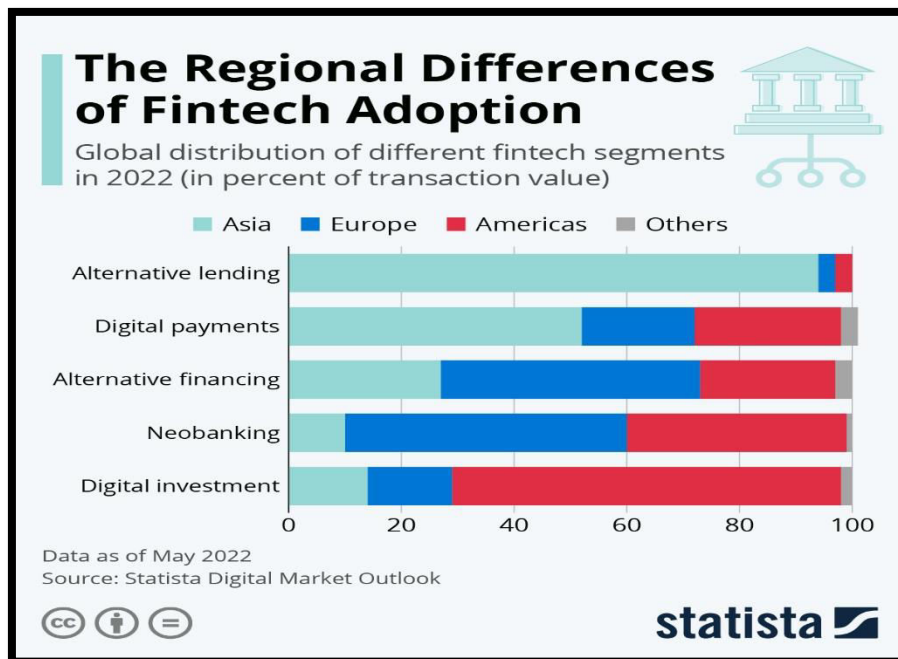


Figure 1: Fintech Market Opportunities in Asia
(Source: Statista, 2022)



A number of measures have been introduced by RBI for providing financial services to the disadvantaged section of the population. They include the national strategy on financial inclusion, the lead bank scheme, the vision of having universal bank accounts in every village, the financial inclusion plan and the national strategy on financial literacy (Kaka et al., 2019). It is these efforts that have gone a long way in improving on the available credit institutions that have enhanced the availability of financial services across the country. The ability to access financial services has shown a significant improvement on the financial inclusion index with a 4.6% from 53.9 in March 2021 to 56.4 in March 2022. It demonstrates effectiveness of numerous measures taken to increase the level of financial inclusiveness. Moreover, there are special programs aimed at enhancing the availability of core banking facilities in the rural areas; it has been defined that the bank branch should be within 5 km radius in respect of areas which are hilly.

The following table captures the evolution of financial inclusion in the subsequent years moving with the pace of the expansion of the banking outlets among other factors.

Table 1: Progress of Financial Inclusion in India

Metric	Mar-10	Mar-13	Mar-14	Mar-18	Mar-19	Mar-20	Mar-21	Dec-21
Banking Outlets in Villages (Total)	67,694	268,454	383,804	569,547	597,155	599,217	1,248,079	1,900,523
Banking Outlets in Villages through BCs	34,174	221,341	337,678	518,742	541,129	541,175	1,190,425	1,844,732
Banking Outlets in Urban through BCs	447	27,143	60,730	142,959	447,170	635,046	426,745	1,412,529

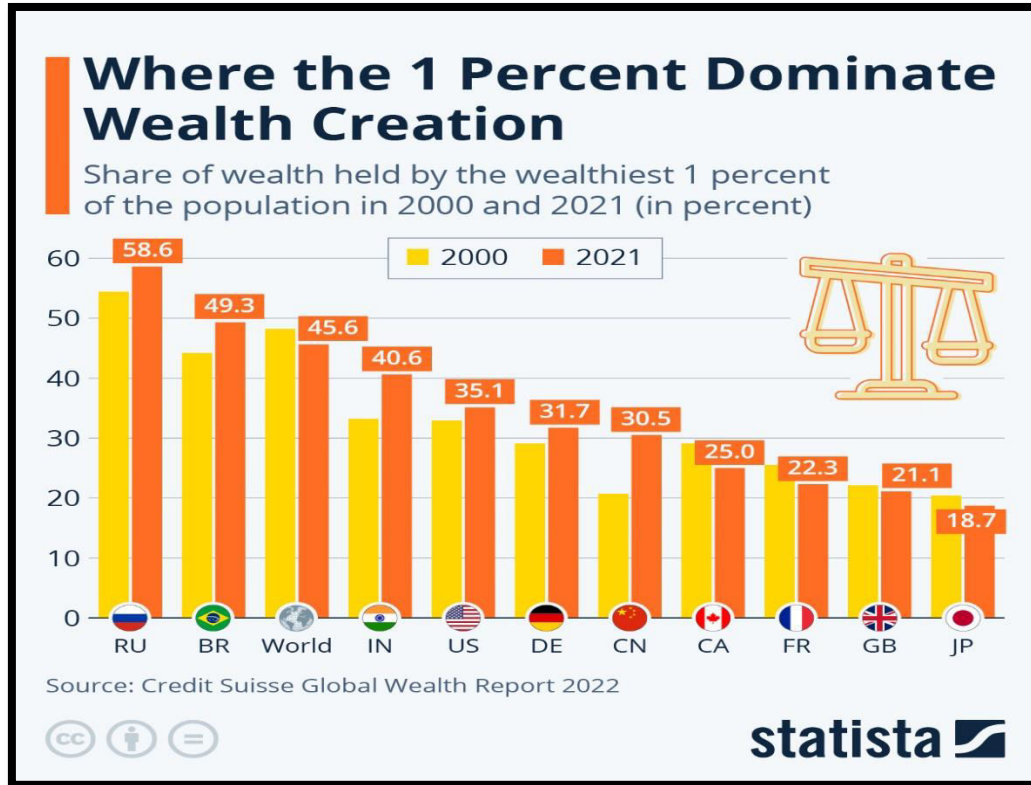


BSBD Opened Million)	Accounts (No. in in	73.45	182.06	243	536	574	600	646	663
KCCs Total Million)	(No. in in	24.3	34	40	46	49	48	47	47
Number of Growth	ATM	NA	NA	NA	222,247	221,703	234,357	238,588	248,307
Credit-deposit (%)	Ratio	75.52	77.09	76.81	75.39	77.7	76.44	72.4	71.3
Number of New Bank Branches Opened		89,167	111,649	123,287	148,869	152,403	156,522	158,334	157,933

Source: Data compiled from various sources



Figure 2: Proportion of Adult Having Account (age 15+)



(Source: Statista report on financial inclusion in India – 2021)

India is one of the largest countries in the world in terms of population and has a population of 1.4286 billion according to the UNFPA’s State of World Population Report for 2023, has recently outnumbered China and is today the most populated country in the world. Out of this large population 68% is in the working age bracket of between 15 and 64 years. This valuable segment is very suitable for continuing the services’ expansion, and recent steps have been made in this direction. Regarding the age of the respondent, the findings show that among the population 15 years and above, 77.53% now possess a bank account, marginally higher than the global figure of 76.2%. This accomplishment is as a result of the collaboration between the RBI and the government that have developed different measures and strategies for enhancing the FSB culture and practice in the country (Kandpal et al., 2019). Such ventures have made it possible to have more people engage in activities that require the use of financial institutions through enhanced access to banking services.

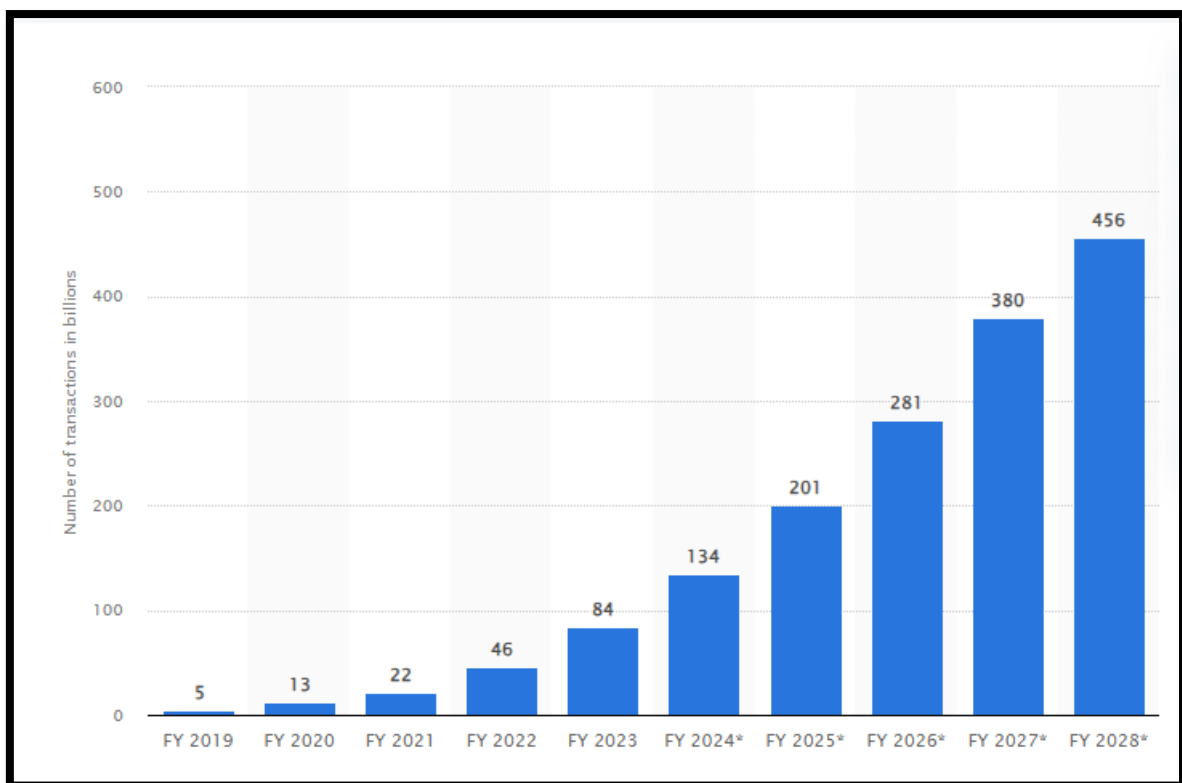
The advancement made by India in financial inclusion has been phenomenal and quite unexpected as the position has shown rise by 42.3% only. Thus, although developed countries already have almost 99% of the financial inclusion Index, the examples of India show that its active, focused approaches work well. In this case, the PMJDY has been crucial to opening bank accounts for individuals who were hitherto not banking, while the UPI has been transformative for transactional processes. There is also a drive to increase people’s awareness of the need to embrace formal financial systems with policies from the Indian government and the RBI aimed at policy awareness. This approach has not only attracted many people to open the account holders but also ensured that people are using the accounts in different aspects of their lives such as financial transactions, saving, and credit (Mishra et al., 2023). This has been especially the case in the rural areas as more people have been forced to embrace the use of mobile money to make their financial transactions. Introduction of programs that would offer banking facilities in areas with a radius that does not exceed five kilometers in hilly and remote areas has facilitated provision of banking facilities to the most hard-core areas. These efforts are vital in the fight against economic inequity and spurring true and progressive development.



The Role of Fintech in Financial Inclusion

India fintech industry comprises approximately 9500 players and they play a major role in the country to achieve financial inclusion. Technological advancements like the UPI, Aadhaar payments, and APIs have upgraded the bounds of financial service delivery and quality. The recent global outbreak of the coronavirus further served as the impetus for firms to embrace digital financial services, intensifying the integration of fintech into consumers' daily interactions. This rapid integration has not only helped to integrate and synchronise the financial process, but has also provided banking opportunities to those who otherwise were remaining outside the periphery of banking system, thus showing the importance of fintech in India.

Figure 3: UPI Transactions



(Source: Statista 2019-2028)

The Unified Payments Interface (UPI), India's stellar payment type has witnessed a phenomenal growth with the transaction values touching INR 139.14 trillion in the fiscal year 2022-23. This upswing further establishes that UPI has been instrumental in simplifying payments and enhancing the reach of digital payments services to larger user base. In the future, the growth of UPI transactions is expected to increase greatly, with expectations that this year's values will reach INR 455.6 trillion and transaction volumes are estimated to reach INR 379.72 billion by 2026-27. Such trends signify the further development of the fintech sector and the ever-increasing incorporation of digital payments into the lives of individuals. The rise of new generations of technologies, including 5G, blockchain, artificial intelligence, among others, should continue this development. These technologies are expected to increase the value and security of financial transactions and expand the financial services to more innovative solutions suited to those who were left behind before. These developments in Fintech are meant to fill existing gaps in financial access, and offer stronger, more effective solutions to the society thus enhancing the financial inclusion and the resilience of the financial sector especially in India.



VII. CONCLUSION

In a broader sociopolitical context, fintech impacted the changes of the financial sector by delivering banking services to new segments of the population in India. Some valuable government schemes like Digital India have supported the growth of fintech and empowered the citizens with affordable and convenient financial services, especially in rural regions. One successful initiative to highlight is the Unified Payments Interface (UPI) that has turned into a critical instrument for facilitating efficient and secure transactions. With the help of UPI, the concept of digital payments has become more convenient, and the variety of its users has expanded. The dynamics of banking in India will continue to undergo changes in the future with developments in the field of fintech. There is also anticipated that the new technologies like blockchain, artificial intelligence, and the future generation of the internet known as 5G will dramatically affect the financial sector. They have the potential of increasing the effectiveness, stability and geographic scope of financial solutions, consequently leading to the improvement of the global and regional financial frameworks as well as addressing the issues of financial inclusion. The advancement of fintech will remain constant over time, enhancing its relevancy for both the urban population and those living in rural areas, thereby supporting economic inclusion.

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