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THE MOBILITY OF DIGITAL FINANCIAL SERVICES DURING COVID-19 LOCKDOWN: AN ANALYSIS

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ABSTRACT

Digital financial inclusion in India has still not permeated a vast segment of society despite it being convenient and providing last mile connectivity to the financial system of an economy. The coronavirus disease (COVID-19) provided the required push towards digital financial inclusion. Therefore, the paper attempts to analyse the digital payment transactions using monthly growth percentages for the period before the lockdown and during the lockdown to evaluate digital financial inclusion in India. The paper also identifies the roadblocks in India's journey towards digital financial inclusion. The paper is based on secondary data obtained from RBI database, National Payment Corporation of India database and various reports. The paper concludes that the lockdown resulted in instant negative growth rates in digital payment transactions which is contrary to the paper hypothesis. This reflected the negative impact of lockdown on the use of digital financial services. The paper emphasizes on the need to provide sufficient digital financial infrastructure, digital and financial awareness programmes, financial services specifically designed according to people's needs and stable employment with sufficient social security to deal with the issues associated with digital financial exclusion.

INTRODUCTION

The coronavirus disease (COVID-19) pandemic has disrupted the economic activities all over the world. India has also suffered economic distress due to the pandemic. The government of India imposed the most stringent lockdown in India to contain the spread of the pandemic in March, 2020. However, the economic crisis due to lockdown eventually led to the un-lockdown phase in India after June, 2020 even though the pandemic still prevailed. The pandemic along with the lockdown has highlighted the importance of financial inclusion and mainly, digital financial inclusion. The Rangarajan Committee Report defined financial inclusion as 'the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low-income groups at an affordable cost' (RBI 2008, p. 297). Digital financial inclusion is defined by CGAP as 'digital access to and use of formal financial services by excluded and underserved populations. Such services should be suited to customers' needs, and delivered responsibly, at a cost both affordable to customers and sustainable for providers'(Layman and Lauer 2015, p. 1).

Digital financial services enable people to conduct financial transactions remotely using either mobile banking (SMS banking, Unstructured Supplementary Service Data service, mobile applications) or internet banking. Digital financial services provide an easy access to financial services which is very low in India . Since the digital financial transactions involves no cash exchange, it can help prevent the spread of pandemic and to keep economy moving to a great extent.

According to International Monetary Fund (IMF), 'during the COVID-19 lockdowns, digital financial services are enabling governments to provide quick and secure financial support to "hard-to-reach" people and businesses, as demonstrated in Namibia, Peru, Zambia, and Uganda. This will help mitigate the economic fallout and potentially strengthen the recovery. Also, to tap the high potential of digital financial services in the post-COVID era, many factors need to fall into place. Equal access to digital infrastructure (access to electricity, mobile and internet coverage, and digital ID); greater financial and digital literacy; and the avoidance of data biases are necessary for a more inclusive recovery' (Eriksson et al., 2020, para.7-8).

With the introduction of Digital India initiative in 2015, there has been a paradigm shift towards the digitalisation of financial services. The government of India has also devised a strategy for Financial

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Inclusion, 2019-24, which aims at achieving a cash less society by strengthening digital financial services in all the tier II and tier VI centres by 2022 The committee also recommended that there should be a financial service provider within a radius of 5 km in every village so as to enable universal access to financial services (RBI 2020). After the Digital India initiative, two events majorly contributed to the digitalisation of Indian economy. The first one is demonetisation of Rs. 500 and Rs. 1000 currency notes in 2016 by the government aimed to curtail the shadow economy in India and to achieve a cash-less economy. Another event is the outbreak of COVID-19 pandemic which led to exchange of cash unsafe thus prompting the use of digital transactions. Therefore, the present paper analyses the use of digital payment systems before and during the lockdown to evaluate digital financial inclusion in India.

THE BACKGROUND

While a lot of literature is available on financial inclusion, literature on digital financial inclusion (DFI) and digital financial services (DFS) has come to forefront recently. In this context, some of the studies on financial inclusion, DFI and DFS have been reviewed to find out the gaps in available literature.

There are numerous studies which have highlighted the importance of financial inclusion and digital financial inclusion. Mohan (2006) argues that financial deepening accelerates economic growth by making finance available to those lacking adequate finance. He cited two major factors as consequence of financial exclusion- i) complications in day-to-day cash flow management ii) lack of financial planning and security due to absence of access to bank accounts. He revealed that financial depth of India is much lower than that of Asian countries. While there has been increase in financial deepening of formal finance, the increase in breadth and coverage is less than adequate. Ramkumar (2017) identified the increase in demand for financial products, growth in GDP, capital formation and accessibility of banking finance to rural areas as the major benefits of financial inclusion and argues that opting for digital transactions will expose people to various financial services provided by the banks in a cashless society.

The impact of financial development on economic growth is most pronounced at lower income levels which enables poorer developing countries to gain most from the development of the financial sector. Also, the link between financial development and income inequality is found to be quadratic implying that financial development is likely to be positively related to inequality at a low level of development but the link between the two becomes negative after reaching a threshold level (Jalilian & Kirkpatrick, 2005). Chibba (2009) argues that to strengthen the FI- poverty reduction (PR)- MDG nexus required four key pillars namely, private (financial and non-financial) sector development, financial literacy, microfinance and public sector support. After reviewing the available literature, it is evident that there is a lot of literature available on the importance, determinants of financial inclusion and DFI and the issues associated with them. However, there are very few studies related to DFS in India. The lockdown during the pandemic has got a very high potential to boost the use of digital financial services. The paper, therefore, analyses the impact of the world's most stringent lockdown in India on different type of digital payments. The analysis evaluates DFI and the issues associated with it in India where 190 million adults are still unbanked as per Global Findex Data, 2017.

THE PROBLEM

The COVID-19 lockdown has highlighted the important role of digital financial services in the smooth functioning of an economy. With the restrictions imposed on the movements of people, digital financial services come as an aid to the people helping them to make money transfers to their family and acquaintances and also to carry out various financial transactions using digital mode. However, appropriate availability of digital infrastructure, digital literacy, trust in digital transactions, data security, availability of money to carry out transactions are also important factors to facilitate DFS. 92 percent of Indian workforce is in informal sector and mainly depends on cash mode of transactions. This makes it difficult for them to use DFS. Since DFI is a way forward to financial inclusion, people need to be financially included first to avail the use of DFS. During the lockdown, the government of India requested the people to use digital financial services instead of cash transactions. Therefore, the use of digital payment services amidst the lockdown can reveal if India's economic environment is conductive or not for the use of DFS and DFI. In accordance, the objectives of the paper are as follows:Digital financial services enable people to conduct financial transactions remotely using either mobile banking (SMS banking, Unstructured Supplementary Service Data service,

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To analyse the digital payment services before the lockdown and during the lockdown to evaluate DFI in India.
To identify the challenges in the India's path to achieve DFI.

METHODOLOGY

The paper is based on the secondary data on 7 digital payment transactions. The data on IMPS, UPI, USSD service (*99#) and AEPS has been obtained from the National Payment Corporation of India (NPCI) database whereas data on mobile banking, RTGS and NEFT has been obtained from RBI database to provide authenticity to the data. The paper considers the monthly data for the period of September 2019 to June 2020 for all the 7 transactions for a better analysis. To incorporate the impact of the pandemic lockdown, the paper undertakes analysis of various digital payments for both before the lockdown period and during the lockdown period. The data from September, 2019 to February, 2020 will represent the trends of digital payments before the lockdown period and the data from March, 2020 to June, 2020 represent the trends for the period of lockdown. The data has been analysed using the statistical tools such as frequency, percentages and growth rates. For better presentation of the data, graphs have also been used. Data from various reports has also been used to meet the objectives of the study. The paper is mainly descriptive and analytical in nature.

Various Digital Financial Services (DFS)

The DFI efficiency is best measured by the growth rates in the digital payment transactions. In order to analyse the impact of the lockdown on digital financial services, the paper takes into account data on 7 digital payment transactions. Though the analysis involves the data on mobile banking, data on Unstructured Supplementary Service Data (USSD) has also been undertaken to specially focus on the impact of the lockdown on people who do not have network connectivity and rely on mobile SMS based services for financial transactions. The analysis is hypothesised on the assumption that the lockdown will result in increasing positive growth rates in digital transactions.

Evidences and Impact Analysis of DFS

Immediate Payment Service (IMPS)

IMPS transactions, introduced in 2010, are used to make inter-bank electronic transfer of funds. The service allows transfer of funds at any point of time including the bank holidays also, i.e., 24X7X365 facility. The

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figure 1 below shows the monthly growth rates of IMPS volume of transactions (in millions) and amount of transactions (Rs. in crores).
[See Figure 1]
It can be observed from fig.1 that while there were fluctuations in the IMPS transactions before the lockdown, there is a significant fall in the growth rate of both IMPS volume and amount of transactions from February, 2020 onwards with the a very steep fall in April, 2020 when the lockdown was its peak. This signifies that the lockdown had a negative effect on the IMPS transactions. While the lockdown was announced towards the end of March, 2020, the pandemic entered India in the month of February itself which explains the significant fall in IMPS transactions after February, 2020. In May, 2020 the government allowed certain relaxations in regions where the COVID-19 had been contained which justifies the significant increase in the growth rate of both volume and amount of IMPS transactions. After increasing in the month of May, 2020, both the transactions again witnessed a decline due to the bleak picture of the Indian economy even after the imposition of stringent lockdown depicting a significant negative impact of the pandemic on IMPS transactions.

United Payment Interface (UPI)
United Payment Interface (UPI) is an instant retail payment system which facilitates inter-bank transactions. Unlike IMPS, most banks do not charge fee on UPI transactions which is more simple and secure to carry out. The figure 2 below shows the monthly growth rates of the volume (in millions) and amount (Rs. in crores) of UPI transactions [See Figure 2]

It is evident from fig. 2 that that the lockdown resulted in the negative growth rates of both the volume and amount the UPI transactions. UPI transactions growth rates follow the same trend as IMPS transactions, i.e., plummeted in April, surged in the May, 2020 due to the relaxations and again slumped in the month of June, 2020. This signifies that the negative impact of lockdown on UPI transactions is significant.

Even though there is evidence of significant negative growth rates during the lockdown period with respect to all the digital transactions except AEPS, there is a trend of positive growth rates from May, 2020 onwards reflecting the future potential of DFS in the unlockdown phase of the pandemic.

IDENTIFYING THE ROADBLOCKS IN THE PATHWAY TO DIGITAL FINANCIAL INCLUSION (DFI)

The above analysis leads us to identify the challenges in India's journey to achieve DFI. India has undertaken many initiatives to achieve financial inclusion, most prominent and recent among them is the PM Jan Dhan Yojana (PMJDY) aimed at eliminating non-price barriers in the way of financial inclusion. The government of India targeted DFI also by making electronic benefit transfers directly to the bank accounts of people. However, there are still certain bottlenecks which needs to be addressed in the way to achieve DFI.
While the government has undertaken so many initiatives to boost financial inclusion, many of the accounts opened under PMJDY remain inactive or low use. According to global findex data 2017, 'in India the share of inactive accounts is 48 per cent — the highest in the world and about twice the average of 25 per cent for developing economies' (Demirguc-Kunt, Klapper, & Singer, 2018, p. 65) . The reason is lack of appropriate financial products which are best suited to the needs of different sections of society. Different needs of various sections of society for different kind of financial products needs to be recognised to design suitable financial products for all. This will facilitate financial inclusion and further adoption of DFS also as financial inclusion is prerequisite for DFI.

Since the COVID-19 and the lockdown resulted in instant negative growth rates in the digital payments, this implies that India is still a cash dominant economy to a larger extent . There is a lack of trust among people in digital payment system, mainly among those people who are not so much technological friendly. Even though the government cash transfers to the poor people led to sudden surge in growth rates of AEPS transactions but the growth rate surged significantly back to the previous levels in May. This imply that people do not use digital financial services voluntarily. The consumer protection risks associated with digital transactions explains this to a larger extent. Zimmerman and Baur (2017) identified the risks to low-income people who are the recipients of cash transfers, whether government to person (G2P) or donor to person (D2P), directly into their bank accounts, as i) inability to transact due to network or service unreliability; (ii)

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insufficient agent or automatic teller machine (ATM) liquidity; (iii) complex user interfaces and payment processes; (iv) poor or no recourse mechanism; and (v) fraud that targets the recipients.

The appropriate digital infrastructure is the key to achieve DFI successfully. However, lack of internet connectivity and inadequate digital financial infrastructure still prevails in many regions preventing people to access DFS. The fact that lack of digital financial infrastructure leads to low level of digital financial services has also been proved empirically (Naumenkova, Mishchenko, & Dorofeiev, 2019).
Another challenge for DFI is the lack of financial and digital literacy among many people, mainly low-income people, females, less educated and rural people. People are not aware of the benefits associated with the use of DFS and even about the different financial services available through digital modes. There is a tendency among people to still rely on traditional bank branches to carry out various financial transactions as they are still not comfortable with using technology.

Digital divide is also prevalent in Indian economy to a larger extent which becomes a hurdle in the use of DFS. As per the global Findex data 2017, 'in developing economies, while 43 percent of men have both a mobile phone and access to the internet, 37 per cent of women do — a gender gap of 6 percentage points. Men are twice as likely as women to have access to both these technologies in some economies, including Bangladesh, Ethiopia, and India' (Demirguc-Kunt et al., 2018, p. 87).

CONCLUSIONS AND POLICY IMPLICATIONS

Digital financial services provide a convenient and an easy way to carry out financial transactions. The COVId-19 pandemic and the resultant lockdown has highlighted the importance of digital financial services even more in the recent times. The paper used the secondary data on seven digital payments to analyse the digital financial transactions during the lockdown, namely, IMPS, UPI, USSD service, AEPS, Mobile banking, RTGS and NEFT. The paper hypothesised on the premise that the lockdown would result in increasing positive growth rates of various digital transactions. The results, however, came contrary to the premise. The lockdown resulted in instant negative growth rates with respect to various digital transactions. Later on, the growth rates improved due to the relaxations in the lockdown in various regions of the country. It was just the AEPS transactions which witnessed a positive growth rate even during the time when the lockdown was its peak due to the withdrawal of the cash transfers provided by the government of India to the most vulnerable citizens which highlighted the need to design suitable financial products and services according to the needs of the vulnerable sections of the society. However, the significant negative growth rates of various digital transactions during the peak of the lockdown period reveals that despite so many initiatives and appeal by the government of India to use digital financial services, the country is still not fully prepared to achieve its objective of digital financial inclusion.

The paper provides some important policy implications on the basis of the analysis and issues identified in the digital financial inclusion. The government of India needs to create the required digital financial infrastructure to facilitate smooth functioning of DFS. The government should organise digital and financial awareness programmes, specifically targeting the needs of the people who still remains financially or digitally excluded. The current programmes by the government to provide financially literacy also needs to be administered well. Another important policy implication is that workers should be provided employment with sufficient social security and stability so as to help them deal with the financial disruptions during any such crisis. This will create smooth flow of money to the workers preventing such significant negative growth rates in digital transactions in the future. Consumer protection rules in digital transactions also needs to be framed so that people develop trust in the carrying out
digital financial transactions.

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