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Are Mobile Financial Services Promoting Financial Inclusion in Bangladesh? An Assessment Study

Bilkis Sultana
Md. Mahbubar Rahman Khan

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Bangladesh Bank

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Bilkis Sultana[1]
Md. Mahbubar Rahman Khan

Abstract

Despite rapid progress of the financial sector in Bangladesh, there are concerns that banks have not been able to include a vast segment of the population, especially the underprivileged sections and rural people into the field of basic banking services. It is now widely evidenced that financial inclusion promotes growth and development. In 2011 Bangladesh Bank has introduced mobile financial services (MFS) for inclusion of the unbanked people in the financial network. The present paper examines whether the introduction of mobile financial services have promoted financial inclusion in Bangladesh. It also analyses challenges confronted by MFS to derive necessary policy options.

JEL Classification: G21, O16

Key Words: Mobile financial services (MFS), financial inclusion, inclusive development, Bangladesh economy

[1]Authors are General Manager and Deputy General Manager of Research Department of Bangladesh Bank respectively. The author would like to thank Biru Paksha Paul and Md. Akhtaruzzaman for their valuable comments and suggestions. Views expressed in the paper are authors' own and they do not necessarily reflect the views of Bangladesh Bank. All comments are welcome at bilkis.sultana@bb.org.bd and mahbubar.rahman@bb.org.bd.

1. Introduction

A good number of empirical literatures reveal that finance contributes to growth by allowing the efficient intermediation of resources among savers and investors (Beck and de la Torre, 2006; Beck, Demirgüç-Kunt, and Levine, 2004); Honohan, 2004; Levine, 2005). During the last two decades following implementation of financial sector reform programs and infusion of new technology, Bangladesh financial services industries have achieved phenomenal success in terms of branch expansion, viability, profitability, innovation and competitiveness. Despite such progress, there are concerns that banks have not been able to include vast segment of the population, especially the underprivileged sections and rural people into the fold of basic banking services.

The key reasons for exclusion of large number people include lack of direct access to financial institutions and suitable products, high operational costs and risks arising from asymmetric information. Financial industry needs to find more cost effective ways to serve the unbanked poor with customized products. Mobile technology may be effective channels in serving the poor by reducing the cost of operation through using low cost technology channels instead of setting up a typical branch. Bangladesh has already million of mobile phone users and wider range of the coverage of Mobile Network Operator's (MNO) that may be used as alternative delivery channel for extending mobile financial services to the unbanked/banked population.

Considering the multi-faced benefits of MFS, Bangladesh Bank has already issued guidelines on MFS to be followed by banks in 2011. Obviously, mobile financial services can bring significant benefits for all stakeholders-service providers and users, especially low income people. Expanding mobile financial services may be a powerful driver of financial inclusion that will also augment the on-going digitalization process of the country. Given this backdrop, it is need to conduct an in-depth study on necessity and potentials of mobile financial services including its cost, risks and regulations.

The objective of the proposed study project are two-fold: first, to review present roles of mobile financial services promoting financial inclusion in Bangladesh and second, to put forward policy options for expanding mobile financial services for inclusion unbanked low income people in financial network. More specific objectives of the proposed study project will be: (a) to analyze the importance and growth potentials of mobile financial services; (b) to review present roles of mobile financial services promoting financial inclusion in Bangladesh; (d) to investigate the existing problems relating to mobile financial services; (e) to develop ways and means for smooth expansion of mobile financial services aiming at promoting financial inclusion.

2. Literature Review

The aspect of mobile financial service is also popular in countries where most of their population is unbanked. Most of the places where banks can only be found in big cities and customers have to travel hundreds of miles to the nearest bank where mobile banking is used as alternative financial service with little or no infrastructure in many of these emerging economies.

Ivatury and Mas (2008) finds that branchless banking has a large contribution to make toward financial inclusiveness in developing countries. It helps address the two biggest problems of access to finance: the cost of roll-out (physical presence) and the cost of handling low-value transactions. The sharp cost reduction creates the opportunity by branchless banking can dramatically reduce the cost of delivering financial services to poor people to significantly increase the share of the population with access to formal finance particularly in rural areas where most of the poor people live. They mention that the poor people are not early adopter of technology and have less access to information about new offerings. They also analyze the key uncertainties relating to branchless banking. So Government programs in India, Russia, Malawi, South Africa and Brazil distribute social protection payments to customers through branchless banking channels. As a result it has significant pro-poor, pro-growth impacts on households, communities and national economies.

Anyasi and Otubu (2009) finds that the economic impact of mobile banking and how mobile banking can helps to create a pace on employment and economic development where most of the people have no access to formal financial institutions. Mobile banking systems may prove to be an important innovation for the developing world to manage money without handling cash.

Deb et al. (2011) find that financial services industry particularly mobile commerce is being popular in remote and rural areas in many parts of the world including Bangladesh in particular. The Banking industries of Bangladesh at present have been matured to a great extent than earlier period and create attention for all section of the people by their various activities including electronic banking. They try to analyzes the dependable factors of mobile banking by a regression model and find that mobile phones will be the most preferred and convenient device for conducting banking transactions and emerge as one for the major payment channels.

Makin (2009) highlights that branchless banking through mobile banking is consider as most powerful option for the emerging countries of Africa and large parts of Asia where a good number of people has no access to formal financial services and there are a variety of mobile services springing up to address their needs. This paper explores relevant issues by building on Consult Hyperion's experiences from two directions: firstly involvement in the conception, development and deployment of M-PESA and other branchless banking initiatives and secondly, conversations with a range of financial regulators from around the world. The role of the regulator and regulatory developments regarding branchless banking where he highlights the establishment of the Alliance for Financial Inclusion (AFI) at the end of 2008, with funding from the Bill & Melinda Gates Foundation is a positive development. Principal technical issues and key regulatory issues have discussed.

Parvin (2013) analyze the traditional banking business pattern where branchless banking is a blessing both for the bank and the customer. She mentions that branchless banking providing unparallel services and easily satisfies the customer in Bangladesh and she tries to predict the future of mobile banking by regression analysis using secondary data mainly. She tries to give some insights and recommendation in this regard which may be use for flourish of branchless banking in future in Bangladesh.

3. Concepts of Mobile Financial Services

Mobile financial services (MFS) refer to such financial services that are provided through mobile phone among people, unbanked people in particular. Mobile financial services (MFS) also known as mobile banking performs finance related functions on a mobile device like a Smartphone or tablet. With the use of a mobile device, the user can perform mobile banking via call, text, website, or app. MFS can bring myriad benefits for all, particularly for unbanked people.

- With Mobile financial services, users of mobile phones can perform several financial functions conveniently, quickly and securely from their mobile.

- Users can check account balance, review recent transaction, transfer funds, pay bills, locate ATMs, deposit cheques, manage investments, etc.
- Mobile banking is available round the clock 24/7/365,
- It is easy and convenient and an ideal choice for accessing financial services for most mobile phone owners in the remote rural areas at lower cost where formal banking is not feasible from commercial viewpoint.
- Mobile financial services utilize the mobile connectivity of telecom operators and therefore does not require an internet connection.
- Mobile banking is said to be even more secure than online/internet banking.

Mobile financial services (MFS) may be classified into two broad categories: branchless banking via mobile phones and mobile banking as a channel for financial services. With branchless banking, users can take advantage of services allowing them to make basic payments—utilities and other bills—and domestic and international remittances. These transactions become fast, easy, and cost-effective through MFS. Users can also participate in savings, credit, and insurance programs. Such services drive the financial inclusion of the unbanked through m-wallet solutions, micro-loans, and micro health and crop-failure insurance. The other side of MFS provides existing banking customers with a highly accessible portal for financial services, increasing convenience. The frequency of interactions between customers and financial providers is enhanced through this mobile portal, allowing for convenient mobile banking and the use of Internet applications on smart phones.

4. Significance of Mobile Financial Services (MFS)

MFS drives financial inclusion. MFS contributes to financial inclusion with a larger impact on those countries with very low financial inclusion rates. Even developed countries with larger banked populations can reap significant benefits as MFS spreads, with much of these benefits accruing to the poorest segments of society. The impact varies by country, depending on, for example, the existing level of financial inclusion and the level of mobile penetration. The study of the Boston Consulting Group (2011) on Pakistan, Bangladesh, India, Serbia and Malaysia finds that the impact of MFS ranges from a 20 percentage point increase in financial inclusion in Pakistan (from 21% to 41%) to a 5 percentage point increase in Malaysia (from 90% to 95%). The other three countries are likely to experience an impact of around 10-12 percentage points.

Evidence also shows that financial inclusion can increase a nation’s GDP (King and Levine, 1993). Access to credit facilitates entrepreneurship and new business creation (World Bank, 2009). The formalization of remittances and domestic payments adds an “accounting benefit” to the economy, and the increased savings within the banking system facilitates the expansion of credit. The Boston Consulting Group (2011) reports that mobile financial services can reduce financial exclusion by 5 percent to 20 percent through 2020 and increase GDP by up to 5 percent, with Pakistan, for instance, potentially seeing a 3 percent uplift. This increase in GDP will also create additional jobs and businesses, and stimulate additional tax revenues for governments. MFS could accelerate economic growth by up to 5% in the case of India, where it helps fuel entrepreneurship and new business creation. GDP in Pakistan, Bangladesh and Serbia could be between 2-3% higher in 2020 as a result of MFS, while the impact on Malaysia is more modest, at around 0.3% reflecting the smaller financial inclusion impact. This additional growth will be associated with an increase in employment, creating up to 4 million additional jobs in India, as well as an increase in tax revenues for governments, spurred by the increase in economic activities.

From a social perspective, financial inclusion promotes inclusive growth which is especially meaningful for the more developed countries in the study, such as Serbia and Malaysia. In Malaysia, for example, economic inequality could be reduced by an additional 5 percent by 2020 with MFS, relative to the baseline. The benefits of MFS accrue to the poorest of the population by supporting entrepreneurs with savings and credit, reducing leakages and costs imposed by middlemen, and facilitating domestic and international remittances and transfers.

For the poor in any country, financial shocks put a severe financial burden on families that can be hard to overcome. Such shocks can come from natural disasters, unexpected medical emergencies, or loss of income due to injury, or even bad luck. In Bangladesh, for instance, floods occur on average every five years, last 35 days, and affect up to 75 percent of the population. Average flood damage cost is US$ 365 per household, or 30 percent of the average annual household income. Most of the damage hits crops and property (Akhter et al 2007).

MFS can help the poor prepare for and respond to shocks, including natural disasters. In Pakistan, EasyPaisa launched a relief payment distribution system. During floods, EasyPaisa used its platform to solicit donations and distribute donations. The same concept was used in Haiti to provide earthquake relief. Another example is Kenya M-Pesa's UAP Insurance, which insures poor farmers through mobile phones against weather-induced crop failures. Claims are disbursed as soon as weather information is verified.

MFS will help reduce income inequality by increasing opportunities for the poorest segments of society to experience the benefits of financial services, and hence mitigate income and expenditure volatility. In addition to a reduction in measured inequality, MFS brings many other important benefits within reach, in particular, education and healthcare, for example, by providing access to insurance to help mitigate the impact of unexpected shocks. These will in turn have critical long-term impact on development, especially rural development.

5. Data and Analysis

To attain the objectives of the study, the required information/data have been collected from secondary sources. Data ranging from January 2015 to January 2016 are used. The secondary sources include articles, reports of national and international Organizations on mobile financial services and country experiences. A descriptive analytical tool has been adopted to derive the objectives in the paper.

6. Mobile Financial Services in Bangladesh

Among two models of MFS, Bangladesh has adopted bank-led model in delivery Mobile Financial Services (the other model is telephone company led model, telco model in brief). According to guidelines issued in 2011, Bangladesh Bank permits the following Mobile Financial Services (in broad categories):(i) Disbursement of inward foreign remittances;(ii) Cash in /out using mobile account through agents/ Bank branches/ ATM's/ Mobile Operator's outlets; (iii) Person to Business Payments (e.g. utility bills payment); (iv) Business to Person Payments (e.g. salary disbursement by corporate bodies/industries/offices etc); (v) Government to Person Payments (e.g. elderly allowances, freedom-fighter allowances, subsidies, etc); (vi) Person to Government Payments e.g. tax, levy payments; (vii) Person to Person Payments (among registered account holders of the same bank) and (viii) Other payments like microfinance, overdrawn facility, insurance premium, DPS, etc. To reap benefits of mobile technology based financial services, banks in Bangladesh have undertaken many initiatives motivated by Bangladesh Bank, the central bank of Bangladesh.

Bangladesh Bank has provided approval to 28 banks for running mobile banking services; out of 28 banks, 18 banks have already launched mobile financial services up to January, 2016. The number of clients stood at 33.18 million at the end of January, 2016. The number of daily transitions and amount of daily transaction stood at 3.96 million and BDT 5581.8 million in January 2016. The statement on mobile financial services is depicted in table 1.

Table 1: Key Information on Mobile Financial Services in Bangladesh

Serial no.	Description	Amount (in January,2016)	Amount (in January,2015)	% Change over previous year
1	No. of approved Banks	28	28	0
2	No. of Banks started to convey the service	18	19	-5.26
3	No. of agents	569,656	535,821	6.31
4	No. of registered clients in Lac	331.38	252.36	31.31
5	No. of active accounts in Lac	136.33	110.53	23.34
6	No. of total transaction	118,832,401	82,068,551	44.80
7	Total transaction in taka (in crore BDT)	16,745.27	11,337.58	47.70
8	No. of daily average transaction	3,961,080	2,735,618	44.80

Source: Payment System Department, Bangladesh Bank, 2016

Among different services, cash in and out cash services dominate. The amount of cash in and cash out transaction stood at BDT 4,5874.5 million and BDT 4,0337.7 million in February 2015. The other mentionable services include P2P transaction, salary disbursement, utility bill payment and inward remittances. The statement on product-wise mobile financial services is depicted in table 2.

Table 2: Product-wise information on Mobile Financial Services in Bangladesh (amount in crore taka)

Serial no.	Product-wise information	Amount (in January, 2016)	Amount (in January, 2015)	% Change Over previous year
a.	Inward Remittance	3.72	2.85	30.53
b.	Cash In transaction	6,969.25	4,742.44	46.95
c.	Cash Out Transaction	6,128.01	4,174.56	46.79
d.	P2P transaction	2,862.69	2,139.52	33.80
e.	Salary Disbursement (B2P)	157.79	76.93	105.11
f.	Utility Bill Payment (P2B)	114.73	59.79	91.89
g.	Others	509.07	141.49	259.79

Source: Payment System Department, Bangladesh Bank, 2016.

In Bangladesh, a large number of NGOs have emerged to provide collateral free credit to the poor inspired by the apparent success of Grameen Bank and due to failure of formal financial institution in reaching the poor. Yet outreach of microfinance remains well below its potential. One of the key hurdles for providing financial services to poor people is high operational cost and resultant interest rate keeping a large number of poor people excluded from formal financial services. Mobile financial services have opened new windows for banking the unbanked. Though Bangladeshi leading MFIs use ICT in handling top management issues, they are lagging behind in case of mobile microfinance programs. Some MFIs like BRAC, ASA are providing mobile financial services only in the form of remittances. If a more enabling environment can be created, the higher number of microfinance institutions (MFIs) will come forward to provide all sort of mobile financial services.

According to recent survey of Institute of Microfinance (Access to Financial Services, Funded by UK Aid, 2011), about 41% of poor HH do not have access to any type of credit. 38% of all HHs have access to MFI service. So, Banks and MFIs can use mobile financial services for promoting financial inclusion among unbanked people.

7. Global Experiences and Developments

Pénicaud and Katakam (2014) provide an excellent account of global developments in the area of mobile financial services planned for the unbanked people. It is estimated that 2.5 billion people in lower to middle income countries are unbanked. They lack the financial services they need to invest in their livelihoods, protect their assets, and avoid falling deeper into poverty. Traditional bricks-and-mortar banking infrastructure is too expensive to serve the poor, particularly in rural areas. However, more than 1 billion underserved people in these markets already have access to a mobile phone, which can provide the infrastructure to offer financial services sustainably, such as payments, transfers, insurance, savings, and credit. As the industry moves on one more year, exciting new developments are taking place.

In 2014, the mobile financial services sector continued to expand, boosted by the creation of more enabling regulatory frameworks in several markets. Now available in over 60% of developing markets, mobile financial services (MFS) are firmly established in the financial sectors of the majority of the developing world. The key trends observed in emerging mobile financial services industry in 2014 are as follows:

- 255 mobile money services are now live across 89 countries. In addition to USSD, STK and IVR, these services are increasingly available through mobile applications. This trend will continue to increase as smartphone penetration rises.
- While competition is heating up in markets where mobile money is available, a growing number of mobile network operators (MNOs) are showing interest in the development of interoperable solutions. In 2014, MNOs interconnected their services in Pakistan, Sri Lanka and Tanzania, following in the footsteps of MNOs in Indonesia, where interoperability was implemented in 2013.
- Regulators are increasingly recognising the major role that non-bank providers of mobile money services can play in fostering financial inclusion and, as such, are establishing more enabling regulatory frameworks for the provision of mobile money services. Reforms have been passed in Colombia, India, Kenya and Liberia this year. Today, in 47 out of 89 markets where mobile money is available, regulation allows both banks and non-banks to provide mobile money services in a sustainable way.
- Providers are now expanding into adjacent markets for mobile financial services, leveraging their strengths in mobile money to provide mobile insurance, mobile savings and mobile credit to customers who previously never had access to formal financial services.

For the mobile money industry in particular, 2014 marked the achievement of several important milestones:

- The number of registered mobile money accounts globally grew to reach just under 300 million in 2014. There is still huge potential for future growth, however, as these accounts only represent 8% of mobile connections in the markets where mobile money services are available. In 2014, seven new markets joined the ranks of countries where there are more mobile money accounts than bank accounts. 16 markets now hold this status, indicating that mobile money remains a key enabler of financial inclusion.
- The industry is getting smarter about what it takes to prompt mobile money adoption: active mobile money accounts stand at 103 million as of December 2014 and an increasing number of services are reaching scale 21 services now have

more than one million active accounts. For investors, industry partners and fellow stakeholders in the financial services industry, this is good news.

Mobile money providers are continuing to invest in improving and expanding their services, particularly through the development of the ecosystem, showing important commitment to the long-horizon investment required by this industry. In particular:

• Providers are strengthening their internal capabilities to address an increasing number of users and transactions through platform migrations and extension of application programming interfaces (APIs) to third party users.

• While domestic P2P transfers and airtime top-ups continue to dominate the global product mix in terms of volume and value, the fastest growth in 2014 occurred in bulk disbursements, bill and merchant payments - reflecting an expanding ecosystem of institutional and business users of mobile money.

• 2014 saw a steep increase in the number of international remittances via mobile money, primarily driven by the introduction of a new model using mobile money as both the sending and receiving channel. Mobile money is helping to reduce the costs of international remittances for users: survey respondents reported that the median cost of sending USD 100 via mobile money is USD 4.0, less than half the average cost to send money globally via traditional money transfer channels.

• Merchant payments are on the rise, reflecting strong interest among mobile money providers to facilitate customers' daily expenditures on goods and services. More can be done to drive merchant adoption, however, as only 25.4% of the 258,000 merchants registered to use mobile money are currently active.

Yet, despite these significant achievements, the mobile money industry today still faces challenges that will need to be addressed in order to ensure the healthy provision of mobile financial services to unbanked and underserved users.

8. Prospects and Challenges of MFS in Bangladesh

Bangladesh has huge potentials in promoting financial inclusion which lies in over 100 million mobile phone users, expanding green banking, massive presence of youth people, more involvement of corporate and Govt. sector in providing Staff salaries via MFS and over 10 million foreign remitters. However, there are challenges in reaping benefits of MFS which includes wide use of OTC channel instead of personal account, agent's insecurity in handling big amount of cash and addressing ML and TF issues.

9. Policy Options

Bangladesh needs some policies in addressing challenges faced by MFS industry. These includes necessary steps to encourage users to use personal account in transactions, concerted efforts for removing insecurity problems of agents in handling big amount, coordinated steps to lower transaction cost, monitoring ML and TF issues in MFS closely.

10. Conclusion

As easy access to finance promotes growth and alleviates poverty, promoting financial inclusion is an integral ingredient of development agenda in Bangladesh. Since inception, performance of mobile financial services (MFS) is encouraging. However, much effort needs to expand MFS network to include the remaining unbanked people. A field survey based research may be undertaken for getting necessary insights in formulating and implementing proper policy on mobile financial services (MFS).

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