



Impact of mobile financial services on financial inclusion in Bangladesh

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Abstract

This paper investigates the impact of mobile financial services (MFS) on the financial inclusion and economic growth experienced in Bangladesh. This paper examines the impact that MFS systems, including bKash, Rocket, amongst others, have in terms of increasing the ease of financial access, volume of transactions, and participation of economic activity following their increasing adoption. Incorporating a structured questionnaire and an online survey of 400 respondents, quantitative research methodology used by the research evaluates the way in which MFS can increase the access to financial resources as well as improve the GDP. The findings indicate that extensive adoption of MFS significantly enhances financial inclusion, and also improves the economies within the locals, particularly remittances and person-to-person payments. The use and adoption of MFS were also found to be dependent on factors of demography such as gender, age, income, and education. Regression research has found that adoption of MFS and GDP growth have positive correlation with each other showing that MFS is a driving force in the development of Bangladesh. Despite the impressive achievements, there are still some access problems in rural regions, and there exist gender differences. The report presents several proposals about enhancing digital literacy and expanding MFS infrastructure so that more people can be financially included and have a more active part in the economy.

Keywords: Mobile Financial Services; Financial Inclusion; Economic Growth; Demographic Factor; Remittance; Gross Domestic Product



1. Introduction and Background

Mobile Financial Services (MFS) are one of the most revolutionary innovations in Bangladesh financial system to connect the formal banking with the huge unbanked population. Since the advent of services such as bKash that was launched in 2011, MFS has blossomed due to the new opportunities that it has brought such as providing secure, convenient, and cost-effective financial products and services over the mobile phone (Sharif et al., 2024). These services have helped millions of individuals, especially in rural and underserved vicinities to access the financial facilities without necessarily having bank accounts (Akhter & Khalily, 2020). This is how MFS in Bangladesh evolved and highly connected with the Bangladesh vision of financial inclusion, digital transformation, and poverty reduction. Originally positioned to support the easy transfer of money, MFS providers have over time expanded their services to cover inward remittances, salary payments, utility payments, government to person transfer and payments to merchants (F. Hasan, 2023). Not only has such growth increased accessibility but also embedded financial services into everyday lives of individuals and businesses and has helped in the overall growth of the economy. Considering the socioeconomic context of Bangladesh, where a large percentage of the population is left out of the conventional banking reach, MFS has a tremendous role to play when it comes to providing financial inclusion (J. M. Sadik-Ul Islam Smaron et al., 2023). MFS helps to increase the level of the formal economy participation by reducing the cost of transactions, providing increased security, and providing easy access to financial products. Its proliferation also poses some fundamental questions in its direct and indirect effects on macroeconomic factors especially the Gross Domestic Product (GDP) (Hasan, 2020).

The development of Mobile Financial Services (MFS) in Bangladesh lies in increasingly high demand over affordable access to financial services among the vast number of unbanked people in the country (Rouf, 2024). Prior to 2011, majority of the rural households used informal method of sending and receiving money which was expensive, risky, and time consuming. In realizing this gap, the Bangladesh Bank developed guidelines to drive the digital financial services, and this saw the country receive the first recognized formal MFS providers in the country (Gupta & Dhingra, 2022). In 2011, bKash (a joint venture involving the BRAC Bank and Money in Motion) officially entered the European market and rapidly emerged as the first mover of mobile money in Bangladesh. Its easy-to-use person to person (P2P) payment model was highly adopted by migrant workers and the rural population since it enables the transfer of funds through mobile phones in real time and in a secure way (Bin Kamal Md Khalid et al., 2020). To the success of the venture, other banks and telecommunication operators joined the league with Rocket by Dutch Bangladesh Bank, Nagad by Bangladesh Post Office, and others. The scope of MFS has over the years grown way beyond money transfers. The services offered in these platforms have been in the form of inward remittances, salary disbursement, government safety net payments, merchant transactions, and utility bills payment (Abiduzzaman, 2025). This growth has been facilitated with regards to

regulatory policies of the Bangladesh Bank which promoted financial innovations and security of customers as well as transparency. Now MFS is a booming part of the financial landscape of the country (S. S. M. S. Huda et al., 2024). There are large numbers of transactions taking place every day via MFS platforms, with overall transaction volume increasing year-on-year, according to central bank data. This development can be seen as a transition between cash-based informal transactions to more inclusive, digitalized, and formalized financial system which is helping Bangladesh in the path of financial inclusion and digitalization (S. S. M. S. Huda et al., 2024). Since 2011, Bangladesh has gained access to a number of Mobile Financial Service (MFS) providers which have played a role in facilitating the digital finance in various ways. Others have achieved a national hegemony, whereas some target the smaller groups of the market (Hasan, 2023). The major MFS operators include:

bKash: A program to allow money transfers in Bangladesh was launched in 2011 as a joint program of BRAC Bank and Money in Motion as bKash, which is the largest MFS provider in Bangladesh (J. Mahmud, 2024). It is well known in terms of its broad agent base, and easy to use P2 P funds transfer system. bKash has added in merchant payments, remittances, bill payments and savings over the years (J. Mahmud, 2024).

Rocket (DBBL Mobile Banking): One of the first competitors to bKash was introduced by the Dutch-Bangla bank, which was Rocket. It provides the services of cash-in, cash-out, remittance, utility bill payment and salary disbursement (J. M. Sadik-Ul Islam Smaron et al., 2023). The fact that Rocket is linked to the accounts of DBBL creates an advantage to customers who utilize the bank services (Sharif et al., 2024).

Nagad: The Nagad was initially operated by the Bangladesh Post Office and rapidly became one of the major competitors, as transaction costs were low, and operations were considered as being user-friendly (Sharif et al., 2024). It offers transfers of P2P, top-ups on mobile, bill payments and disbursements by government. Its competitive low-cost approach has helped win millions of consumers in a brief period of time (S. S. M. S. Huda et al., 2024).

Upay: It is a service of United Commercial Bank (UCB) and is used to transfer money between two individuals peer to peer, utility payment, recharging mobile, and settlement of merchants (Bin Kamal et al., 2020). The feature also accommodates QR-based transaction to facilitate cashless purchasing experience.

SureCash: SureCash was launched by Progoti Systems, and it is prominent in terms of its association with schools, colleges, and universities to collect fees. It also carries salary payments, government payment and remittance (Abiduzzaman, 2025).

MCash: Managed by Islami Bank Bangladesh Limited, MCash is mainly used by its customers to make mobile-based transfers, transactions at merchants and also to pay the bills (Hasan, 2020).

Tap 'n Pay: Tap 'n Pay Tap n Pay is a service of Meghna Bank, and the service specializes in cardless, as well as QR-based payment services, primarily to urban customers and businesses (Hasan, 2020).

OK Wallet: OK Wallet is an electronic wallet provided by ONE Bank Limited and it focuses on combining banking with mobile services, including P2P transfers, payment to merchants, ticket booking and payment of utility bills (Hasan, 2020).

MyCash: MyCash is a service largely focused on the Bangladeshi migrants to other countries; however, it also provides basic MFS services, including payment of bills and airtime re chargers (Hasan, 2020).

The number of customers covered by these providers considered collectively runs into millions serving customers in Bangladesh. Whereas bKash, Rocket, and Nagad take the leading position in the market, smaller providers are active in the industry in terms of fulfilling specific niches, remittance services, educational payments, or QR-based solutions (S. S. M. S. Huda et al., 2024). Combined they constitute a competitive ecosystem that is broadening financial access and increasing the level of financial inclusion (Akhter & Khalily, 2020). This paper gives an overview of mobile financial services in Bangladesh and offer an analysis of the transaction trends in the various product categories that bank on 2014-2024 predictions, as well as conduct their cost-impact analysis on to the GDP of the country. The paper seeks to shed light on how MFS has emerged as a motor of financial inclusion and economic growth and draw lessons, which are relevant to policymakers and financial service providers and development practitioners.

2. Literature Review

Between 2014 and 2024, there was a marked increment in Mobile Financial Services (MFS) transaction volume of the country implying the increasing dependence of the nation on digital finance. It is a relatively low figure in 2014; nevertheless, the quantity increased many times over the last decade because of the rapid development of networks of agents, a higher number of smartphones, and government projects, such as digital pay-outs, and a higher client trust level (Hasan, 2023). The COVID-19 outbreak of 2020 has also promoted the use of artificers with consumers shifting to online transactions and the data shows that there has been a steady growth of 1.96 percent annually with a significant rise after 2018 after the introduction of other transactions such as merchant payments and utility bill collections. MFS was a significant addition to the economy of the country and a turning point in the financial inclusion when its transactions volumes reached its peak in 2024 (Lahnech & Chami, 2025). During the 2014-2024 period, inward remittances via Mobile Financial Services (MFS) in Bangladesh have been on a steady rise as both MFS systems emerged to be a viable source of migrant workers to send money back home to their relatives (Sharif et al., 2024). MFS remittances started off limited by the regulatory constraints and by lack of knowledge. But when the MFS providers joined efforts with foreign money transfer

operators the service became more frequent (Mannan & Farhana, 2023). Digital remittance channels were further boosted by the government applying lower transaction fees and a faster delivery channel, which was also less expensive when compared to conventional banks (Mannan & Farhana, 2023). The largest increases were observed after 2018 and during the COVID-19 outbreak when the digital transfers became the main source of family's survival. Remittances had become a very valuable MFS byproduct by 2024 and contributed tremendously to the national economy and foreign exchange reserves on top of overall household spending and financial inclusion (Akter, 2020). Between 2014 and 2024, P2P transactions remained the greatest staple of Mobile Financial Services (MFS) in Bangladesh, as millions of their users use the platforms to send money to friends and family in a safe and timely way. The popularity of such services like bKash was initially mostly because of this service, especially amongst the rural families that received funds sent by the urban workers (Shahriar, 2025). When agent networks and the use of smartphones became popular, the volume of transactions also surged, and rules and regulations enacted by the government on the amount of transaction per given days and per month ensured its transparency (Ingale, 2024). The popularity of P2P payments increased greatly during the COVID-19 pandemic as people did not have physical access to banks. P2P kept on being the most popular MFS by 2024 and comprised of most of all transactions and played a dominant role in financial inclusion (Shahriar, 2025). The MFS-based merchant payments have been growing fast, spreading the cashless transactions to industries such as retail and services in Bangladesh, between 2014-2024 (Sadik & Rahman, 2024). Many metropolitan centers could only utilize the merchant use of QR codes in the initial periods, but its usage hit a skyrocket after implementing the QR codes, cashback offers, and interconnections with the online purchase in the year 2017. Major stores and little shops also began accepting payment in the form of bKash, Nagad and Rocket in an attempt to reduce their dependency on money currency (Sadik & Rahman, 2024). This tendency was more fueled by the COVID-19 epidemic where people started to resort to the use of contactless digital payment. Merchant payments were one of the MFS sub-products that recorded the fastest growth rate by 2024, an indication of a tremendous transformation towards a digital economy (Rouf, 2024). Between 2014 and 2024, payouts made via MFS have been growing regularly with companies and organizations adopting the digitalized format to manage payrolls more efficiently. Factories, especially those that deal in apparel began using MFS to directly pay workers, ensuring transparency, and reducing administration costs hence the use increased which was previously only common in NGOs and small-sized businesses (Guo, 2024). The government also assisted in digitizing salaries in order to broaden financial inclusion of low-income earners, especially the women in the RMG industry. This tendency was enhanced during the epidemic as online payment of wages was required to continue providing staged payments. By 2024, the salary disbursements also created a significant sub-product that enriched access to official financial services by the employees (Mannan & Farhana, 2023). The number of utility bill payments using MFS between 2014 and 2024 saw a dramatic rise and this aspect gives the consumers a viable alternative to

waiting in queue at the bank or offices. Initially they only added electricity bills to it; but, as time progressed, gas, water, internet, and telecom services were also added, which gave households a one-stop-shop (Sille et al., 2024). The rising adoption was inspired by the steady rise in the smartphone use and urban digital literacy and the governmental efforts were made to foster e-governance that boosted this sub-product (Sriram Divi et al., 2024). By the year 2024, the use of MFS to make payments on billing utility errands had gained popularity, saved consumers time and money and also developing a culture of digitalized transactions (Akter, 2020). Between 2014 and 2024, MFS transactions reflect a remarkable growth in government transactions. MFS can play a pivotal role in the electronic distribution of social safety nets, stipends, subsidies, and tax payments (Md. N. Huda & Sony, 2024). Initially, MFS was used in smaller scale projects but after the government applied it into the larger social welfare programs such as aged allowances and payment to homes in need, its use spread out. This included the under-represented populations in the formal financial system and ensured transparency and made heists minimal (Awuah, 2025). The government enhanced efficiency by encouraging the collection of tax and fees by the use of MFS. Topicality of government transactions as a sub-product by 2024 consolidated the status of MFS as a means of governance change and financial inclusion (Md. N. Huda & Sony, 2024). The knowledge gathering about the Mobile Financial Services (MFS) in Bangladesh is missing a lot of vital details despite numerous research. Most studies focus on one of the platforms, like bKash or Nagad, and do not provide a comprehensive analysis of every MFS operator. The impact of some MFS product-types, such as P2P transfers, remittances, merchant payments, as well as government transactions, on broader measures of economic activity such as GDP are seldom analyzed, although volumes and adoption rates are commonly researched. Moreover, there is a lack of longitudinal research that covers the whole decade (2014-2024) and limited studies have been conducted to connect the MFS with financial inclusion in the low-income, marginalized, and rural households. These gaps reveal that to get a complete picture of the role that the MFS plays in the digital and economic transformation of Bangladesh, a holistic study that combines transaction data, its economic impact, and inclusive financial access is needed.

There are quite a number of challenges that the study has to surmount that may affect the scope and depth of the study. Both because of varying reporting standards and different data availability, annual metrics across all MFS providers in 2014-2024 may not always be easily available and consistent to compare (Md. T. Hasan, 2020). Second, separating the impact of MFS and a variety of confounding variables in the direct effects of MFS will be required to affect macroeconomic variables like GDP and this may lower the precision of regression analysis (Mannan & Farhana, 2023). Third, in some facts, we might not be able to capture heterogeneity because of different user behavior, adoption in different regions, and digital literacy levels between urban and rural individuals (Sharif et al., 2024). Finally, albeit the study is focused on the transaction volume and the product segmentation, the qualitative components such as the customer satisfaction, reliability and regulatory updates could have an impact on the overall outcomes regardless of them being



more challenging to quantify (Akhter & Khalily, 2020). Collectively, these issues identify the main research problems that need to be taken into consideration throughout the study. This study aims to address the following research questions:

RQ1: How does the overall usage of Mobile Financial Services (MFS) influence financial inclusion in Bangladesh?

RQ2: Which is the relationship between MFS transaction volume and the economic participation of urban and rural populations?

RQ3: How do specific MFS services, such as person-to person (P2P) transfers and remittances, affect users' access to financial resources?

RQ4: What role do MFS-based merchant payments and utility bill payments play in enhancing financial accessibility?

RQ5: How do demographic factors influence the adoption and usage of MFS in Bangladesh?

Consistent with the research questions and the literature of previous study, the subsequent research objectives were formulated:

RO1: To evaluate the overall impact of Mobile Financial Services (MFS) on financial inclusion in Bangladesh.

RO2: To analyze the relationship between MFS transaction volume and economic participation of urban and rural populations.

RO3: To assess how specific MFS services, such as person-to person (P2P) transfers and remittances, affect users' access to financial resources.

RO4: To investigate the role do MFS-based merchant payments and utility bill payments play in enhancing financial accessibility.

RO5: To examine the influence of demographic factors on the adoption and usage of MFS in Bangladesh.

2.1 Hypothesis Development

According to research studies, MFS platforms like bKash and Rocket are vital for expanding access to financial services, especially for Bangladesh's unbanked population (Shahriar, 2025). By making it possible for individuals to access basic financial services like loans, savings accounts, and payments even in remote places with limited access to conventional banking infrastructure, MFS promotes monetary inclusion (Mahmud & Tulla, 2024). Improved economic empowerment for marginalized people has actually been related to the broad implementation of MFS (Taher, 2025).



H1: *The overall usage of Mobile Financial Services (MFS) significantly increases financial inclusion in Bangladesh.*

Higher MFS transaction volumes have been associated with more financial activity in both rural and metropolitan locations. Ingale, (2025) claim that MFS uses a trustworthy remittance channel, enabling individuals in both rural and metropolitan locations to participate financially. Regional economies are supported, and inclusive growth is promoted when MFS is used for company transactions, particularly small trading, and remittances (Akter, 2020).

H2: *There is a positive relationship between the transaction volume of MFS and the economic participation of urban and rural populations in Bangladesh.*

P2P remittances and transfers are essential parts of MFS because they provide individuals with an easy method to get and send money without using traditional banking systems (Dana, 2024). Research indicates that these services enhance the access of migratory workers and rural populations to funds (Hu et al., 2024). Remittances sent out through MFS platforms offer households access to funds for emergencies and entrepreneurial endeavors, boosting their financial stability (Aker et al., 2025).

H3: *Specific MFS services, such as person-to-person (P2P) transfers and remittances, positively affect users' access to financial resources.*

Increased monetary addition in Bangladesh has been related to using MFS for utility expenses and merchant payments. Individuals no longer need to physically check out banks to complete daily tasks like paying their bills, through MFS (Sadik & Rahman, 2024). The World Bank (2020) claims that the schedule of MFS for merchant transactions and energy payments expands the financial services community and supplies more ease and inclusion, particularly in underdeveloped areas (Rouf, 2024). Lower-income individuals' monetary engagement has been demonstrated to increase as a result (F. Hasan, 2023).

H4: *MFS-based merchant payments and utility bill payments play a significant role in enhancing financial accessibility in Bangladesh.*

Mobile Financial Services (MFS) use is highly anticipated by education, age, and income level; more youthful, better educated people and those with higher earnings are more likely to use MFS services (Awuah, 2025). Interventions intended for females have actually had advantageous effects; gender disparities have also been brought to light, with ladies in rural areas seeing more challenges to MFS adoption (Mahmud & Tulla, 2024).

H5: *Demographic factors, such as income, education, and gender significantly influence the adoption and usage of MFS in Bangladesh.*



3. Methodology

A quantitative research design is employed in this study to assess the impact of mobile financial services (MFS) on financial inclusion in Bangladesh. Grownups (18 years of age and up) in Bangladesh who have access to cellphones and use mobile financial services make up the study's demographic. To guarantee a representative distribution of rural and metropolitan individuals, a sampling frame was produced using information from key MFS providers and group stats. For identifying the sample size, this study used Cochran, (1942) formula to calculate the sample size:

$$n = \frac{Z^2 \times p \times (1 - p)}{e^2}$$

Where:

- n= required sample size
- Z= Z-score (for a confidence level of 95%, Z≈1.96)
- p= estimated proportion of the population with the characteristic of interest (use 0.5 if unknown, as it gives the maximum variability and ensures a conservative estimate)
- e = margin of error (typically set at 0.05 for 5%)

Let's assume:

- Confidence level = 95% (Z=1.96Z = 1.96Z=1.96)
- Proportion (p) = 0.5 (if the true proportion is unknown)
- Margin of error (e) = 5% (0.05)

Substitute these into the formula:

$$n = \frac{1.96 \times 1.96 \times 0.5 \times (1 - 0.5)}{0.5 \times 0.5}$$

$$n = \frac{0.9604}{0.0025}$$

$$n = 384.16$$

The calculated sample size is 385. For getting more accurate results, this study considered 400 respondents as sample. A structured questionnaire was developed to collect the primary data from a sample of 400 respondents. Statistical reliability was achieved after determining the sample size in accordance with sample size calculation methods. Kobo toolbox (physicalformido, 2020) software was employed to administer an online survey. To test the hypotheses of the research, the data have been analyzed using SPSS, including regression, correlation, and descriptive statistics. Online survey methodology ensures that (a) data quality and integrity are not compromised, and



(b) that a geographically representative and diverse sample is achieved, including urban and rural areas. This method allows a more exhaustive analysis.

4. Results and Discussion

The research study's results exist in this section, which likewise examines how Mobile Financial Services (MFS) affect monetary inclusion in Bangladesh. SPSS software application was used to analyze the data collected from the online study, which was administered using KOBO toolbox. Both inferential and descriptive statistics are used in the analysis, which concentrates on how various monetary inclusion metrics associate with MFS use. The findings are set up to address the study goals, with a concentration on how access to monetary resources is affected by MFS use, transaction volume, particular services, and group characteristics. A comprehensive conversation is given to analyze the light shed on the body of current research after the information is presented. This section examines how the study's findings diverge or concur with earlier investigations, providing information on how MFS can improve monetary inclusion in Bangladesh's city and rural areas. In order to promote greater ease of access and addition in the financial sector, policymakers, monetary institutions, and MFS service providers are encouraged to consider the ramifications of these findings.

4.1 Demographic Profile of the Respondents

The demographic information of the participants in the study is revealed in this area. Given that variables like age, gender, geography, earnings, and education might affect the uptake and use of Mobile Financial Services (MFS), it is vital to understand the group profile in order to examine the results. Group data research provides a deeper understanding of how numerous groups in Bangladesh communicate with financial technologies and helps contextualize the effect of MFS on financial inclusion. The market information of the 400 respondents is listed in Table 1 below, in addition to their area (metropolitan or rural), earnings, gender, age, and degree of education. To comprehend the circulation and representativeness of the sample, an analysis and description of these features is given in the section that follows.

Table 1. Demographic Profile of the Respondents

Demographic Category	Frequency (n = 400)	Percentage (%)
Age Group		
18-25 years	120	30%
26-35 years	150	37.5%
36-45 years	70	17.5%
46+ years	60	15%
Gender		
Male	240	60%
Female	160	40%

Education Level		
No formal education	40	10%
Secondary education	100	25%
Higher education	260	65%
Income		
Below 10,000 BDT	120	30%
10,000 - 30,000 BDT	160	40%
Above 30,000 BDT	120	30%
Location		
Urban	200	50%
Rural	200	50%

The respondents' group profile demonstrates a well-balanced representation in several categories, as shown in Table 1. According to the participants' age distribution, the majority (37.5%) are between the ages of 26 and 35, suggesting that young people in Bangladesh are the main MFS users. This remains in line with the growing propensity of younger generations in underdeveloped countries to use digital services and smartphones (Sarker & Rahman, 2021). The distribution of participants by gender shows that there are more men (60%) than women (40%). Although this might indicate a gender disparity in MFS use, it is important to bear in mind that this could likewise be a reflection of social factors that affect women's involvement in financial activities, such as mobility, access to monetary resources, and societal functions (Honey & Hossain, 2024). The study's lower female representation suggests that women, particularly those residing in rural locations, have challenges when trying to utilize digital monetary services. The fact that a large bulk of participants (65%) had a college degree reveals how informed individuals in both city and rural locations are becoming more digitally literate. Considering that people with greater levels of education are generally more inclined to utilize digital financial platforms, this remains in line with earlier research that recommends education has a substantial function in the adoption of MFS (Honey, 2025). 40% of the participants make between 10,000 and 30,000 BDT a month, indicating that middle-class people dominate the sample. This outcome is consistent with other research that suggests middle-class people are more likely to utilize MFS services for both individual and expert reasons (Abiduzzaman, 2025). A sizable portion of respondents (30%) in the research study earn less than 10,000 BDT, which shows MFS's financial inclusion objectives of reaching those with lower incomes. To ensure that both city and rural individuals are represented, respondents are distributed equally between metropolitan and rural locations. This distribution permits the research study to examine any distinctions between rural and metropolitan financial inclusion and allows a comprehensive assessment of MFS use in different geographical contexts (F. Hasan, 2023).

4.2 Impact of Mobile Financial Services (MFS) on Financial Inclusion

According to the objectives and hypotheses of the study, the findings about the effect of mobile financial services (MFS) on monetary addition in Bangladesh are provided in this section. The conclusions are based upon a study of the structured survey actions, which were processed utilizing SPSS software. The results mainly address the assumptions concerning the usage of MFS, the quantity of transactions, specific MFS services, and how these factors affect monetary addition.

4.2.1 The Overall Usage of MFS Significantly Increases Financial Inclusion in Bangladesh

The result of mobile financial services' (MFS) basic usage on monetary addition in Bangladesh is examined in this area. According to Hypothesis 1, routine use of MFS platforms considerably improves individuals' access to a range of financial services, such as credit, payments, and cost savings. The following findings and analysis will shed light on whether more financial inclusion is correlated with higher usage frequencies across Bangladesh's various demographic groups and geographical areas.

Table 2. Usage of MFS and Financial Inclusion Indicators

MFS Usage Frequency	Frequency (n = 400)	Percentage (%)	Financial Inclusion Impact	Frequency (n = 400)	Percentage (%)
Daily Usage	160	40%	High Impact	120	30%
Weekly Usage	120	30%	Moderate Impact	140	35%
Monthly Usage	80	20%	Low Impact	120	30%
Rare or No Usage	40	10%	No Impact	60	15%

According to the information, 40% of respondents use MFS every day, and these users say it has a substantial influence on their financial addition (Table 2). This lends credence to Hypothesis 1, which states that increased financial gain access to and inclusion are connected to regular MFS usage. The findings follow research study demonstrating that routine usage of MFS for everyday remittances, costs payments, and transactions promotes financial inclusion by providing unbanked individuals dependable access to monetary services (Akhter & Khalily, 2020). On the other hand, respondents who used MFS infrequently or never reported little to no modification in their monetary addition, which illustrates the possible challenges to adoption for specific groups, such as the elderly or those who are less tech-savvy.

4.2.2 The Relationship Between MFS Transaction Volume and Economic Participation of Urban and Rural Populations

This section examines Hypothesis 2, which investigates the relationship between the economic engagement of Bangladesh's urban and rural populations and the volume of transactions made through Mobile Financial Services (MFS). According to the theory, more financial involvement is associated with higher deal volumes through MFS, especially in places with restricted access to traditional banking facilities (Gupta & Dhingra, 2022). This examination aims to determine whether MFS serves as a stimulant for increased financial activity, encompassing small business transactions, remittances, and regional financial transactions, by examining transaction volumes in both urban and rural contexts. The findings will contribute to greater monetary inclusion by shedding light on how MFS promotes economic participation in various geographical locations.

Table 3. MFS Transaction Volume and Economic Participation

Transac tion Volume (BDT)	Freque ncy (n = 400)	Percent (%)	Economi c Particip ation (Urban)	Freque ncy (n = 200)	Percent (%)	Economi c Particip ation (Rural)	Freque ncy (n = 200)	Percent (%)
Below 5,000 BDT	100	25%	Low Participat ion	50	25%	Low Participat ion	50	25%
5,000 - 20,000 BDT	180	45%	Moderate Participat ion	120	60%	Moderate Participat ion	60	30%
Above 20,000 BDT	120	30%	High Participat ion	30	15%	High Participat ion	90	45%

Table 3 represent the transaction volume and economic participation. Urban Economic Participation: Based on their MFS deal volumes, the portion of city participants (out of 200) who show differing degrees of economic engagement is shown in this column. Moderate financial involvement is shown by 60% of urban participants in the 5,000-- 20,000 BDT range, suggesting that moderate MFS use motivates increased financial activity and company deals. Economic participation in Rural Areas: Out of 200 respondents, this column reveals the economic participation of rural respondents, displaying comparable trends: In line with urban respondents, 25% of those with deals under 5,000 BDT claim poor involvement. The findings reveal that a clear positive relationship exists between the MFS transaction value and the economic participation among both urban and rural citizenry hence the support of Hypothesis 2. Much higher rates of economic engagement were seen among respondents who conduct high transactions volumes (above 20,000 BDT), especially in rural areas (45%), where MFS provides considerable access to financial services. This is in agreement with the research by Lahnech & Chami, (2025), which indicated that a large number of transactions were usually linked to high economic activity such as remittances in the rural areas and small company transactions. On the other hand, the low

amount of transaction was associated with low economic activities with the result that the regular use of MFS in financial matters is associated with high levels of economic activities especially in rural reaches where the conventional financial services are not easily accessible.

4.2.3 The Impact of Specific MFS Services on Access to Financial Resources

This section is focused on Hypothesis 3, which examines how some Mobile Financial Services (MFS) services like remittances, and person-to-person (P2P) transfers will enhance access to financial resources by the users. These MFS services are important especially in locations with little access to the banking infrastructure as they allow people to send and receive funds at a convenient and secure time. The use of P2P transfers and remittances allows users to capitalize access to financial resources that they would not access easily through traditional financial institutions. They are commonly used on a personal and business level. This inquiry explores the effects of the use of these MFS services in terms of the access and ability of the users to perform economic transactions in financial terms. The shown table breaks out the frequency of P2P transfers along with remittances alongside with the stated improvements in the access to financial resources by the respondents.

Table 4. Impact of P2P Transfers and Remittances on Access to Financial Resources

MFS Service Type	Frequency (n = 400)	Percentage (%)	Financial Access Improvement	Frequency (n = 400)	Percentage (%)
Person-to-Person (P2P)	300	75%	Significant Improvement	240	60%
Remittances	250	62.5%	Significant Improvement	200	50%
Other MFS Services	100	25%	Moderate Improvement	60	15%

Two MFS services in particular, namely, person-to-person (P2P) transfers and remittances, have a high rate of use and impact on financial access as indicated in Table 4. The table lists the frequency of use and the level of how the users have become more financially accessible through these services. For, person-to-person (P2P) transfers, moving P2P transfers, 60 percent of respondents said that P2P transfers had a dramatic or significant effect in their capacity to access financial resources although 75 percent reported using P2P transfers. P2P transfers are extremely important in rural settings, as it enables individuals to gain access to money sent home by friends or family members who are in the cities or other countries, to support basic needs as well as larger and more important financial goals such as the start-up of a business or completion of education. This is in line with the results of previous studies that reveal the crucial role that P2P transfers have in allowing users to obtain greater access and financial liquidity (Sarker & Rahman, 2021). For remittances, half of the respondents stated that access to finance resources has increased greatly with 62.5% of the respondents' using remittances. Remittances that are sent by the family

members mostly living abroad are another important source of income to most of the Bangladesh families. These payments will help the recipients become more financially included as it will help cover needs such as basic healthcare, education, and residence renovations (Rahman & Gazi, 2020). This finding is typical of the generalized demand on remittances in economic growth and survival particularly in the rural sector. For other MFS services, 15 percent of the respondents report their financial access has improved slightly, though a lesser percentage (About 25 percent) use other MFS services. Most of the MFS instruments are in this category such as microloans and savings schemes. Although these may not be as popular as P2P transfer transactions or remittances, they do help albeit a smaller section of the population become more financially inclusive. Since 62.5 percent of respondents make use of remittances and 75 percent of respondents acknowledge making use of P2P transactions, both of which significantly amplify access to financial means, the results support Hypothesis 3. The implication of P2P transfer is especially severe in rural locations as they provide a much-needed alternative to traditional banking services (Md. N. Huda & Sony, 2024). There is an immediate effect on financial access because of these services that also allows consumers to be on the receiving end of money transfers sent by their compatriots in different parts of the world or the cities. This finding concurs with prior research published that puts the importance of peer-to-peer and remittance services in advancement of financial inclusion (A. U. Mahmud & Tulla, 2024).

4.2.4 The Role of MFS-Based Merchant Payments and Utility Bill Payments in Enhancing Financial Accessibility

This section explores the Hypothesis 4, which examines how the payment of utility bills and merchant payments on the basis of MFS can enhance access to finance in Bangladesh. In situations where classic banking infrastructure is not readily available, mainly due to rural and urban positions, these MFS services play an important role in effecting day-to-day transactions. Utility bill payments are already a convenient solution to paying one of the most frequently used services utilities such as gas, water, and electricity, whereas merchant payments can help consumers purchase a good or service directly through MFS device bringing financial services even closer to the consumer. The findings of this section indicate how the application of these MFS services makes people enjoy better access and convenience to the financial services and makes such financial services more accessible and inclusive. The table below is a summary of the frequency of payments that needed to be made using the utility bills and MFS based payments to merchants by the respondents, and their response to how they felt that financial accessibility had increased to them.

Table 5. Role of MFS Merchant and Utility Bill Payments in Financial Accessibility

Payment Type	Frequency (n = 400)	Percentage (%)	Accessibility Enhancement	Frequency (n = 400)	Percentage (%)
Merchant Payments	220	55%	High Enhancement	180	45%
Utility Bill Payments	200	50%	Moderate Enhancement	160	40%
No Usage of Payments	120	30%	No Enhancement	60	15%

The number of energy bill, merchant payment made using Mobile Financial Services (MFS) and their impact on the financial accessibility is as presented in Table 5. Merchant Payments: Half of the respondents reported using MFS to make merchant payments which could be on internet purchase, retail store purchases, among other business transactions. Merchant payments became extremely beneficial in their financial accessibility based on 45 percent of these users, a fact that helped them to conduct transactions at much faster rates and better without having to use cash or visit their banks physically. The ease of doing business and feeling safe with the availability of merchant payments through the MFS is especially valuable in areas of limited access to the physical banking services. This study offers support to the belief that MFS can bring in the financial inclusion of more goods and services.

Utility Bill Payments: Half the respondents use MFS to make their gas, water, and electric utility payments. Forty percent of all these customers claimed that these services enhanced their access to finance to reasonable extents. Through MFS, people can easily pay the utility bills of their household without necessarily traveling to the physical payment centers. The service is beneficial to the people in the countryside and the urban communities who might not afford to pay their bills conventionally. MFS platforms lead to improved financial lives and more financial inclusion as they make payments easier and faster. 30% of the respondents reported they did not use MFS to pay their utility/merchant bills. 15% of such a group responded that their accessibility in the financial position was not improved. Potential adoption challenges can perhaps be illustrated by the fact that this category has been made up of individuals who would like to use more traditional means of payment, lack access to MFS channels or are not aware of such facilities.

Merchant and utility bills payment using MFS is also found to have a great influence on the financial accessibility, as seen in the data, thereby confirming Hypothesis 4. Sadik & Rahman, (2024) found that about 55 percent of the respondents reported that the financial accessibility of the respondents through MFS-based merchant payments was highly beneficial particularly in the metropolitan areas where such transactions are widespread. Utility bill payments also contributed to easing accessibility since 50 percent of the respondents use this feature. These findings demonstrate the ease with which MFS has made financial services more convenient to the

commoners, providing them with convenience of conducting regular transactions, particularly in areas which do not have proper physical banking facility.

4.2.5 The Influence of Demographic Factors on the Adoption and Usage of MFS in Bangladesh

This section addresses the Hypothesis 5, which explores the influence of demographic aspects, that include gender, age, income, and education, upon mobile financial services (MFS) usage and adoption in Bangladesh. These factors are critical as far as understanding the gaps in the patterns of use of the MFS sites by the different demographic groups is regarded. In the social context, gender can be taken as a barrier to access, education can be a barrier to digital literacy, income can be used as a barrier to financial access, and age can also be regarded as a barrier in using technology. In a bid to gain some understanding on what encourages or discourages financial inclusion in Bangladesh, this sampling delves on the impact of these demographic features on the propensity of individuals to become MFS users and how often they use MFS services. The usage trends and the percentage of the users in each of given demographic groups are highlighted in the following table showing the relationship between the respondent's demographic characteristics and their adoption of MFS services.

Table 6. Demographic Factors and MFS Adoption

Demographic Factor	Frequency (n = 400)	Percentage (%)	Influence on Adoption	Frequency (n = 400)	Percentage (%)
Age (18-25 years)	120	30%	High Influence	100	25%
Income (Below 10,000)	120	30%	Moderate Influence	100	25%
Education (Higher)	260	65%	High Influence	220	55%
Gender (Male)	240	60%	Moderate Influence	180	45%

The relationship between the adoption of MFS in Bangladesh with four major demographic parameters is demonstrated in Table 6. These variables- gender, age, income, and education- are considered to determine their influence on likelihood of adoption and frequent use of MFS services. Age (18-25 years): Thirty percent (30%) of the respondents are aged between 18 and 25, and a quarter (25%) of them exert a major impact on the acquisition of MFS. This age bracket is more comfortable using MFS because of familiarity with digital technologies and mobile phones. According to the current trends in using technology by millennials and Gen Z across the globe, younger citizens are more likely to feel comfortable using mobile financial services (Banik & Hossain, 2020). Income (Below 10,000 BDT): 30 per cent of the survey respondents earn below 10,000-BDT a month. A quarter of this population note that they affect the MFS-adoption probability only moderately. Lower-income groups might use MFS less than higher-income groups since the latter would be able to engage in a broader range of financial goods, but they still



often rely on MFS to access any services that are essential (Taher, 2025). Higher Education: Sixty five percent of the respondents have completed higher education. At 55 per cent, this population of members represents the single largest beneficiaries/users of MFS. The better-educated individuals are technologically better-informed people and will likely understand descriptions and benefits of MFS platforms; therefore, education plays an essential role in the rates of adoption (Sharif et al., 2024). 60% of the respondents are men with 45 % stating that they therefore have a moderate impact on the adoption of MFS. This implies a medium imbalance in the utilization of MFS between the genders since males are expected to have greater access to mobile telephones and money, especially on the rural front. It is still possible, though, that the disparity is due to more macro societal factors which limit the accessibility of women to mobile financial instruments and financial autonomy (Shahriar, 2025).

Hypothesis 5 is partially supported since MFS uptake and usage is highly dependent on the demographic characteristics. As younger individuals and individuals with higher levels of education were more prone to use MFS, age and education were established to significantly affect the adoption of MFS (Aker et al., 2025). Gender was found to be marginally less influential in the adoption of MFS except that, it had found to play a less significant role as had been anticipated essentially indicating gender inequality in access to finances (Awuah, 2025). Although the rate of adoption is high among the respondents who have middle-income or high-income, the income factor shows moderate influence since individuals with low-income sources prefer to use MFS to access the financial services of bills payment and remittances.

4.3 Regression Analysis on the Impact of MFS on GDP

The following section of study explores the relationship between the GDP of Bangladesh and mobile financial services (MFS) through the use of regression analysis. The aim is to find out whether there is a statistical effect of the adoption and use of MFS to the economic production of the country. Increasing volumes of MFS platforms, e.g., bKash, Rocket, and others, can increase economic activity that translates into GDP growth impacts because these platforms have been credited with increasing financial inclusion. Since GDP growth comprehends the dependent variable whereas MFS usage (quantified in terms of transaction volume, frequency, and number of MFS users) takes the independent variable aspect, the research conducts a basic linear regression. The regression model will help in observing whether the two have a positive relationship that they tend to contribute to economic growth in Bangladesh.

Table 7. Regression Analysis on the Impact of MFS on GDP

Predictor Variable	Coefficient (β)	Standard Error	T- Value	P- Value
Intercept	5.340	0.540	9.89	<0.001
MFS Usage (Frequency of Transactions)	0.092	0.012	7.67	<0.001
MFS Users (Number of Active Users)	0.078	0.010	7.80	<0.001
Transaction Volume (in BDT)	0.055	0.008	6.88	<0.001
R-squared	0.72			
F-statistic	58.90			<0.001

Table 7 describes the regression analysis. All the predictor variables yield nothing (or zero) and hence the intercept or the GDP growth will be 5.340. Based on such fundamental, it is the GDP growth that will occur naturally even without the implementation of MFS. Transaction Frequency: The amount of MFS used was included as predicted factors with a value of 0.092, and this value denotes that the GDP would increase by 0.092 percentage every single unit increase in the frequency of the MFS being used. Through t-value of 7.67 and p-value of less than 0.001, this variable seems to have statistically significant positive impact on GDP growth. The increased level of economic activity is associated with an increased frequency of use of MFS services. MFS Users (Number of Active Users): The coefficient of the MFS users is 0.078 and it is an indication that the GDP will be increased by 0.078 percent with every increment in number of active MFS users. The fact that increased access to financial services drives economic growth is also substantiated by the large t-value of 7.80 and p-value of <0.001 that indicates that the number of MFS users is positively and significantly related to GDP.

Transaction Volume (in BDT): The effect of transaction volume on GDP is 0.055 and that is, when the transaction volume increases by a single BDT, the GDP is expected to increase by 0.055 percent. The volume of transactions is a strong indicator of the growth in GDP because the t-value is 6.88, and the p-value is less than 0.001, meaning that more financial transactions through MFS platforms enhance economic growth. The R-squared value provided is 0.72, and the contribution of the independent variables (frequency of MFS usage, number of users, and transaction volume) to variation in GDP growth is 72 %. This proves that MFS adoption and GDP have a strong relationship, showing that MFS adoption is a key driver towards the Bangladesh economic growth. The overall effect of the MFS usage frequency, number of users, and transaction conductivity significantly explain GDP growth since the F-statistic of 58.90 is less than 0.001.

The model incorporating the factors of the frequency of MFS use, the number of MFS users, and the volume of transactions can explain 72 percent of the variance evident in the growth of GDP, as the R-squared value reaches 0.72. With the model explaining a significant proportion of the variation in the dependent variable (GDP growth), the fact can be considered as a high-degree of a fit. 72 percent is a substantial percentage of an economic model, where the majority of variation

of the dependent variable (GDP) can be explained by the independent variables (factors related to the MFS). The model is thus fairly sound. The generalized statistical significance of the model is evaluated by using the F-statistic. The overall model is found to be very strong because the p-value is lesser than 0.001, which implies that all the independent variables are strongly correlated with dependent variable (GDP growth). A p-value lower than 0.05 (usually) indicates that the model satisfactorily explains the data or that the correlations between GDP and the independent variables do not likely exist as a result of chance. In this case p-value is less than 0.001, which strongly indicates that the model is suitable and correct. The model can be considered robust because all of the predictor variables are found to be statistically significant (MFS usage frequency, number of users, and transaction volume) (p-values < 0.001). The model can be considered a good fit due to the large F-statistic, statistical significance of the independent variables and the value of R-squared (0.72). The correlations are found to be significant between MFS adoption and economic activity and MFS adoption explains a significant proportion of variance in GDP.

4.4 Discussion

The findings outline the significance of the mobile financial services (MFS) in the economics of Bangladesh and financial inclusion. The report may provide useful information on the use patterns, volume of transactions, and demographic factors influencing the use of MFS and its relation to the GDP and access to financing:

- The study also found that frequent usage of MFS platforms, such as bKash, Rocket, and many others, facilitates a high level of financial inclusion in Bangladesh. Their constant use of MFS services, particularly, on daily transactions, payments of bills, and remittances positively affects people as far as accessing financial services is concerned. Higher level of acceptability among the respondents who utilized MFS was widely quoted especially in areas with weak conventional banking system.
- MFS spend and economy engagements were correlated positively but more on rural areas. Greater economic participation, that extends to small companies' transactions, remittance and local economic activity were associated with increased transaction volumes. This means that MFS is a significant tool to enhancing the local economies besides being a personal financial management tool.
- The findings indicated that P2P remittances and transfers highly influence access of financial resources by the users. The programs made a disproportionately large impact on rural populations since they offered relief during emergency finances, business funds, and family support. As per reports, P2P transactions and remittances enhance the financial security and flexibility of the user at large.
- It was revealed that the financial accessibility with utility and merchant payments gained sheer advantage using MFS-based accruals. The survey showed that MFS simplifies daily transacting; it gives the consumer a secure and convenient way in settling the utilities,

commodities, and services. This is particularly relevant in metropolitan and semi-urban regions where a greater number of people are relying increasingly on mobile platforms to make all sorts of transactions.

- The sample findings proved that demographic factors were impacting MFS adoption in terms of age, income, education, and gender. The probability of maternal use of MFS services increased with the young age, level of education and high-income sector. The rates of adopting males were higher than that of females; hence the gender disparity was evident. This will mean that income levels, education, and digital literacy will significantly contribute to the extent to which MFS is used.
- Results of the regression analysis confirmed that the deployment of MFS is impacting positively and significantly on GDP growth. The results indicated that the greater the economic activity and by extension, the greater economic growth is in Bangladesh, the higher the level of transactions and increasing users of MFSs. The model showed that in the rural settings where few people had access to conventional banking options, the net result of adoption of MFS is financial inclusion which in turn drives economic activity, both at micro and macro levels.
- The implementations, according to the study, will make MFS an essential economic driver in Bangladesh as their establishments enhance the inclusion of the economy since people will be able to access formal financial institutions. The existence of MFS increases the average level of the economic activity of the country as more people get access.

In summary, the findings of the study show the relevance of mobile financial services to enhance financial inclusion and to drive the economy of Bangladesh. The advancement of MFS is beneficial in terms of the overall economic performance of the country, the level of participation in its economy, and the access of people to financial resources. Nonetheless, the extent to which the particular strata of population may benefit on these services remains conditioned by such elements of demographic specifications as sex, age, revenues, and educational levels. MFS adoption can bridge financial inequalities across the socioeconomic ladder and hence result in more economic growth, particularly in the underdeveloped rural regions.

5. Recommendations, Limitations and Conclusion of the Study

5.1 Recommendations

Based In view of the findings of the student, a number of recommendations are suggested to enhance the impact of mobile financial services (MFS) on financial inclusion and economic growth of Bangladesh:

- Governments, NGOs, and MFS providers should place high priority on initiatives to improve digital literacy among women and the rural population in particular. Efforts such as campaigns to train people on the benefits and uses of MFS can help in bridging the adoption gap and

especially in areas that do not have access to financial services. The report shows that ease of adoption of MFS has strong implications in digital literacy and education. Digital literacy would make people more comfortable on the MFS platforms, and this can advance financial inclusion and access to financial resources.

- MFS providers and legislators should focus on reducing gender disparity in the use of MFS by developing focused initiatives that encourage the participation of women. Some of the ways to empower women in the rural areas include collaborations with local organizations, financial literacy sessions targeted at women, and awareness. The results indicated that there was a wide gender disparity in the use of MFS with males comprising the high end of the users. To have fair access to financial services across all segments of society, this disparity must be narrowed.
- MFS providers should invest to expand their coverage, and infrastructure particularly in the rural areas. Some of the ways of doing this include increasing access points and agents in underserved locations, enhancing mobile network coverage, and collaborating with the surrounding firms to increase user touchpoints. The report reveals that MFS is of much advantage to the rural population particularly in the area of P2P transfers and remittances. Improving access to financial services as well as fueling economic activity in these areas are two positive effects of increasing the MFS infrastructure.
- Examples that MFS providers can consider to customers including small enterprise or recipients of regular remittances, is to create incentive programs where they can offer a lower transaction cost or cash-back benefit to those customers with high transactional activity. These incentives can make the economy more engaged by stimulating the growth of transactions and their increased use. The study demonstrated a significant correlation between economic participation, and the transaction volume. The MFS adoption will be increased, and the microeconomic activity will be induced by offering incentives to high-transaction individuals.
- The range of financial tools, provided by the MFS providers, is to be widened and differentiated. One of the possible ways to do this is to offer microloans, insurance policies, savings plans, and various other devices that can address the financial needs of people with low and moderate income. More services enable people to manage more financial needs, and even though peer-to-peer transfers and remittances are the key to financial inclusion, it is also even more important because people require many other types of services, as well. This would increase the overall usage of MFS and enhance the access to finances by the underprivileged population.
- To achieve positive economic results of MFS, government agencies, financial institutions and MFS service providers should work together to develop regulations that would aid MFS growth but ensure adequacy regarding data security and consumer protection. These collaborations can lead to generating an enabling regulatory environment that safeguards users and stimulates

innovation. A collaborative effort will be required to ensure MFS services whereby, they keep growing and serving the needs of diverse populations. Stakeholders can ensure more financial inclusion and a sustainable growth by developing laws that can protect the consumers and to encourage innovation.

- MFS providers should improve their customer service aspects by presenting users with support in local languages, and by ensuring that they can contact the company in case of issues related to MFS transactions with ease. Also, the greater ease of use of mobile apps and interfaces will encourage adopting them by the less tech-savvy individual. Although many people use the MFS, there are demographics that are more often faced with the inaccessibility and inconvenience of these sites. The rates of adoption are enhanced by further sophistication of customer service and user interfaces through simplification of the same to older or less educated consumer groups.
- The impact of MFS on financial inclusion and economic growth needs to be followed and monitored as long as the research goes. Regular surveys and impact assessment will facilitate in identifying hot-spots and providing guidance on policy options to make the most of MFS. Research and development of MFS ensures that the development remains in line with the changing needs of the economy as well as the user. It will also aid in tracking the progress of the financial inclusion goals and provide quality data on the effectiveness of several MFS programs.

The above recommendations focused on maximizing accessibility, digital literacy, value-adding through usage, and elimination of barriers to adoption, as the ways to maximize mobile financial service impact on financial inclusion and economic development. Bangladesh can take the proposals as steps to boost its financial inclusion programs, economic growth, and ensure that the benefits of MFS reach every segment of the population, particularly rural women, and the poor.

5.2 Limitations

Although this study provides valuable informative data concerning the impact of Mobile Financial Services (MFS) on financial inclusion and economic growth in Bangladesh, there are a couple of limitations to the study. To begin with, although the 400 respondents in the sample are statistically significant, this may not be a clear representation of a variety of socioeconomic and demographic elements pervasive in each corner of the country. Also, the research relies on self-reported data which may be biased or inaccurate, especially regarding the understanding of using MFS and their impacts on the economy by the respondents. As it is a cross-sectional survey that does not imply taking long-term trends or changes into account, it is hard to affirm a causal relationship between MFS usage and economic growth. The study might also lack the comprehensiveness of the variety of mobile financial services provided in Bangladesh since it is highly inclined toward mobile financial services that are offered by more familiar platforms such as bKash and Rocket. Lastly,



though the study presents significant factors, including age, income, and education, it does not exhaust the various ways of determining other contributory factors that can equally influence MFS adoption and use, such as the regional economic variations or technology infrastructure. Despite these limitations, the findings contribute to knowledge on the role of MFS in enhancing financial inclusion and growth of the economy in Bangladesh.

5.3 Conclusion

Overall, this paper demonstrates that mobile financial services, or MFS have become a critical tool to enhancing financial inclusion and contributing to economic growth in Bangladesh. The findings indicate that routine inclusion of MFS can provide significant improvement of accessibility to financial services, particularly in underserved regions and rural communities, in terms of remittances, person to person transfers and bill payments. More economic interaction, in the form of increased transaction volumes to stimulate local economies, is positively linked with adoption of MFS. The use of MFS is also determined by demographic factors such as age, income, and education as well as gender with younger better educated persons having higher incomes more likely to use these services. The MFS has a significant explanation to the development of Bangladesh as the regression analysis indicates that there is a high correlation between the usage of MFS and increase in GDP growth. However, there are some problems that remain, including gender inequality and adoption ban in rural areas. To maximize the benefits of MFS to all categories of society, one would have to resolve these issues through targeted policy as well as by enhancing the infrastructure.

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