

Cost Comparison between Electronic Money Transfer Channel and Traditional Money Transfer Channel: A Study on Commercial Bank in Bangladesh

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ABSTRACT

Electronic banking plays a pivotal role in the economic development of a country. Due to immense advances of Information and Communication Technology (ICT), it certainly introduced new dimension for the global banking community. Attempts are made to find out the total user cost of electronic money transfer that is a segment of electronic banking. To conduct this research, primary and secondary data are used and to compile these data various statistical tools are applied. Efforts are also made to make a comparison between the total user cost of electronic money transfer and that of the traditional money transfer. This research conveys that user cost of electronic fund transfer channels is less than traditional fund transfer channels due to sophisticated technology adopted by commercial banks.

Keywords: Electronic Fund Transfer, Traditional Fund Transfer, Physical Effort

OBJECTIVE OF THE STUDY:

The main objective is to find out the total user cost of electronic money transfer channel and traditional money transfer channel and make a comparison between the user costs of both channels.

METHODOLOGY:

Sources of Data:

The data related to the present research was collected from both-

Primary sources: A structured questionnaire was used as the research instrument to collect primary data. The research populations for this study are people who transfer their money through Jamuna Bank Ltd., BRAC Bank Ltd., Bank Asia Ltd., National Bank Ltd. and NCC Bank Ltd. in home and abroad. 250 people were selected as sample based on their availability.

Secondary sources: Most of the data of the study were collected from the secondary sources like brochures of Jamuna Bank Ltd., BRAC Bank Ltd., Bank Asia Ltd., National Bank Ltd. and NCC Bank Ltd. and web sites of the respective banks.

Questionnaire Design: The questionnaire is designed based on the user's purchase and using costs, time cost, operating and incidental expenses.

Sampling Method: The convenience sampling technique was used to collect the primary data from the respondents.

Target Population: User of electronic money transfer channel of five commercial banks.

Elements: The sample elements for the research were the customer of five commercial banks.

Sampling Units: Jamuna Bank Ltd., BRAC Bank Ltd., Bank Asia Ltd., National Bank Ltd. and NCC Bank Ltd. The total number of questionnaires distributed to the commercial banks is 250. 50 questionnaires are distributed in each commercial bank. 50 questionnaires are received back from each commercial bank.

LITERATURE REVIEW:

Vyas, (2012) has worked on "Impact of E-Banking on Traditional Banking Services." This research paper focused on E-banking, given the meaning, functions, types, advantages and limitations of E-banking. It also showed the impact of E-banking on traditional services and finally the result documentation was highlighted.

Al-Amin and Rahman, (2010) studied on "Application of Electronic Banking in Bangladesh: An Overview." They postulated the performance, problems and prospects of E-banking in Bangladesh. This study was descriptive in nature. It reveals that E-banking mostly depends on IT. At present, IT is a subject of widespread

interest in Bangladesh. The government has declared IT as a thrust sector. The study recommends that a comprehensive E-banking will be possible only when there will be political commitment with better IT infrastructure, internal network, country domain and, above all, a high speed fiber optic link to the information super highway.

Hornicek, (1977) had an analysis on “Electronic Fund Transfers, Branch Banks, and Potential Abuse of Privacy”. That research paper investigated about Electronic Fund Transfer (EFT) systems that allow consumers to deposit and withdraw money. He also gave the emphasis on the legal problems, which had resulted from attempts by national banks to use EFT systems in states that did not allow state banks to engage in branch banking, and whether EFT systems are branch banks under applicable federal law.

Sulaiman et al., (2005) worked on “Prospects and Challenges of E-banking in Malaysia”. They tried to provide an overview of E-banking adoption in Malaysia. It has been done by analyzing the local bank websites using a model introduced by Chung and Payter, (2002). The study then explored the different types of E-banking products used by adopters before finally describing the characteristics of E-banking adopters. The study also illustrates that there were more adopters among the younger age groups, among those with higher salaries and those holding higher positions.

Arcari et al., (2004) studied on “The Electronic Fund Transfer System (EFTS)”. They described about the electronic bill-payment system created at the University of Connecticut Health Center (UCHC) in Farmington. The program was developed and implemented on a regional basis in 1996 to replace a prepaid coupon system utilized by Docline libraries. Health sciences libraries use EFTS for payment of Interlibrary Loan (ILL) transactions. Centralized electronic billing of participants greatly reduces the need to create invoices and to write reimbursement checks for ILLs and document delivery among participants.

Beer Industry Electronic Commerce Coalition, (2007) had an analysis on “Electronic Funds Transfer in the Beer Industry, White Paper”. This paper conveyed that EFT payment system appeals to distributors for various reasons. Although each distributor's operation is different, the uses of electronic funds transfers are likely to deliver value in many ways. For some distributors, value will come in the form of more efficient use of personnel and in others; value may be realized through dollar-labor savings. A number of other benefits have been described throughout this document. No matter which benefit applies, distributors can undoubtedly enjoy the convenience and the security inherent in EFT transactions. Distributors and retailers already engaging in EFT transactions find the process to be convenient and easy. In sum, EFT is an excellent way for beer distributors to collect payments.

Bangladesh bank has provided an operating rules regarding electronic fund transfer. It was prepared by Department of Currency Management and Payment Systems, Bangladesh Bank and published on 10th August 2010. This paper provides an overview of electronic fund transfer and its mechanism, participant, condition, procedure etc.

ELECTRONIC MONEY TRANSFER:

Electronic banking plays a vital role to accelerate the economic development of a country. Due to immense advances of Information and Communication Technology (ICT), it certainly introduced new dimensions for the global banking community.

Electronic money transfer is a segment of electronic banking, which, in turn encompasses all types of business performed through electronic networks. It provides some attractive features for the customers than those offered by traditional banking system such as to open an account; it takes less time than traditional system. Other services like free fund transfer and free payment cards etc. are offered. In case of traditional banking system a fund transfer, for instance, used to take several days, in some case it even can take several months. On the other hand, electronic banking is capable to perform the same operations within few seconds. Customers are getting better services now because of the development of ICT in E-banking and so bank can perform its function with high speed and more accuracy.

Bank uses different channel for electronic money transfer. Among those channel the most popular means of electronic fund transfer are taken for comparison. These channels are mentioned below:

- **X-press Money:** X-press Money is the fastest way to transfer money. The sender gives receiver sixteen (16) digit reference number. Receiver fills up the “receiver form” with all required information real and correct with sixteen digit secret reference number.
- **Money Gram:** Customers can receive money usually within 10 minutes from anywhere in the world using money gram. The recipient can approach at any commercial bank at his convenience with the reference number and a photocopy of passport or Voter ID or citizenship certificate. The sender gives

receiver eight (8) digit reference number. Receiver fills up the “receiver form” with all real and correct information along with eight digit secret reference number.

- **Western Union:** Using these channel bank collect foreign remittance from countries. Any people that live in abroad, send digits to his/her relatives in Bangladesh as a pin code.

Bank also uses different scheme/ instruments for traditional money transfer. Among these, the most popular means of traditional money transfer are taken for making comparison. These are described as follows:

Foreign Demand Draft (FDD): A foreign draft is a bank draft that is drawn on a financial institution in the country of currency. It can be purchased at commercial banks and usually have a fee depending on the institution and the type of account you hold.

Foreign Telegraphic Transfer (FTT): The term telegraphic transfer refers to a method of payment in which funds are wired or transferred through telegraph or cable from one place to another especially to overseas destinations.

Mail Transfer (MT): Mail Transfers (MTs) are issued by any of the branches of a commercial bank for transfer of funds between branches through the medium of post offices either for credit of an account holder or for payment to a certain beneficiary. The issuing branch directly sends the mail transfer to the desired branch on the same day by post.

Pay Order (PO): A bank pay order is a document that gives instructions to a bank to give out or pay a specified amount of cash to a third party. Such orders are generally recognized by the bank that guarantees that the payment will be made.

Data Analysis: The data collection procedure for the survey took almost six months. The data was collected from the customer of the Jamuna Bank Ltd., BRAC Bank Ltd., Bank Asia Ltd., National Bank Ltd. and NCC Bank Ltd. by using the self-developed questionnaire. The gathered data from the survey has been analyzed using several statistical techniques.

Total User Costs:

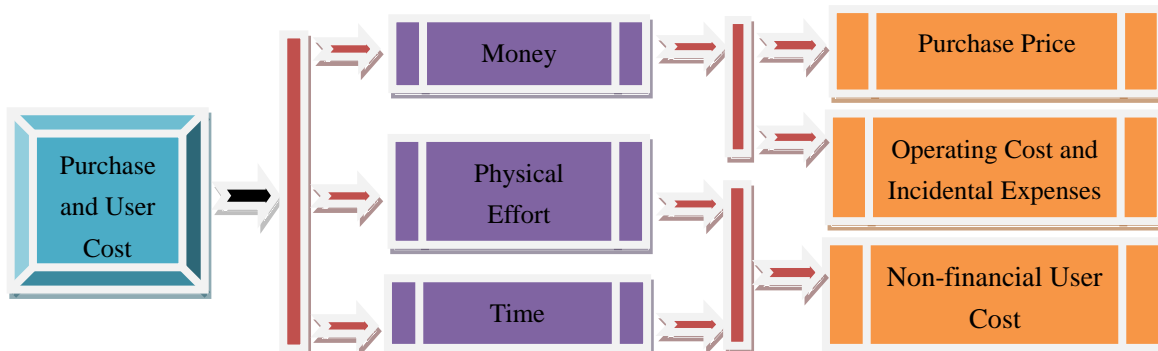


Fig. 01: Total user cost of fund transfer system

FINDINGS:

Use of electronic fund transfer channels to receive foreign remittance from commercial banks:

From the fifty customers of Jamuna Bank Ltd. eight persons use the Money gram, fourteen persons use the Xpress money, twenty eight persons use the Western union and seven persons use the all the channels of electronic money transfer. Out of fifty surveyed customers of BRAC Bank Ltd., seven use Money gram, twelve use Xpress money, thirty one use Western union and four use all the channels. Out of fifty surveyed customers of Bank Asia Ltd., ten customers use Money gram, twelve customers use Xpress money, twenty eight customers use Western union and nine customers use all the channels. Among fifty surveyed customers of National Bank Ltd., five customers use money gram, thirteen customer use Xpress money, thirty-two customers use Western union and nine customers use all the channels. Among fifty surveyed customers of NCC Bank Ltd., thirteen customer use Money gram, fourteen customers use Xpress money, twenty-three customers use Western union and eight customers use all the channels. The gathered information is arranged in the following table (Table 1).

Table 01: Users of various electronic fund transfer channel

| Name of channel | Jamuna Bank Ltd. | BRAC Bank Ltd. | Bank Asia Ltd. | National Bank Ltd. | NCC Bank Ltd. | % of user of various electronic fund transfer |
|-----------------|------------------|----------------|----------------|--------------------|---------------|---|
| Money Gram | 8 | 7 | 10 | 5 | 13 | 18 |
| Xpress money | 14 | 12 | 12 | 13 | 14 | 26 |
| Western union | 28 | 31 | 28 | 32 | 23 | 56 |
| All | 7 | 4 | 9 | 9 | 8 | 14 |

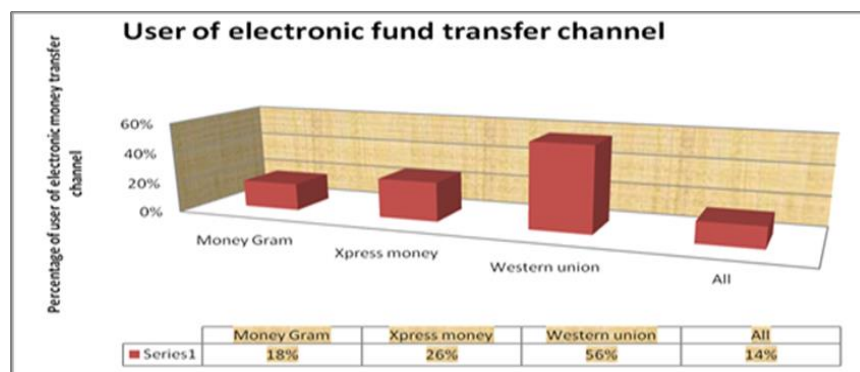


Fig. 02: Customers frequently use EFT channel to receive foreign remittance from commercial banks

From the graphical presentation (Fig. 02), it is easily inferred that 18% customers use Money Gram, 26% customers use Xpress money, 56% customers use Western union and 14% customers use all the electronic fund transfer channels.

Use of traditional money transfer channel before using electronic money transfer channel:

Among the surveyed fifty customers of Jamuna Bank Ltd., twenty customers use the Foreign Demand Draft, fifteen customers use the Foreign Telegraphic Transfer, nine customers use the Mail transfer and six customers use the Pay order of traditional money transfer. Out of fifty surveyed customers of BRAC Bank Ltd., nineteen customers use Foreign Demand Draft, thirteen customers use Foreign Telegraphic Transfer, eleven customers use Mail transfer and five customers use Pay order for money transfer. Out of fifty surveyed customers of Bank Asia Ltd., twenty-two customers use Foreign Demand Draft, sixteen customers use Foreign Telegraphic Transfer, nine customers use Mail transfer and three customers use Pay order for money transfer. Among fifty surveyed customers of National Bank Ltd., sixteen customers use Foreign Demand Draft, seventeen customers use Foreign Telegraphic Transfer, thirteen customers use Mail transfer and four customers use Pay order for money transfer. Among fifty surveyed customers of NCC Bank Ltd., twenty-three customers use Foreign Demand Draft, thirteen customers use Foreign Telegraphic Transfer, four customers use Mail transfer and ten customers use Pay order for money transfer. The gathered information is systematically arranged in the following table (Table 02).

Table 02: Users of various traditional fund transfer channel

| Name of channel | Jamuna Bank Ltd. | BRAC Bank Ltd. | Bank Asia Ltd. | National Bank Ltd. | NCC Bank Ltd. | % of user of various traditional fund transfer |
|-----------------|------------------|----------------|----------------|--------------------|---------------|--|
| FDD | 20 | 19 | 22 | 16 | 23 | 40 |
| FTT | 15 | 13 | 16 | 17 | 13 | 30 |
| MT | 9 | 11 | 9 | 13 | 4 | 18 |
| PO | 6 | 5 | 3 | 4 | 10 | 12 |

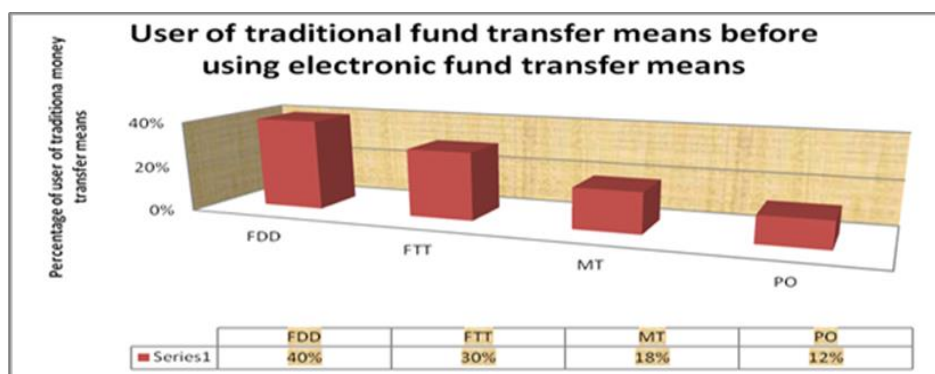


Fig. 03: Customer used to receive money using traditional money transfer channel

From the graphical presentation, it is easily inferred that 40% customers use Foreign Demand Draft, 30% customers use Foreign Telegraphic Transfer, 18% customers use Mail Transfer and 12% customers use Pay order for fund transfer.

Reasons for Switching into Electronic Money Transfer Channel:

1. Time: Time is a free force. It does not wait for any one. It is commonly said that time and tide waits for no man. A minute not usefully spent is a loss. One can never get back the lost minute. That’s why, eight customers of Jamuna Bank Ltd., seven customers of BRAC Bank Ltd., eleven customers of Bank Asia Ltd., six customers of National Bank Ltd. and five customers of NCC Bank Ltd. (Table 05) move to electronic fund transfer channels from traditional fund transfer channel. The following table (Table 03) shows the time that requires for getting money by electronic money transfer channel vs. traditional money transfer channel.

Table 03: Electronic money transfer channel vs. traditional transfer channel

| Money transfer system | Time Required | No of Respondents |
|-----------------------|------------------|-------------------|
| Electronic | Less than 1 hour | 250 |
| Traditional | More than 7days | 250 |

2. Low cost: Low cost is another factor that causes customers for switching to electronic fund transfer from traditional fund transfer. Electronic fund transfer provides fund transfer facility to the customers through little cost in comparison to the cost associated with traditional fund transfer. That’s why, seven customers of Jamuna Bank Ltd., seven customers of BRAC Bank Ltd., five customers of Bank Asia Ltd., eight customers of National Bank Ltd. and six customers of NCC Bank Ltd. (Table 05) move to electronic fund transfer channels from traditional fund transfer channel due to lowest possible cost.

3. Money: Undeniably, it can be said that money can give ones a comfortable life by better living standard. Money is a social element. No one likes to pay additional money. For this reason, money is considered as another factor for switching to electronic fund transfer. Six customers of Jamuna Bank Ltd., five customers of BRAC Bank Ltd., seven customers of Bank Asia Ltd., six customers of National Bank Ltd. and eight customers of NCC Bank Ltd. (Table 05) switch to electronic fund transfer channels from traditional fund transfer channel due to an opportunity to save money. The following table (Table 04) shows why electronic fund transfer involves less cost and leads to save money.

Table 04: Charge requirement between electronic money transfer channel and traditional money transfer channel

| Money transfer system | Charge Required | No of Respondents |
|-----------------------|---------------------------|-------------------|
| Electronic | Not Required | 250 |
| Traditional | Required (0.1% on amount) | 250 |

4. Security: Security is another important factor to switch to electronic fund transfer. Before contracting for EFT services or making first electronic transfer, the institution must give the following information:

- A summary of your liability for unauthorized transfers
- The phone number and address for a contact if you think an unauthorized transfer has been or may be made, the institution's "business days" (when the institution is open to the public for normal business), and the number of days you have to report suspected unauthorized transfers
- The type of transfers you can make, fees for transfers, and any limits on the frequency and dollar amount of transfers
- A summary of your right to get documentation of transfers and to stop payment on a pre-authorized transfer, and how you stop payment
- A notice describing how to report an error on a receipt for an EFT or your statement, to request more information about a transfer listed on your statement, and how long you have to make your report
- A summary of the institution's liability to you if it fails to make or stop certain transactions
- Circumstances when the institution will share information about your account with third parties

For the above mentioned services electronic fund transfer is more secured than traditional fund transfer. That's why, nine customers of Jamuna Bank Ltd., ten customers of BRAC Bank Ltd., three customers of Bank Asia Ltd., eleven customers of National Bank Ltd. and seven customers of NCC Bank Ltd. (Table 05) move to electronic fund transfer channels from traditional fund transfer channel.

Table 05: The comprehensive information of cost, time, money and security

| Name of the banks | Less time consuming | Saved money | Low cost | More secured | All |
|--------------------|---------------------|-------------|----------|--------------|-----|
| Jamuna Bank Ltd. | 8 | 6 | 7 | 9 | 20 |
| BRAC Bank Ltd. | 7 | 5 | 7 | 10 | 21 |
| Bank Asia Ltd. | 11 | 7 | 5 | 03 | 24 |
| National Bank Ltd. | 6 | 6 | 8 | 11 | 19 |
| NCC Bank Ltd. | 5 | 8 | 6 | 7 | 24 |
| Total percentage | 14 | 12 | 14 | 16 | 44 |

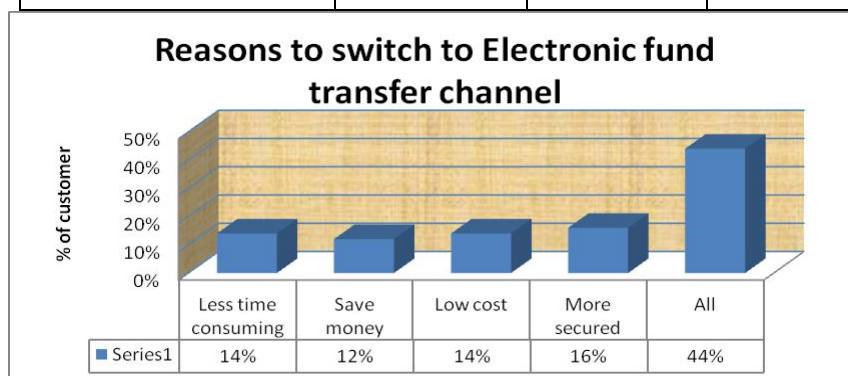


Fig. 04: Reasons for switching into electronic money transfer channel

From the graphical presentation (Fig. 04), it is easily inferred that 14% customers due to less time requirement switch to EFT. 14% customers due low cost switch to EFT. 12% customers due to save more money switch to EFT. Moreover, 16% customers due to more security move to EFT channel. Finally, 44% customers due to above all reasons move to EFT channel to transfer money.

Table 06: Total user cost of electronic money transfer channel and traditional money transfer channel

| Money transfer channel | Transport cost | Charges | Account Required | Time |
|------------------------|-----------------|----------------|---|------------------|
| Electronic | Tk. 50-Tk.200 | No | No | Less than 1 hour |
| Traditional | Tk. 200-Tk.1000 | 0.1% on amount | Required (At least Tk. 500 for open an A/C) | More than 7 days |

From the above table, we find that by using electronic money transfer channel customers can save their time, money as well as effort.

Transport cost: In case of electronic money transfer channel customer has to spend only Tk. 50-Tk. 200. However, using traditional money transfer channel, customer has to spend Tk. 200-Tk. 1000.

Charges: Receiver does not need to pay any charge in case of electronic money transfer channel. On the other hand, in traditional money transfer channel, receivers need to pay 0.1% on amount.

Account opening: In electronic money transfer channel, receiver does not need to open an account. However, in traditional money transfer channel, receiver needs to open an account. To open an account receiver has to spend at least Tk. 500.

Time: In electronic money transfer channel, receivers receive money in less than 1 hour. On the other hand, in traditional money transfer channel, receivers receive money in more than 7 days. So, receivers can save their time.

CONCLUSION:

There is no denying the fact that, the people of Bangladesh are very much dependent on foreign remittances. In fact, the economy of Bangladesh is totally import oriented. However, its export basket is not large enough to meet the import cost. For this reason, balance of trade of Bangladesh is always unfavorable. It is not a good indicator for the economic development of the country. It is a matter of great hope that balance of payment of Bangladesh is positive and is possible for its expatriates who send their earnings in home through using proper channel. Electronic money transfer is the best way to remit foreign currency in home (Bangladesh). Bangladesh Government encourages commercial banks to provide efficient and effective services in this perspective for smooth fund transfer channel.

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APPENDIX:

Questionnaire

For our research purpose, we need some data regarding "**Cost Comparison between Electronic Money Transfer Channel and Traditional Money Transfer Channel: A Study on Commercial Bank in Bangladesh**". It would be highly appreciable if you provide us some necessary information. We also assure you that this data will be used for only academic purpose; the information collected from you will be reserved with strict confidentiality.

Name: _____

1. Which channel do you use to receive foreign remittance from BRAC Bank?
 - Money Gram
 - X-press Money
 - Western Union
 - All of the above
2. Which channel did you use to receive money before using electronic money transfer channel?
 - Foreign Demand Draft (FDD)
 - Foreign Telegraphic Transfer (FTT)
 - Mail Transfer (MT)
 - Pay Order (PO)
3. What is the reason for switching to electronic money transfer channel?
 - Less time consuming
 - Save money
 - Low cost
 - More secured
 - All of the above
4. How much time requires getting money by electronic money transfer channel?
 - Within one hour
 - More than one hour
5. How much time requires getting money by using traditional money transfer channel?
 - Within 7 days
 - More than 7 days
6. Do you have to pay any charge for electronic money transfer service?
 - Yes
 - No
7. Do you have to pay any charge for traditional money transfer service?
 - Yes
 - No
- If, yes please answer the following question.
8. How much charge you have to pay for traditional money transfer channel?
 - Tk. 20 (Tk. 1-Tk. 20000)
 - 0.1% (Tk. 200000 -Tk. 100000000)
9. How much money you have to spend for transportation in electronic money transfer channel?
 - Tk. 20
 - Tk. 50
 - Tk. 70
 - Tk. 100
 - Tk. 200
10. How much money you have to spend for transportation in traditional money transfer channel?
 - Tk. 200
 - Tk. 400
 - Tk. 600
 - Tk. 800
 - Tk. 1000
11. Do you have to open any bank account to receive money using electronic money transfer channel?
 - Yes
 - No
12. Did you have to open any bank account to receive money using traditional money transfer channel?
 - Yes
 - No
- If, yes please answer the following question.
13. How much money you have to spend to open a bank account?
 - Current Account: _____
 - Saving Account: _____