Can Government Incentive on Remittance Encourages Remitters in Bangladesh? A Policy Study

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ABSTRACT: The government's recent two percent remittance incentive has attracted the attention of remitters and policymakers in Bangladesh. The purpose of this inward remittance incentive policy is to encourage remitters to send money in a legal manner. This will minimize illegal money transfers from overseas, and the government will be able to grow the reserve. The goal of this research is to investigate if the policy has had any recent impact on remitters and if there has been any change in money flow from overseas to Bangladesh through legal channels. We investigated using Bangladesh Bank remittance data and discovered a significant increase in the Bangladesh remittance flow in FY 2020-2021. In correlation matrix analysis using Pearson product correlation matrix this study has found Bangladesh's reserve and remittances are more closely linked than those of Bhutan, Pakistan, and Sri Lanka, following Nepal and India. However, the Pearson product correlation value for Pakistan and Sri Lanka was determined to be statistically insignificant.

Keywords: Remittance, Incentive, Policy, Bangladesh Bank, Correlation matrix
INTRODUCTION

The government of Bangladesh recently applied a 2 percent cash incentive for the expatriate community from the financial year 2019-20, to encourage more foreign remittance into the country. The plan was originally proposed by current Government of Bangladesh in 2019 when presenting the country’s budget. Effective from 1 July 2019, the 2 percent incentive had the desired effect of increasing the number of remittances coming into Bangladesh, an important part of the country's economy. Prime Minister Sheikh Hasina, while presenting the country’s budget stated that the cash incentive will only apply to money that is sent into the country through legitimate remittance channels. As per a notice issued by the Central Bank, beneficiaries will receive a direct 2 percent incentive for transfers of up to USD 1500.

Here Banks or Money Value Transfer Services (MVTS) will apply Simplified Customer Due Diligence measures. However, for amounts exceeding USD 1500, Beneficiaries have to show valid supporting documents, and Banks or MVTS have to comply with Standard Due Diligence measures to prevent Money Laundering and Terrorist Financing incidents in Bangladesh.

Bangladesh's remittances have climbed by 3.07 percent on average over the previous 15 years, and by 27.6 percent during the last 31 years. According to R. A. Hasan (2006), remittance earnings have a substantial macroeconomic influence at the household level [6]. Remittances have a positive but modest influence on economic growth in Asia and the Pacific, according to the United Nations Economic and Social Commission for Asia and the Pacific [22]. Though remittance earnings have drawbacks, such as brain drain, their total contribution to Bangladesh's economy is significant [7].

After selling ready-made garments, remittances are Bangladesh's second-largest source of foreign currency revenues. Bangladesh was placed eighth in the world for remittance inflows by the World Bank in 2020 [2].

Remittances are thought to contribute to long-term economic growth through increasing capital accumulation rates, which leads to increased investment [21]. According to the neoclassical migration theory, labor migrate from low-pay nations to relatively high ones due to wage disparities [10]. When immigrants send remittances to their home countries, they help to alleviate poverty and promote economic growth [24]. Informal remittances are when people use unofficial channels like Hundi and Hawala to lower the cost of sending remittances. Remittance inflows are positively associated with political stability and improved government regulations [1].

The rapid increase of remittances in developing nations is due to at least two factors. First, between developing and developed nations, immigration has surged considerably in the last 20 years. Second, as a result of technical advancements, transaction costs for international financial transfers between persons have decreased [5]. In 2019, Bangladesh has a total of 2,185,613 migrants across the world [8]. About 617,209 Bangladeshis are employed abroad, according to the Bangladesh Bureau of Manpower, Employment & Training (BMET). Figure 1 shows that, with the exception of 2016 and 2017, remittances have been growing since 1991, although foreign employment has been fluctuating. So, based on Figure 1, either overseas employment and remittances are not directly associated, or the transaction is channeled through the unlawful method, which is why the government established the incentive strategy to eliminate the illegal channel transfer.

Fig. 1: Total remittances received (million USD) and total overseas employment

doi.org/10.53272/icrrd.v3i2.3
The objectives of this paper are to evaluate the remittance situation in Bangladesh before and after the inward remittance incentive policy was adopted, and to see if the policy had a positive or negative impact on the economy. Section 2 discusses relevant literature. Our target audience is the policymakers, who can further decide whether the incentive policy has a positive or negative impact on the economy. The study’s data sources and methodology are presented in Section 3. The descriptive statistics and the paper’s findings are discussed in Section 4. Section 4 comprises two subsections. Section 4.1 focuses on the remittance pattern and growth in Bangladesh, whereas Section 4.2 analyzes the remittance and reserve relationship in South Asia.

LITERATURE REVIEW

Remittances have a favorable impact on nearly all of a country’s macroeconomic variables [7]. According to Uddin & Sjö (2013), remittances can have a distinctive impact in the short and long term. In the short run, remittances provide buffer stock against income fluctuations [21]. Remittances are a long-term source of finance that can be used instead of the local financial system. According to empirical research, remittances and economic growth in Bangladesh have a favorable long-term association [11,13,14,17, 18,19,23]. According to Paul et al. (2011), production alone influenced long-run positive trends in remittances in Bangladesh over the previous 35 years from 1976-2010 [15]. Salahuddin (2013) estimated the growth impacts of remittances in Bangladesh, India, Pakistan, and the Philippines using the panel OLS technique and found a positive link [16]. However, no long-term association was discovered in the study. Datta & Sarkar (2014) found that while there may be a long-run association between remittances and GDP in Bangladesh, there is no predicted causal relationship, whether in the short-run or the long run [4]. However, according to Masuduzzaman (2014), the influx of remittances from workers is important for nations like Bangladesh, which has a reasonably rising economy and a burgeoning banking sector [14]. Siddique et al. (2012) showed in their research paper that remittance growth does not contribute to economic development in Bangladesh [19]. The outcome of pooled OLS in Sutradhar, (2020) analysis reveals that a 1 percent rise in remittance growth leads to a 0.05 percent decline in GDP per capita growth in Bangladesh [20]. The negative outcome implies that a bigger number of remittances is spent on non-productive activities such as consumption. In the short run, however, there is a negligible positive correlation between them [13,17]. According to Salahuddin & Gow (2015), the error correction term in the short run is -0.037, implying that about 3 percent of short-run deviations from long-run equilibrium are corrected each year [17]. The short-run insignificance of the findings is most
likely owing to a variety of transitory economic shocks. Kumar & Stauvermann (2014) show that remittances have a mixed impact on output per worker in the short run, but a significant positive effect in the long run (0.11 percent) [9]. Remittances are adversely connected to GDP growth in the long term, therefore a rise (down) in GDP growth is associated with a reduction (increase) in remittance flow [21]. Wadood & Hossain (2015) reveals that remittances and economic growth are cointegrated [23]. Based on data from 1995 to 2016, Sarkar et al. (2018) observed a substantial positive association between remittance and GDP in Bangladesh [18]. Remittance is also substantially connected with gross capital formation, gross domestic saving, and household final consumption expenditure, according to the findings. Wadood & Hossain (2015) show that remittances and economic development in Bangladesh have a one-way causal link [23]. Kumar & Stauvermann (2014) reveal a bidirectional causality between remittances and GDP (in per worker terms) and unidirectional causality from the capital to remittances using the Granger causality analysis (in per worker terms) [9]. According to Siddique et al. (2012), there is only a one-way causal link between remittances and economic growth in Bangladesh, hence their findings are more relevant in the short run [19]. The multiplier effect, in which injected capital via consumption indirectly contributes to economic development and growth through the spillover effect, might explain the causation of remittances on economic growth in Bangladesh [19, 23]. The error correction terms in the models in Majumder & Donghui (2016) study are very significant and appropriately signed [11]. This signifies that the dynamic model has reached long-term equilibrium. As a result, deviations from the remittance to economic growth are swiftly adjusted. Remittances have a favorable impact not just on GDP per capita and GDP growth rates, but also on the savings rate and public expenditures [25]. According to Mamun & Nath, (2010), remittances lessen poverty at the household level while also having a major impact on macroeconomic indicators in Bangladesh [12]. Chowdhury (2011) revealed that remittances contribute favorably to the growth of Bangladesh’s financial system utilizing time-series cointegration and vector error correction mechanisms [3]. Furthermore, according to Masuduzzaman (2014), remittances have a significant and positive impact on financial development [14]. Growth causes remittances, and credit causes inflows of workers’ remittances, but not the other way around. The test also shows that there are bi-directional causalities between remittance deposit and remittance-money supply. According to Uddin & Sjö (2013), remittances and financial sector development are integrated of order one, implying that they are driven by stochastic patterns. This variable is integrated of order two in the case of real GDP per capita [21]. According to Sarkar et al. (2018), remittance flow is influenced by a variety of variables, including a decrease in personnel export, a high rate of emigrants returning home, a weak bilateral partnership with manpower importing nations, a lack of adequate policies connected to manpower export, and so on [18]. The reputation of employees is also crucial for manpower importing countries to recruit additional workers. In Bangladesh, the bulk of remittances is spent for consumption rather than investment and savings [19]. Moreover, even though spending remittance on investment is limited, even a tiny amount might assist reduce liquidity restrictions and contribute directly to growth [23]. In reality, continuing the upward trend in remittances in the face of low earnings and declining migration demand in labor-importing nations is extremely difficult for Bangladesh [7]. In response to these findings, Uddin & Sjö (2013) believe that the government should encourage remittance payments to enter the formal financial system before focusing on improving the overall efficiency of the financial system [21].
DATA AND METHODOLOGY
Yearly data of remittance is collected from the World bank. Overseas employment data are collected from the Bangladesh Bureau of Manpower, Employment & Training (BMET). Monthly data of remittance is collected from the Central Bank of Bangladesh (Bangladesh Bank). The methodology used in this study is the year-on-year analysis and correlation analysis.

DATA ANALYSIS AND RESULTS
A. Remittance Trend and growth in Bangladesh
Figure 2 depicts the monthly trend of remittances in Bangladesh over the last five fiscal years. The graph shows that remittances peaked in FY2020-21. In the 2020-21 fiscal year, Bangladesh received $2598.21 million in remittances, which is a new record. However, it began to drop in FY 2021-22, and it already reaches the FY 2019-20 trend line. The surge in remittance flow during two of Bangladesh's most important festivals, Eid-ul-Fitr and Eid-ul-Adha, which occurred around May and July in recent years, is an intriguing observation from this graph. Following May and July, there is an abrupt drop in remittance in the months of June and August.

Fig. 2: Monthly remittance trend in the last 5 years (in million USD)

Source: Bangladesh Bank, 2022

Following that, we calculated the year-on-year percentage change in remittance from FY 2018-19 to FY 2019-20 (figure 3), FY 2019-20 to FY 2020-21 (figure 4), and FY 2020-21 to FY 2021-22 (figure 5) respectively. Following the implementation of the 2 percent incentive policy in July of FY 2019-20, remittances have climbed this year over last year for eight months in a row, from July 2019 to February 2020. The year-over-year percentage change in March, April, and May of 2020 was negative. We believe this is mostly because of the COVID-19 outbreak in Bangladesh, which is why the country was under strict lockdown.

Fig. 3: Year-on-Year percentage change in remittance from FY 2018-19 to FY 2019-20
April had the biggest year-over-year growth in FY 2020-21, with an 89 percent increase from FY 2019-20 (figure 4). July was the second-highest month, with a 63 percent raise, and it was also the month in which Bangladesh received the most remittances in her history. Through the year, remittance has been experiencing positive year-on-year growth.

**Fig. 4:** Year-on-Year percentage change in remittance from FY 2019-20 to FY 2020-21

Source: Bangladesh Bank, 2022

**Fig. 5:** Year-on-Year percentage change in remittance from FY 2020-21 to FY 2021-21

Source: Bangladesh Bank, 2022
Surprisingly, the year-on-year change in remittance in FY 2021-22 was lower than the previous FY. The declining trend of FY 2021-22 remittance is illustrated in Figure 5. Except for August, each of the five months has seen a decrease of more than 20 percent from the previous year’s remittance. This is due to the fact that most overseas workers are returning home or in the process of flying overseas for their employment destination during the months listed above. Furthermore, for workers returning to Bangladesh, the renewal of work visas in some Middle Eastern nations is taking longer than usual. The Covid-19 vaccine program is another factor. The majority of the workers are waiting in line for a second dose of the Covid-19 vaccine before beginning their work abroad. All of these factors could be contributing to the decline in remittance increase over this period.

Certainly, the rise in remittance inflow following the policy incentive suggests that foreign employers are motivated to send money to their families in a lawful manner. The incentive has two effects:

1. It encourages wage earners working abroad to transfer more money to their family members residing in Bangladesh.

2. To transmit wage earner’s hard-earned money through a legitimate channel.

**B. Remittance and Reserve Relation for the South Asian Countries**

Finally, we’d want to have a look at the reserve. From a theoretical standpoint, a rise in remittances boosts reserves. According to WDI-2021 records, reserve growth has been positive from 2011 to 2017, with the largest rate of growth in 2013, with a 42 percent raise over the previous year, and subsequently a drop-in growth rate (see figure 6). Reserves fell by 4 percent in 2018 compared to the previous year. Following the 2 percent monetary incentive, the reserve grows in lockstep with remittance. Bangladesh’s reserve increased by 32 percent from $32696.94 million in 2019 to $435,000,000 in 2020.
$43171.74 million in 2020.

**Fig. 6:** Bangladesh Total reserve (including gold) in the last 10 years

![Bangladesh Reserve Chart](chart.png)

Source: WDI, 2022

Following that, we’d like to look into the link between reserves and remittances. We, therefore, perform correlation analysis to determine the strength of the linear relationship between these two variables. This time, though, we include Bangladesh as well as six additional South Asian nations. Table 1's correlation matrix shows whether and how strongly these two variables are connected. For Bangladesh, the Pearson product correlation between reserve and remittance was highly positive and statistically significant ($r = 0.71, p < 0.001$). This indicates that an increase in remittances would result in a rise in Bangladesh's reserve value. Bhutan, India, the Maldives, and Nepal are the four other Asian nations with a significant positive relationship. With a very high positive correlation coefficient ($r = 0.92, p < 0.001$), the Maldives' reserve to remittance relationship is stronger than the rest of the countries. Bangladesh's reserve and remittances are more closely linked than those of Bhutan, Pakistan, and Sri Lanka, following Nepal and India. However, the Pearson product correlation value for Pakistan and Sri Lanka was determined to be statistically insignificant. Furthermore, the Bangladesh reserve is favorably and significantly related to remittances from Bhutan, Maldives, Nepal, Pakistan, and Sri Lanka.

**Table-1:** Correlation matrix of reserve and remittance for the South Asian Countries
<table>
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<tr>
<th></th>
<th>BD reserve</th>
<th>BD remittance</th>
<th>BHU reserve</th>
<th>BHU remittance</th>
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<th>IND remittance</th>
<th>MDV reserve</th>
<th>MDV remittance</th>
<th>NPL reserve</th>
<th>NPL remittance</th>
<th>PAK reserve</th>
<th>PAK remittance</th>
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<tr>
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<tr>
<td>IND reserve</td>
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<td>0.89*</td>
<td>0.82*</td>
<td>0.95*</td>
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<tr>
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<tr>
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<tr>
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<td>0.88*</td>
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**CONCLUSION AND CONTRIBUTION**

This research has aided in two ways. One, it illustrates how a large incentive program in FY 2019-2020...
has affected the pattern of inward remittance flow in Bangladesh, and how this policy has modified the pattern of remittance flow in Bangladesh until lately. This study can be used to lay the groundwork for future remittance policy research in Bangladesh, as well as other developing countries. The main conclusions of this brief study, as well as the numbers and data, show that the monthly pattern of remittances in Bangladesh has remained consistent over the last five fiscal years, with inbound remittances peaking in FY2020-21. Bangladesh collected $2598.21 million in remittances in the fiscal year 2020-21, a new high. This indicates that the current policy is effective in encouraging remittance flow in the country. It is still too early to say whether this policy will be sustainable in the near future because it is accompanied by government subsidies that affect the economy's overall fiscal policy. However, in correlation matrix analysis, Bangladesh's reserve and remittances are more closely linked than those of Bhutan, Pakistan, and Sri Lanka, following Nepal and India. However, the Pearson product correlation value for Pakistan and Sri Lanka was determined to be statistically insignificant.

LIMITATIONS AND FUTURE RESEARCH SCOPE
There are various shortcomings in the current study. For starters, it analyzes a limited number of variables. As a result, the findings' generalizability should be viewed with care. Second, because the policy has only been in place for two and a half years, we are unable to conduct an econometric analysis to assess the influence of remittance growth on macroeconomic variables. Using the Difference-In-Difference technique, more study may be done to see if the incentive program has a major influence on remittance growth. Furthermore, beginning in 2020, future researchers can include Pakistan and Sri Lanka, which has enacted an incentive strategy to promote remittance inflows.

CONFLICTS OF INTEREST
There are no conflicts to declare.

REFERENCES


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