Scholars Journal of Arts, Humanities and Social Sciences OPEN ACCESS
Abbreviated Key Title: Sch J Arts Humanit Soc Sci
ISSN 2347-9493 (Print) | ISSN 2347-5374 (Online)
Journal homepage: https://saspublishers.com

The Impact of Remittance on Economic Growth in Bangladesh

Sanjoy Kumar Saha[1*]

[1]Associate Professor, Department of Economics, Mawlana Bhashani Science & Technology University, Tangail, Bangladesh

DOI: 10.36347/sjahss.2021.v09i09.013 | **Received:** 02.08.2021 | **Accepted:** 07.09.2021 | **Published:** 24.09.2021

***Corresponding author:** Sanjoy Kumar Saha

Abstract **Original Research Article**

This research examines the impact of remittances on the economic progress of developing countries such as Bangladesh, which receives significant amount of remittance. To investigate this, we used a time series analysis to undertake an empirical study for Bangladesh from 1995 to 2016. Several time series techniques are used in this work, including the Johansen–Juseliues test and the Granger causality test. We discovered that in the long run, overseas remittances have a greater impact on economic growth (per capita GDP). There also exists a unidirectional causality among the variables such as foreign remittances and domestic investment. In the coming days, we recommend that the Bangladesh government be cautious and smart in preserving bilateral and multilateral relationships with donor organizations and countries, with a particular focus on achieving the Sustainable Development Goals (SDGs).

Keywords: Remittances, Foreign grants, Economic growth, Domestic Investment, Granger Causality Test.

INTRODUCTION

Remittances are linked to better human development results in a variety of areas, including health, education, and gender equality, in addition to monetary gains. There are also beneficial spillover effects, with some remittance-receiving households' spending and investments benefiting entire communities. It has become critical because the continent's low savings have created a major resource gap, necessitating the need for foreign capital to supplement local savings. Remittance inflows to poor countries have already overtaken official resource inflows. After foreign direct investment, workers' remittances have been the second largest source of funds going into developing nations since 1999. (FDI). Furthermore, worker remittances are not obligations, but rather cash transfers from abroad, which in theory do not cost the recipient country anything. According to studies, when the number of economies transitioning from developing to developed increases, total FDI flows decline, whereas remittance inflows grow; this has boosted people's living standards, successfully reducing poverty while ensuring they satisfy their fundamental necessities. As a result, remittances inflows can greatly boost economic activity by supporting and complementing consumption, investment, and savings. According to the World Bank (2020), remittances to developing and lower middle income countries have been steadily increasing in recent years, reaching a whopping $508 billion in 2020.

According to published statistics, foreign remittance inflows have become a major mode of financial inflow in Bangladesh, with a spectacular and tremendously expanding tendency year over year. With the aforementioned scenario in mind, it became necessary to look into the impact of foreign remittances on economic growth in Bangladesh.

OBJECTIVES

The debate over whether remittances have a greater impact on a developing country's economic progress is outdated. Many economists believe that remittances constitute a trap for developing and underdeveloped countries, trapping them in a cycle of debt and dues. Contrary to the beliefs of some supporters, such remittances are used to improve policy and governance, as well as to stimulate growth, whereas handouts cannot. Opponents also pointed out that handouts are primarily used for national consumption rather than development and economic investment. That is, economic growth is positively correlated with the quality of their economic policies, but not with the amount of donor funding received. There have been a few notable demonstrations that governments receiving overseas remittances often perceive remittances to be distinct from grants since remittances come with a hefty payback burden. Remittances obstruct policymakers' ability to use the cash granted wisely by implying efficient tax collection policies, consistent growth in internal and external revenue sources, and assistance in remittance repayment.

The argument of whether foreign grant or foreign remittance is more impactful towards the economic development of a developing country is not modern. Many economists claimed that remittances are not that much of good rather is a trap of accumulating debt and dues for the developing and under developed countries. On the contradictory to some supporters, such remittances are utilized for better policy and good governance as well as it promotes growth while grants can't do so. The opponents further also noted out the facts that grants are solely used up for the national consumption rather than utilization on development and economic investment. That is economic growth depends positively on the quality of their economic policies but not on the amount of grants received from donor agencies. There have been a few numbers of noticeable proofs that countries obtaining the foreign remittance generally consider remittances divergent from grants because the remittances carry the heavy burden of repayment with them. Remittance restrict out the policy maker to use the provided funds wisely by implying proper of tax collection policy and a stable growth in the internal and external revenue sources and help in the repayment of the remittances.

Grants, on the other hand, are seen as a free resource and might be considered of as a substitute for domestic revenue, leading to a misallocation of capital. Similarly, if remittances' restrictions or limitations were not restricted, policymakers would regard them to be equal to grants. Again, if a government accepts an excessive quantity of remittances from donor agencies or countries, the country will suffer.

In contrast grants are viewed as free resource and can be thought as a substitute of domestic revenue which will eventually lead to miss use of the capital. Similarly, if the conditions or requirements of remittances were not restrictive then policy maker would consider it as an identical of the grants. Again if a country accepts excessive amount of remittances from the donor agencies or nations then the constant build-up of debt may not be viable and have negative impact on the economic stability and growth in the long run.

OBJECTIVES

According to the big push idea, undeveloped or developing countries require a large amount of capital expenditure to move forward from their current state of backwardness. The source of financial flow in this scenario is foreign remittance. Various scholars have looked at the impact of foreign remittances on GDP, and the results are generally positive. However, very little research has been done on the impact of foreign remittances on Bangladesh's economic progress. The goal of this research is to close the gap and determine the current state of foreign remittances in Bangladesh.

This paper empirically tried to investigates the relationship between foreign remittance more specifically remittance to the economic growth.

1. Firstly this paper shows the individual effect of foreign remittances in the context of Bangladesh.
2. Secondly this paper attempts to clarify the debate whether Foreign Remittance should be in form of remittances with the help of econometric models.

Overview of Remittance Flows in Bangladesh

Over the previous decade, remittances to Bangladesh have consistently increased. More than 3 million Bangladeshis have fled the nation in search of work since its independence in 1971. Their total remittances between 1976 and 2003 are estimated to be around US$22 billion, according to the national bank (Azad, 2005). Recognizing the importance of migration to the economy, the government has had legislation, regulations, and an institutional structure in place to help citizens migrate for years. The question now is why is the perception of remittances suddenly becoming so important?

Bangladesh is going through a phase of dual graduation. In 2015, the country earned the label of Lower Middle Income Economy after growing its per capita income. By March 2018, it had successfully begun the process of transitioning from a Least Developed Country to something like a Developing Country by 2024 (UNCTAD, 2017) by meeting all three of the required criteria. Per-capita income, human assets, and economic vulnerability are the three primary factors. This, however, does not imply that the future will be bright. Bangladesh still faces a number of hurdles and challenges in order to progress and ensure long-term growth. The efficient mobilization of financial credits for development objectives from external sources would be one of the hurdles.

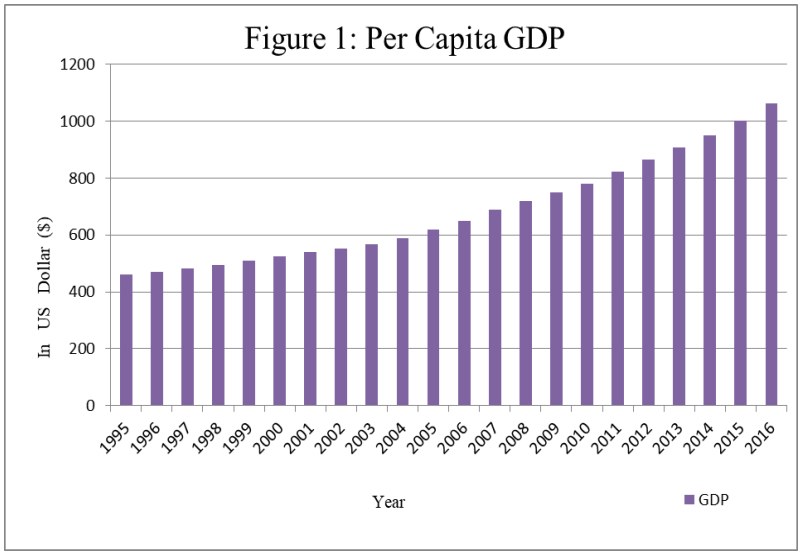

Figure 1: Per Capita GDP

Source: Economic Relation Division (ERD), Ministry of Finance, Govt. of Bangladesh

Bangladesh has received a sizable amount of foreign remittance over the years. During the period immediately after independence Bangladesh received significant amount of food remittance in total remittance.

But since the early 1980s the share of food has declined gradually and now Bangladesh receives very insignificant amount of food remittance. For example, in FY 1971-72 the share of food remittance in total remittance was about 48 percent, while the share declined to just 1.2 percent only in FY 2013-14 (source: ERD, Ministry of Finance). The decreasing rate in food remittance indicates that the production and import capacity has gradually increased. But still every year the country imports a significant amount of food to meet the ever growing demand (Hasan, 2011).

In the recent years the share of remittances has increased significantly. For example, in in 1990 the share of remittance was 49% but in recently the share has increased up to 96% in 2016. However most of the foreign remittances the country receives are concessional, the buildup of debt has been slow.

LITERATURE REVIEW

Some scholars who are considered pioneers in contemporary economics have completed a series of studies. However, not everyone agreed on the same decision. Some investigations found a beneficial influence, while others discovered a negative relationship, and some academics believe that both remittances can have an impact provided right actions and policies are adopted.

A series of research has conducted by some researchers who are considered as pioneers in the modern economics. But not all of them agreed to the same decision. Some of the researchers have found a positive impact while others have empirically showed a negative relation and according to some researcher's remittances can be impactful simultaneously if proper steps and policy is taken. Thus we can divide into three points of view.

Researchers such as Barrow and Garrt (1989), Aghion and Howih (2009), Manuelli and Anath (2009), and Lime (2016) have identified the sources of economic growth as FDI investment, physical capital investment, human capital investment, excess labor, technological changes, foreign aid, and an increase resulting from venturing into new concepts and R&D. Tolcha and Rao (2016) used yearly secondary time series data for the years 1981 to 2012 to examine the impact of remittances on Ethiopian economic growth. In analyzing secondary data acquired from official sources, they used the ADF unit root test and the ARDL approach. According to the study's findings, remittances had a favorable and considerable impact on Ethiopia's economic growth in the short run, but had a detrimental impact in the long run.

In their study, Wadood and Hossain (2015) looked at the impact of offshore remittances on Bangladesh's economic growth. Johansen approach to Cointegration, Vector Error Correction Model, and Granger Causality Test were the analytical techniques employed in their study to analyze the secondary annual time series data gathered between 1972 and 2012. The study's findings demonstrated that remittances and economic growth have a long-term association. Furthermore, remittances have a substantial positive impact on Bangladesh's economic growth.

(Sethi *et al*., 2019) compares the effectiveness of REMITTANCE in India and Sri Lanka from 1961 to 1950; the comparison results demonstrate that India's economy has had a substantial positive impact, whereas

Sri Lanka's economy has had the opposite effect. However, Sri Lanka receives significantly more REMITTANCE than India. The authors demonstrate that development is not solely dependent on REMITTANCE, but also on policy.

(Kamal, 2018) emphasizes the value of having solid governance and strong strategic policy accomplishment in order to get the most out of the flow of foreign remittances. His research also concludes that international remittances, rather than foreign assistance, provide Bangladesh with significant benefits. We believe that the Bangladeshi government should be cautious in maintaining both bilateral and multilateral relationships.

(Hasnain Ahamad, 2018) argue that foreign remittances are critical for developing country economic development as well as lower-middle income and middle-income country infrastructure development. However, it should focus on paying prior remittances and being mindful of the use of foreign remittances.

(Binata Rani Sen *et al*., 2017) discovered that in the early years of Bangladesh's independence, foreign remittances contributed more to our GDP. However, from 1996-1997, the share of overseas remittances has been gradually diminishing due to the development of non-materialistic sectors such as inventive and infrastructure development, rising literacy rates, and rising labor skills.

According to Hossain, (2014), international remittances have a favorable effect on Bangladesh's economic growth, are statistically significant, and their contribution to GDP is decreasing with time. His report also reveals that remittance yields decreasing returns due to Bangladeshi institutions' inability to effectively utilize foreign money. This conclusion is consistent and well-balanced.

According to Murshed & Khanaum, (2014), improving the capability of poor countries and incorporating all stakeholders for a better deal of political interests at the highest level is important to optimize remittance efficacy. Remittance-receiving countries should pay close attention not just to their economic policies, but also to how remittance funds are distributed.

(Mallik, 2008) examines the impact of remittances on economic growth in six of Africa's poorest and most remittance-dependent countries. Central African Republic, Malawi, Mali, Niger, Sierra Leone, and Togo are the countries involved. While investment and trade openness have beneficial outcomes, remittances have the reverse effect on growth in most of the nations listed above.

(Clements *et al*., 2004) look at why there has been a minor shift toward remittance. Concessional remittances are converted into expenses if donors supply more funds to poor countries. They argue that distribution should be supported by policies aimed at strengthening domestic institutions.

According to (Adam Lerrick and Allan H. Meltzer, 2002), the poorer a country is, the greater the need for aid. From 1990 to 1999, he shows the failure rate of initiatives in Africa, South Asia, Latin America, and East Asia to produce adequate long-term results due to unsustainable remittance debt.

(Burnside C. and Dollar D., 1996) investigated the links between foreign remittance, economic policies, and the progress of developing countries in their research on foreign remittance. Their findings show that developing countries with sound fiscal, monetary, and trade policies have a favorable effect on growth. However, when there is a lack of political stability, remittances have little impact.

Research design

Methodology and Data Source

The research study is quantitative and analytical in character, and it is based on secondary data since it is more accurate, viable, and compelling, and it saves the researcher a lot of time (C. Hakim, 1993). Secondary data was gathered from the Bangladesh Bank's annual report, its website, the World Bank, Bangladesh's Ministry of Planning, the Economic Relation Division (ERD), and the Bangladesh Bureau of Statistics (BBS). The quantitative data is in the form of a time series, with a range of 1995 to 2016. Per capita GDP, Foreign Remittance, and Inflation are the equivalent variables. Per capita GDP, Foreign Remittance, and Investment are all measured in US dollars. Appendix 1 contains the data set.

The research study is quantitative and analytical in nature based on the secondary data as it is more accurate, viable and convincing that leads to a huge time saving for the researcher (C. Hakim, 1993). Secondary information has been collected from the Bangladesh Bank annual report, Bangladesh Bank website, World Bank, Ministry of planning of Bangladesh, Economic Relation Division (ERD) and Bangladesh Bureau of Statistics (BBS). The quantitative data are time series in nature, the time frame is from 1995 to 2016. The corresponding variables per capita GDP, Foreign Remittance, and Investment are taken in US$. Data set are presented in Appendix 1.

Research Model

To see the effectiveness of foreign remittance and grants towards the economic growth of Bangladesh we have used time series variables with the time frame of 1995 to 2016. In this paper we will use foreign

remittance-growth model that was developed by (Mallik, 2008). In his model he included foreign remittance, GDP growth, trade openness and domestic investment. Here the model has been used with slight modification where the corresponding variables are per capita GDP growth, remittance, and annual domestic investment. (Mallik, 2008) has taken foreign remittance as a single variable but as we want to measure the effectiveness of remittances towards the economic growth, thus foreign remittance is divided into foreign remittances. The non-linear form of the growth model follows by;

$GDP_t = \alpha_0 REMIT_t^{\beta} INV_t^{\lambda} e_t$ ..... (1)

Where,

α_0 = Constant term

β = Elasticity of GDP per capita with respect to foreign remittances

ε = Random error term the logarithmic transformation is used to convert the non-linear equation into linear equation. The new model follows by;

$\ln GDP_t = \alpha_0 + \beta \ln REMIT_t + \lambda \ln INV_t + \epsilon_t$ .....*(2)*

In this linear model GDP per capita is used as dependent variable and foreign remittances, and domestic investment is used as independent variable. The source of data, explanation and mathematical term of the variables are given in the following table-1.

Note that in the table-1 the following variables in the foreign remittance-growth model are in log form, thus the variables GDP, Remittances, INV respectively becomes lnGDPt, lnRemittancet, lnINVt.

Table 1: Description of the Variables

Variable	Description	Variable Type	Source of Data
GDP_t	Per capita GDP	Dependent	World Bank (WB)
$Remittance_t$	Foreign remittance in thousands of dollar	independent	Economic Relation Division (ERD)
INV_t	Domestic investment in thousands of dollar	Independent	World Bank (WB)

Variables

If the independent variables in the model set effects the GDP growth then there must be a causality relation among the variables which can be measured easily by Granger Causality Test. However we can't run the test directly to measure the direction of causality on the data set, as we are unaware of the fact that the data is stationary or not. There are three steps to figure out the relationship of the different types of variables from in this study. Firstly each variable is tested for the existence of any unit root test. If there is any, in second step we use Johansen Co-integration Test to test the long run co-integration relation among the variables. Finally with the help VAR diagnostics test we examine the relations among the variables.

The following tests are carried on STATA software which is widely known and mostly used for economics, sociology and political science analysis. The name STATA is a syllabic abbreviation of the words Statistics and Data.

Estimation Result Analysis and Discussion

The following chapter presents the results of empirical analysis and tries to answer the existence a causal relationship between foreign remittance and economic growth and the remittance effectiveness on economic growth.

Descriptive Statistics

The following table-2 contains the information about average, standard deviation, coefficient of variance, variance, minimum, maximum value of the particular variables. In the table the average the average foreign remittances are received respectively $1408,068 and $581,523. The country received maximum foreign remittance of $3218,000 in 2016 and maximum grants of $745,100 in 2010. The domestic investment was maximum $65655,280 in 2016 and it was lowest $7254,000 in 1995. Per capita GDP was minimum $459.6 in 1995 and maximum $1062 in 2016. All the statistics regarding GDP and domestic investment indicates that Bangladesh Is a least developed country and increasing rapidly for its next target. Detailed data set is presented in Appendix 1.

Table 2: Descriptive statistics

Variables	Mean	Std. Dev.	CV	Minimum	Maximum
GDP	682.068	186.094	0.306955	459.6	1062
Remittances	1408.068	762.327	0.535687	695	3218
INV	24815.7	16456.8	0.782171	7254	65655.28
Source: Author's calculation					

Unit root test

Historically econometricians observed that In the presence of the stochastic trend the usual process of overseeing a regression analysis may result in unexpected misleading closure (Clive W.J. Granger, 1973). The study introduces a wide order of econometric tools to carry out the empirical analysis emphasizing 22 years of annual time series data. It is necessary to get rid of the problem of non-stationary, for which Augmented Dickey Fuller unit root test is implemented. Unit root test is a pre-required step for evaluating the long run relationship between two or more times series data set (C. W.J. Granger, 1981).

Null Hypothesis (H_0): The series has unit root, which is it is non-stationary.

Alternative Hypothesis (H_1): The series has no unit root, which is it is stationary.

Decision Criteria: When the test statistic is found to be larger than that of critical value then the assumed null hypothesis will be rejected. That is the variables are stationary in the long run.

Table 3 represents the unit root test of ADF test. From the result, we can notice that some of the variables are stationary while most of the variables are non-stationary, which is there is presence of unit root. Therefore, we need to perform the first difference of the variables and the results are shown below in Table-4.

Table 3: Augmented Dickey Fuller Test

Variables	Augmented dickey fuller test		
	Case 1	Case 2	Case 3
lnGDP	6.272	-1.326	16.896
lnRemittances	-0.537	-3.245	1.242
lnINV	0.744	-0.717	8.516
Source: Author's calculation			

Case 1: Constant and Trend terms included in the equation to unit root test.
Case 2: Only Constant term is included in the equation to the unit root test.
Case 3: Neither Constant nor Trend is included in the equation to the unit root test.

Table 4: Summary of T-stat and p-value in Augmented Dickey Fuller Test with Variables in First Difference

Variables	Unit Root Test in	Case 1	Case 2	Case 3	Remark
Δ lnGDP	1st difference	-4.912	-2.157	0.748	Stationary
ΔlnRemittances	1st difference	-4.781	-5.281	-3.441	Stationary
Δ lnINV	1st difference	-5.017	-7.254	-2.254	Stationary
Source: Author's calculation					

Note that all the cases are now only for the Augmented Dickey- Fuller Test. From the table we can notice that all variables are found to be stationary and integrated at their first differences order i.e. I (1). This suggests that the Null Hypotheses (H_0) has no unit root present or the variables are stationary, as all the variables are not accepted in their first differences at ADF test.

Lag Selection Criteria

Optimum lag selection criteria are used to find out the appropriate lag, as it is important for using any advanced econometric techniques such as Co-integration test and Granger Causality Test. In this study we have taken five lag order selection criterion to select optimum lag, they are LR, FPE, AIC, HQIC and SBIC. The minimal value of each criterion is used to select as the optimum lag. Based on the result all criteria suggest taking four lags as optimum lag.

Table 5: Optimum Lag Selection Criterion

Lag	LogL	LR	FPE	AIC	HQIC	SBIC
0	41.2009	NA	1.9e-07	-4.13343	-4.10615	-3.93557
1	120.525	158.65	1.8e-10	-11.1695	-11.0331	-10.1802
2	150816	60.582	5.0e-11	-12.7574	-12.5118	-10.1802
3	180.922	60.21	3.2e-11	-14.3246	-13.9699	-11.9766
4	1191.39	2020.9*	5.7e-57*	-124.357*	-124.457*	-121.457*
Note: * Represents lag order selected by the criterion. **Source**: Author's calculation						

Johansen and Juseliues Co-integration Test

Johansen Co-integration Test is applied to find out the co-integration vector (denoted by r) within the given time series variables. In this co-integration test the variables must be non-stationary at the level but stationary at their first difference. As all the variables are stationary in their first order Johansen multivariate co-integration test can be used. This test uses two likelihood estimators for example, Trace test and Maximum Eigen Value test. Both of them either reject the null hypothesis ($H_0 \neq 0$) which indicates no co-integration among the variables or accept the null

hypothesis (H_0=0) which indicates the existence of co-integration. We commence the test by considering H_0: r = 0. If it is not accepted then we proceed to test whether H_0: r = 1. This procedure will continue until the null hypothesis is accepted. In the following table the results of co-integration test are charted.

Table 6: Johansen and Juseliues Co-Integration Test

Hypothesized No. Of CE	Eigenvalue	Trace Statistics	Critical Value At 5%	Max Statistic	Critical Value At 5%
None		52.2667**	47.21	35.6993**	27.07
At most 1	0.83220	16.5674	29.68	9.3178	20.97
At most 2	0.37242	7.2497	15.41	5.1799	14.07
At most 3	0.22817	2.0698	3.76	2.0698	3.76
At most 4	0.09831				
Note: (**) denotes rejection of the hypothesis at the 0.05 level. **Source**: Author's calculation.					

From the test result we find that both Trace Test and Maximal Eigen indicate the existence of one co-integrating vector in case of Bangladesh, at 5 per cent level of significance.

Granger Causality Test

The co-integration relationship from the Johansen test exhibits the presence of a possible causal relation that exists between the selected variables. However, this does not say anything about the appropriate direction of the causal relationship between the variables. Granger's Causality Test is applied to point out the possible relationship among the variables. In this section we set three pairwise hypotheses to deduce the causal relationship between the variables. In the following table, the result of pairwise the Granger Causality Test has been portrayed.

Table 7: Pairwise Granger Causality Test

Null Hypothesis	Direction of Causality	F- Statistics	Probability
lnRemittances doesn't Granger Cause lnGDP	lnRemittances $\Rightarrow$ lnGDP	1.1635	0.2950
lnGDP doesn't Granger Cause lnRemittances	lnGDP $\Rightarrow$ lnRemittances	3.8373	0.0051
lnINV doesn't Granger Cause lnGDP	lnINV $\Rightarrow$ lnGDP	0.4667	0.6359
lnGDP doesn't Granger Cause lnINV	lnGDP $\Rightarrow$ lnINV	5.9726	0.0124

Source: Author's calculation

From the test results of Table 7 no bi-directional relationship was found among the variables. In first hypothesis, we take consideration of the causal relationship between foreign remittances (lnRemittances) and economic growth (lnGDP). It is clear from the table that there is existence of a unidirectional relationship between lnRemittances and lnGDP for Bangladesh. Secondly a similar relationship exists between domestic investment (lnINV) and economic growth (lnGDP). Lastly there is no such causal relationship between lnGDP at 5% level of significance.

CONCLUSION AND POLICY IMPLICATIONS

In the long run test analysis suggests that foreign remittances are statistically significant in the direction of the economic growth of Bangladesh. In reality the foreign remittances had a greater effect on GDP indicating a relationship between them. In addition, the impact of domestic investment used in the model was highly significant in the long run. Foreign remittances which are received by Bangladesh from various donor countries and agencies should be maneuvered more diligently if the trend of long-term benefit observed here is to be carry on in the near future.

A new dimension of further investigation to the potency of foreign remittances in developing countries of the world should be introduced. Policy makers can utilize the results of this study as an important source of knowledge and information for setting new decisions in future regarding the foreign remittance mix. Domestic investments need greater scrutiny and the newly enacted National Industrial Policy (NIP) effectively implemented for developing a fruitful investment framework and encourages new investors to increase their investment in Bangladesh. Meanwhile the government should stay alert on remittance pushing, as the amount of foreign remittances that are coming into Bangladesh past the last decades is much greater in percentage than grants. A cautious monitoring on the remittance behavior of the donors will help to identify a potential debt trap in advance. Most importantly the government of Bangladesh is determined towards the achievement of Sustainable Development Goals (SDGs) as soon as possible. The economic plans need a perfect combination of foreign remittance and remittance is

essential. Foreign remittance project should be customized to particular needs of the country for proper utilization of the funds can be made possible.

Appendix

Year	Per Capita GDP in $	Remittace (in thousands of $)	Domestic Investment (in thousands of $)
1995	459.6	766.3	7254.002363
1996	470.3	745.2	9626.674457
1997	481.1	748.5	10525.08178
1998	495.6	866.7	11057.29075
1999	508.4	861.9	11649.37604
2000	524.9	864.7	12706.57921
2001	541.3	963.4	13052.02001
2002	551.9	1074.9	13320.6164
2003	568.1	695	14846.72575
2004	588.8	1244.2	16271.81926
2005	617.5	1067.1	17937.41463
2006	649.9	1040.4	18776.48591
2007	687.3	1403.4	20841.19582
2008	720.4	1189.5	24009.47621
2009	748.3	1588.6	26855.38846
2010	781.2	1031.6	30256.90311
2011	822.2	1538.5	35273.77492
2012	865.7	2084.7	37689.44867
2013	907.3	2403.7	42581.72021
2014	951.3	2561.8	49406.99043
2015	1002.4	3033	56351.7717
2016	1062	3218	65655.28327

Source: Economic Relations Division (ERD), World Bank.

BIBLIOGRAPHY

- Adam, L., & Allan, H. M. (2002). Grants: A Better Way to Deliver Remittance. *Quarterly International Economics Report*, *January*.
- Aghion, P. & Howitt, P.W. (1992). A model of growth through creative destruction. *Econometrica*, 60:323-351
- Barro, R. J., & Garry, S. B. (1989). Fertility choice in a model of economic growth. *Econometrica*, 57(2), 481-501.
- Aghoutane, K., & Karim, M. (2017). The impact of foreign aid on economic growth in Morocco: econometric analysis using VECM. *International Journal of Economics and Finance*, *9*(5), 87.
- Burnside, C., Dollar, D. (1996). *Aid , Policies and Growth*.
- Hakim, C. (1993). from the SAGE Social Science Collections. Rights Reserved. *The ANNALS of the American Academy of Political and Social Science*, *503*(1), 122–136.
- Clements, B., Gupta, S., Pivovarsky, A., & Tiongson, E. R. (2004). Foreign aid: Grants versus loans. *Finance and Development*, *41*(3), 46–49.
- Granger, C. W. J. (1981). Some properties of time series data and their use in econometric model specification. *Journal of Econometrics*, *16*(1), 121–130. https://doi.org/10.1016/0304-4076(81)90079-8
- Granger, C. W. J. (1973). Spurious Regressions in Econometrics. *A Companion to Theoretical Econometrics*, *2*, 557–561. https://doi.org/10.1002/9780470996249.ch27
- Hasan, M. D. (2011). Foreign aid dependency of Bangladesh: An vvaluation. *The Chittagong University Journal of Business Aministration*, *26*, 281–294.
- Hasnain, A. (2018). *Foreign Grants and Loans in Bangladesh*. *November*. https://doi.org/10.1729/Journal.18905
- Hossain, B. B. (2014). *Nexus between Foreign Aid and Economic Growth: Evidences from Bangladesh*. *14*(6).
- Kamal, Y. (2018). *The Paradox of Foreign Loans and Grants : An Econometric Analysis in the Perspective of Bangladesh*. *XXXIX*(3).
- Khatun, F. (2018). *Can Bangladesh do without Foreign Aid ? November*.
- Lime, L. H. (2016). The impact of foreign remittances on the economic growth of Kenya.
- Mallik, G. (2008). Foreign Aid and Economic Growth: A Cointegration Analysis of the Six Poorest African Countries. *Economic Analysis and Policy*, *38*(2), 251–260. https://doi.org/10.1016/S0313-5926(08)50020-8
- Manuelli, R. E., & Ananth, S. (2009). Explaining International fertility differences. The Quarterly.
- Murshed, M., & Khanaum, M. M. (2014). Impact of Foreign Aid in the Economic Development of

Recipient Country. *Journal of the Bangladesh Association of Young Researchers*, *2*(1), 33–37. https://doi.org/10.3329/jbayr.v2i1.20539

- Sethi, N., Bhujabal, P., Das, A., & Sucharita, S. (2019). Foreign aid and growth nexus: Empirical evidence from India and Sri Lanka. *Economic Analysis and Policy*, *64*, 1–12. https://doi.org/10.1016/j.eap.2019.07.002
- Tolcha T. D., & Rao, P. N. (2016). The impact of remittances on economic growth in Ethiopia. *Indian Journal of Commerce & Management Studies*, 7(3), 1-15
- Wadood S. N., & Hossain M. A. (2015). Impact of overseas remittances on economic growth: Evidences from Bangladesh. Munich Personal RePEc Archive. Paper No. 81657, https://mpra.u b.un i-muenchen.de/8165