Volume-8, Issue-1, January - June, 2021
PP. 102-117

Impact of Education Level of the Expatriates on Remittances Inflow: Bangladesh Perspective

Md. Maidul Islam Chowdhury[1]
Joy Saha[2]
Tarek Aziz[1]
Md. Zahidul Islam[3]

Abstract

The economy of Bangladesh is leveraging remittances as one of the most important sources of foreign currency inflow into the country. The inflow of remittances helps Bangladesh to maintain an economic-shock resilient foreign exchange market leading to a stable exchange rate of the local currency which in turn ensures smooth foreign trade of the country. Exploring the micro determinants of remittance inflow of Bangladesh can be useful to understand the dynamics of remittance inflow better which consequently should guide us to take proper measures for the smooth inflow of remittances. This paper is an effort to determine the relationship between remittances inflow and its micro determinants especially expatriates' human capital represented by the level of education. Besides human capital, the paper also examines the impact of expatriates' age, sex, host country, occupation, number of years spent abroad, etc. on the remittances inflow of Bangladesh. The necessary analysis of this research is based on the Ordinary Least Square (OLS) method. The source of the cross-sectional data is the Bangladesh Bureau of Statistics (BBS) conducted Household Income and Expenditure Survey (HIES), 2010. The final sample size became 1406 after necessary data cleaning. The paper estimates three different models to find the best one to serve the purpose of the research. The finding of the paper shows that given a one-year increase in education year, we can expect the remittance inflow into Bangladesh to increase by 2.19 percentage. For the age variable, given a one-year increase in the age of expatriates, we can expect the remittance inflow to increase by 1.11 percentage.

Keywords: Remittances, Migration, Human Capital

JEL Classification: F22, F24, J24

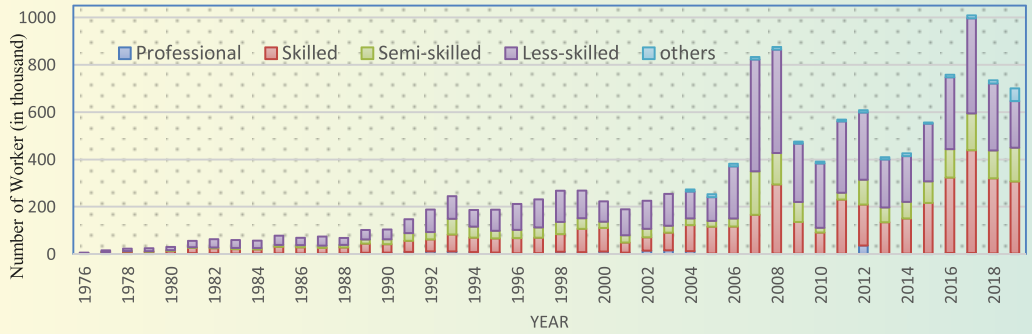
[1]Author: Joint Director, Research Department, Bangladesh Bank, Head Office, Dhaka
[2]Author: Assistant Professor, Department of Economics, JatiyaKabiKazi Nazrul Islam University, Mymensingh
[3]Author: Lecturer, Department of Economics, Government Maulana Mohammad Ali College, Tangail.

* The views expressed in the paper are the authors' own and do not necessarily reflect the views of their institutions. Comments can be sent to the corresponding author: maidul.chowdhury@maec.moore.sc.edu

Introduction

Remittance is an important foreign currency earning source for the least developed countries like Bangladesh. Statistics show that Bangladesh is one of the highest remittances earning countries in the world. World Bank ranked Bangladesh as the eighth-highest annual remittance recipient country of the world in 2019 with USD18.36 billion of remittances (World Development Indicator, World Bank). For Bangladesh, remittance is the second highest foreign currency earning source that helps her to maintain an economic-shock resilient foreign exchange market leading to a stable exchange rate of the local currency which in turn ensures smooth foreign trade of the country. The role of remittance has also been crucial for Bangladesh to strengthen its current account balance. The importance of remittance is also evident from its significant share as a percentage of GDP. In the fiscal year 2017-18, remittances as a share of GDP was 11.67 percent for Bangladesh (calculated from *Bangladesh Economic Review, 2018-19*).Apart from this, Bangladesh is expecting to graduate to the club of developing countries from the least developed country (LDC) category in 2024 achieving necessary development in the required indicators. Graduation to a developing country will be an achievement for Bangladesh but the new status may shrink the trade and low-cost fund opportunities of Bangladesh as an LDC. So, the importance of remittance inflow will be much higher as a developing country for Bangladesh to maintain a healthy current account balance and foreign exchange reserve.

Chart-A: Skill based composition of Bangladeshi Expatriates (1976-2019)



Middle Eastern countries are the main source of remittance inflow for Bangladesh. In the fiscal year 2018-19, the country received 18.9 percent of total

remittance from KSA, 15.5 percent from UAE which is followed by 11.2 percent from the USA (*Bangladesh Bank Annual Report, 2018-19*). Despite the huge importance of remittance in the economy of the country, Bangladesh is yet to add enough impetus to remittance inflow into the country because of a large share of unskilled and less-skilled workers in the total expatriates. The picture is evident from *chart-A* which shows that even in 2019, 48.5 percent of workers went abroad from Bangladesh were belong to the group of the semi-skilled and less-skilled worker. This composition is not only a reason for sluggish remittances inflow compared to other remittance earning countries but also making the remittances inflow of Bangladesh vulnerable as the unskilled workers are more likely to lose a job in the world economic crises compared with the skilled labors. Now, it seems to be interesting to see how far the skill of Bangladeshi expatriates affects the country's remittance inflow.

Objective of the Research

Examining the relationship between the education of expatriates and remittance inflow into Bangladesh is the main interest of our research. Here, we are taking the education level of expatriates as a proxy of their skill level. We want to observe how the academic education of expatriates affects the remittance inflow into Bangladesh. So, the prime objective of the research can be summarized as below,

- To identify and measure the change in the remittance inflow to Bangladesh due to change in the years of education of expatriates.

In addition to education, our research will also shed light on the impact of age of expatriates, tenure of abroad stay, sex of expatriates, etc. on the remittance inflow to the country.

Rationale for the Research

This research outcome is likely to come up with a relationship between the education of expatriates and the remittance inflow of Bangladesh. Unskilled labor is still found as a large share of manpower export from Bangladesh. The research can underline the importance of academic education of labor to expedite of

remittance flow into Bangladesh. Besides, we have failed to find any economic literature explaining the micro determinants of remittances inflow into Bangladesh effectively though there are an ample number of researches explaining its macro determinants. So, we hope our research will be able to reduce the dearth of research in the stated area. Any empirical evidence is always very helpful to guide the course of the economic policy of a country. Hence, the research outcome is likely to be useful for the relevant policy formulation for Bangladesh too.

The paper consists of six sections. The next section will discuss the related literature. Section III discusses the methodology of the research. A discussion on the data is given in section IV followed by section V describing the data through graphs before diving into the estimation. Section VI contains estimation and findings which is followed by section VII covering the conclusion of the paper.

I. Literature Review

Many available research papers address the determinants of remittance inflow into a country. A few of the available research papers with the discussion of the determinants of remittance inflow into a country explain Bangladesh perspective. However, the determinants of remittance inflow for a country are broadly categorized into macro and micro determinants. The following literature review of the paper covers some of the most relevant research articles that investigate both micro and macro determinants of remittance inflow,

Bollard et al. (2009) investigate the relationship between remittances and the education level of migrants. Authors use microdata comprising 33,000 immigrants from developing countries from 14 surveys in 11 OECD destination countries which accounted for 79 percent destination of all global migrants to OECD countries in 2000. Authors regress three different measures of remittance (total remittances addressing both extensive and intensive margins, log of total remittances conditional on remitting) on education. Education is also measured by university degrees and years of schooling. All regression in the paper includes country of birth fixed effects and dataset fixed effects. The paper finds a mixed association between education and remittances at the extensive margin, but at the intensive margin, the association is strongly positive. Adding up the two, the

paper concludes that more educated migrants remit more significantly. Being further specific, migrants with university degrees yearly remit $300 more than migrants without a university degree. Hussain and Naeem (2010) also investigate the macroeconomics factors in determining remittance inflow into Bangladesh. They find oil prices, exchange rates, employment abroad every year, and GDP growth as the key determinants of remittance inflow into Bangladesh. This paper also does not shed light on the micro determinants of remittance inflow. Islam and Nasrin (2015) examine the major driving forces of remittances into Bangladesh empirically. The paper finds a significant impact on host country GDP, home country GDP, petroleum price, and skill of labor on the remittance inflow into Bangladesh based on annual data for the period of 1977-2011. The paper says that skilled labor sends less amount of money to compare to unskilled workers. Hasan (2010) examines the macroeconomic determinants of workers' remittances in Bangladesh. The paper finds that the macroeconomic variables such as inflation, interest rate, the exchange rate of the home country (Bangladesh), and GDP of five host countries (Saudi Arabia, United Arab Emirates, Kuwait, Malaysia, and Oman) have a significant impact on remittance into Bangladesh. This paper concludes that inflation rates of the home country has negative, and interest rates and the exchange rate of the home country have a positive relationship with the remittance inflow of Bangladesh. But the host countries' GDP has a positive relationship with the remittance inflow. It is observable that the author did not touch micro determinants of remittance inflow in the paper. Mamun and Nath (2010) investigate workers' migration and remittances in Bangladesh. The paper highlights altruism towards the family left in the country, investment in the home country, insurance against the risk that migrants are exposed to host country, etc. as microeconomic determinants of remittance inflow into Bangladesh. On the other hand, the paper states foreign exchange rate, difference in the interest rate between the home country and host county, business cycle, etc. as macroeconomic determinants of remittance inflow. Barua et al. (2007) investigate the macroeconomic determinants of the inflow of workers' remittances into Bangladesh using a balanced panel dataset of bilateral remittance flows from 10 major host countries (of Bangladeshi migrants') to Bangladesh for the period 1993-2005. The paper finds home country inflation rate as a negative determinant of remittances to Bangladesh when income differentials between the host country

and home country and devaluation of the home country currency as the positive determinants of Remittances to Bangladesh. The paper does not talk about the micro factors behind remittance inflow into Bangladesh. Rahman and Wadud (2014) examine the macroeconomic determinants of remittances in five South Asian countries over the period of 1976-2012 by applying the Arellano-Blundell-Bond Systems of Generalized Method of Moments (SGMM). The paper identifies home and host countries' income, the number of migrants abroad and financial deepening, domestic inflation, and domestic political rights as the important determinants of remittance inflows in this area. The altruistic nature of human beings also affects the remittance inflows. The researchers found that when the domestic economic condition is worse off the altruistic nature influence to remit more. This paper finds a significantly positive impact of 9/11, 2001 on remittance inflows. Schiopu and Siegfried (2006) discuss mainly the macroeconomic determinants of remittance inflow in the European Neighboring Region. In discussing this they seek the answer to the question of whether remittances behave like capital flows or like altruistic transfers. To do so, the researcher created a new dataset containing information on bilateral remittance flows from 21 European countries to 7 ENR countries. They investigate which factors affect the average remittance per migrant. According to them the difference in GDP between the host and home country increases average remittances which the researchers interpret as an indication that altruism is important for remitting. While they conclude that the effect of the interest rate differential does not appear to be significant i.e. the investment motive to remit is weak. This paper also found that migrant's skill level has a positive impact on the average remittance per migrant. Rapport and Docquier (2005) discusses economic literature on migrants' remittances from both theoretical and empirical point of views. Discussion of the paper from the microeconomic point of view underlines the importance of migrants' education but due to lack of information on the issue, the discriminative test of migrants' education on remittance inflow is unavailable in the paper. Niimi, Ozden, and Schiff (2008) examine whether remittances to origin countries increase with migrants' education level. The paper concludes that remittances decrease with an increase in migrants' overall level of education. The reason for this is that the educated migrants' come from better-off families. So, these families don't need money like a poor family. Another factor is that the

skilled migrants' can bring their family member along with them. The researcher also shows that per capita income and expected economic growth in the home country is inversely related to total and per capita remittances. Pfau and Long (2008) investigate the role of gender in the dramatic growth in remittance flows into Vietnam since 1990s, from the perspective of both receiving and sending remittances. The study uses the Vietnam Living Standard Survey 1992/93 and 1997/98 and finds evidence that women have a higher likelihood to both send and receive remittances. Ahmad et al. (2007) studies the determinants of international workers' remittances in Pakistan. The paper concludes with positive relation between real remittances, and real GDP, real growth rate and unemployment rate when real wage rate, literacy rate and spread rate of banks are found affecting real remittances negatively. Karunarathne and Gibson (2013) examine variation in financial literacy amongst two actively remitting immigrant groups in Australia – Sri Lankans and Samoans. The paper shows there are large gaps in the level of financial literacy of the two groups, which are due especially to differences in educational attainment. The Sri Lankans are either skilled migrants or tertiary students, whereas the Pacific Islanders are almost family migrants who entered Australia. The paper finds that the Sri Lankans remit more money in their homeland than the Pacific Islanders do from Australia. The paper also finds that both of them cost more to remit due to a lack of full information about all the options for remitting. The conclusion of the paper underlines the importance of education in case of inflow of remittance.

It is evident from the brief literature review that most of the academic literatures in the area underline the macro determinants of remittance inflow. Although the issue of expatriates' skill i.e. level of education is addressed as a micro determinant by a very few literature where the role of expatriates' skill in remittance inflow is mixed. The literature review unveils that there is no available research paper to explain the micro determinants of remittance inflow for Bangladesh. Thus, in the case of Bangladesh, the void is very clear, and our research is likely to contribute to filling up the void to some extent.

II. Methodology

Education boosts human capital which has a positive impact on productivity (Benos and Karagiannis, 2016). So, Education can play important role in enhancing the productivity of the workers. Thus, an increase in education should affect the earning of the expatriate workers of the recipient country like Bangladesh and consequently is likely to increase the remittance (*remit*) flow into the country. Here, education is taken as the proxy for the skill of migrant workers in Bangladesh as we found it as the best measure of skill subject to data availability. In addition to education (*educyr*), age of the expatriates (*age*), length of stay at abroad (*tenure*), gender (*sex*), expatriates' occupation (*occup*), host country (*country*) etc. also are likely to have impact on the earnings of expatriate workers. So, our model will also try to address these factors. Hence, the economic model for our research becomes as below,

remit=f (*educyr, age, sex, tenure, occup, country*)---------- (i)

We have applied the simple Ordinary Least Square (OLS) technique to investigate the impact of explanatory variables on the output variable remittance inflow i.e. *remit*. So, our functional form of the economic model is likely to take the following form,

$remit_{icj} = \beta_0 + \beta_1 educyr_{icj} + \beta_2 age_{icj} + \beta_3 sex_{icj} + \beta_3 tenure_{icj} + \beta_4 country_c + \beta_5 occup_j + \varepsilon_{icj}$-----(ii)

Considering the values of remittance inflow compared to other variables in the above model, we found it appropriate to take the natural log of remittance inflow as the outcome variable from the perspective of the convenience of interpretation of the estimation output. Thus, the final form of our model turns out to be as below,

$lremit_{icj} = \beta_0 + \beta_1 educyr_{icj} + \beta_2 age_{icj} + \beta_3 sex_{icj} + \beta_3 tenure_{icj} + \beta_4 country_c + \beta_5 occup_j + \varepsilon_{icj}$ ----------(iii)

This paper has estimated equation (iii) using STATA 15 for the data set described in the next section.

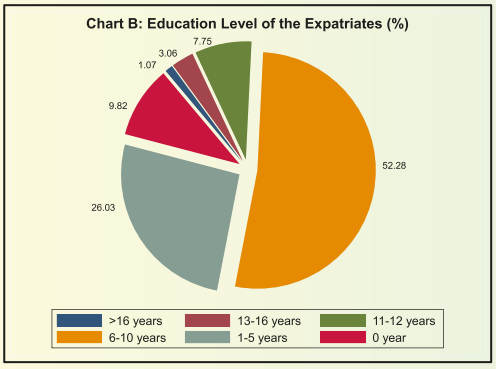
III. Data

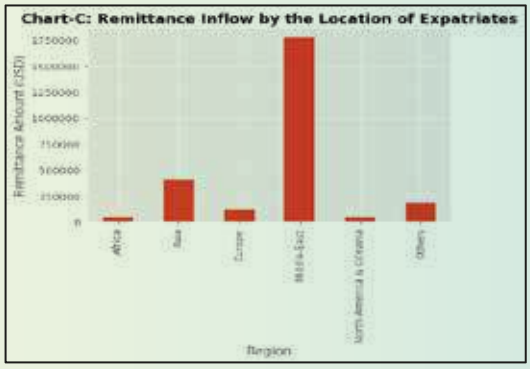
The paper uses cross-sectional data on Bangladeshi expatriates collected from Household Income and Expenditure Survey (HIES) 2010. Bangladesh Bureau of Statistics (BBS) conducts HIES, the primary data source of this paper. The survey was based on a two-stage stratified random sampling technique in drawing samples under the framework of Integrated Multipurpose Sample (IMPS) design which was developed based on a sample frame built on the Population and Housing Census 2001 in Bangladesh. There was 1000 Primary Sampling Units (PSU) throughout the country under IMPS design. Remittances information was collected from 356 PSUs. The survey collected information on any member of the family who migrated within the country or abroad in the last five years. It is a sample of 2100 respondents, but according to the design of the questionnaire, the respondents reported remittance receipt from their family members located in both abroad and within the country. Our research interest is to examine the remittance inflow from abroad only. So, we dropped the observations related to the remittance generated from within the country and our sample size comes down to1443 after the adjustment. The dependent variable for the research will be remittance, which is given as money amount, so, we prefer to use a logarithmic form of the variable to magnify the changes in the variable. The remittance amount was the amount sent in the last 12 months which allows the possibility of sending zero amounts during the period. Since, we are using a logarithm of remittance, we lost 36 more observations which are with zero remittance amounts and our sample size becomes 1407.Then we lost one more observation due to one missing value for the variable tenure and hence, the final sample size reaches 1406. The survey collected information on education in terms of degree attained, but for the comprehensive interpretation, we have recoded the degree of education into the year of education. For example, expatriates completed Secondary School Certificate (SSC) are given 10 years of education as it takes 10 years of education to complete the certificate and so on. As a result, the regression output will allow us to measure the magnitude of change in remittance inflow resulting from one-year increase in expatriates' years of education. The survey has a list of 26 countries, and we have grouped the countries according to geographical location. There are 6 groups of host countries in our sample which are North America &

Oceania, Europe, Middle East, Asia, Africa, and Others. Time spent in the host country by an expatriate who is defined as tenure in the paper is given in two units in the survey: years and months. For the convenience of analysis, we have aggregated both variables into years. As a result, the analysis should allow measuring the change in remittance inflow due to one-year increase in abroad stay. In addition, we will control for occupation though the labels for the codes used under occupation is unavailable.

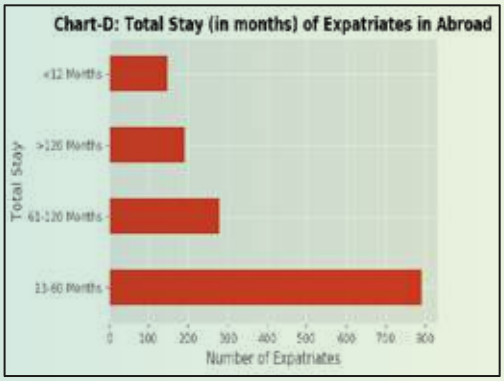
IV. Graphical Observations

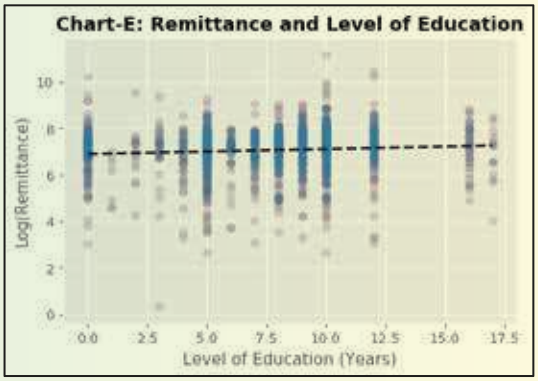
Before diving into the econometric analysis, we can explore the relevance of these determinants to the remittance inflow through visualizing these variables from a different perspective. Firstly, we can look at the distribution of the expatriates' level of education. Chart-B shows that 52.28 percent of the expatriates had 6-10 years of schooling when 9.82 percent had no schooling. So, the education level of the expatriates is very diverse which may influence their earnings.





The host countries of the expatriates (by region) may impact the remittance inflow of a country. Chart-C sheds light on the sample Bangladeshi expatriates' residing countries in 2010. The chart shows that expatriates located in the Middle East account for the highest amount of remittance to Bangladesh in 2010. The distribution also tells that after the Middle Eastern countries followed by the Asian countries contribute most in remittance inflow. These two regions are followed by European Countries, North America and Oceania countries, and African countries which adumbrate the importance of expatriates' location in determining the remittance inflow of Bangladesh.





Expatriates' length of stay can be a useful covariate to explain remittance inflow to Bangladesh. So, the distribution of Bangladeshi expatriates' total stay in abroad is something of our interest. Chart-D portrays the distribution of our sample expatriates' abroad total stay. Though we are going to use the year as a unit for econometric analysis, here, the month is taken for better visualization of the data. The chart shows that most of our expatriates in the sample stayed 13 - 60 months abroad which is followed by the number of expatriates stayed 61-120 months, >120 months, and <12 months.

Now, we can use a scatter plot to get a crude idea on the relationship between the sample expatriates' level of education and remittance inflow in Bangladesh in 2010. Chart-D portrays the scatter plot between remittance inflow (log) and level of education. Though the scatter plot does not show a strong relationship between the factors, the line of best fit comes up with the possibility of a positive relationship between remittance inflow and expatriates' level of education.

Table 1: Summary statistics of the model variables

Variable	Sample	Mean	Std. deviation	Min	Max
Lremit	1406	11.24	1.08	4.79	15.42
Educyr (year)		7.32	3.79	0	17
sex (male, female)		0.98	-	-	-
age (year)		32.64	9.55	14	83
tenure (year)		5.08	4.83	0.08	35

VI. Estimation and Findings

Before jumping to econometric estimation, we wanted to have a closer look into our data set using the summary statistics of the model variables. The summary statistics of the model variables (Table 1) show respective variables' mean, standard deviation, maximum-minimum value, and sample size. Here, it is evident that about 98% of our sample expatriates are male which highlights the total composition Bangladeshi expatriates. The share of female expatriates is still very low for Bangladesh. The sample average age of the expatriates is 32.64 years. The maximum age of the expatriate is 83 years when the minimum is 14 years. Expatriates spent about 5.08 years on average abroad according to the sample with a maximum of 35 years and a minimum of 0.08 years.

Table 2: Estimation output

Dependent Variable: Lremit			
Control Variables	***Model 1***	***Model 2***	***Model 3***
Constant	10.18033***	10.3228***	10.78164***
	(0.3800162)	*(0.4483569)*	*(0.4813226)*
Educyr	0.0179324*	0.0142294	0.0219491**
	(0.0092734)	*(0.009572)*	*(0.0102192)*
Sex	0.52127*	0.5215628*	0.2483621
	(0.3125107)	*(0.3112266)*	*(0.3078042)*
Age	0.0091087**	0.0098451**	0.0110797***
	(0.0042621)	*(0.0042865)*	*(0.0042287)*
Tenure	0.0230085***	0.0249841***	0.0267064***
	(0.0075409)	*(0.0074118)*	*(0.0071401)*
Country Fixed Effect	-	Yes	Yes
Occupation Fixed Effect	-	-	Yes
R^2	0.0328	0.0418	0.1370
Cluster size	356	356	356

****statistically significant @1%, **statistically significant @ 5%, *statistically significant @10%*

The average years of education of expatriates is 7.32 in the sample with a minimum zero and a maximum 17 years of education. The estimation output (Table 2) shows the estimation results for three models. All the models are clustered based on the PSU to get robust standard error. Variables show expected signs in all three models though their statistical significance varies across the models. First model includes first four variables education, sex, age, and tenure.

The result for model 1 shows that education year and sex are statistically significant at 10% level of significance when age is significant at 5% significance level and tenure is significant at 1%. As discussed in the section V, the host countries of the expatriates in our sample are distributed across different continents. So, host countries may have role in the remittance inflow of Bangladesh. Hence, Model 2 controls for country by addressing the country fixed effect which shows that sex, age, and tenure remain statistically significant at 10%, 5% and 1% level of significance respectively but education year becomes insignificant.

In addition to the variability in the host countries of the expatriates of Bangladesh, the type of occupation of the expatriates is also heterogeneous which may also affect the remittance inflow of Bangladesh. From this token, model 3 controls for both country and occupation which results in statistically significant education year at 5% level of significance, but the sex of the expatriates becomes insignificant when both age and tenure remain statistically significant at 1% level significance. Our research result indicates that model 3 has the highest explanatory power among all the models. According to model 3, given a one-year increase in education year, we can expect the remittance inflow into Bangladesh to increase by 2.19 percentage. For the age variable, given a one-year increase in the age of expatriates, we can expect the remittance inflow to increase by 1.11 percentage. The variable sex is found insignificant as the number of female expatriates is very small compared to the male expatriates in our sample which do reflect the gender composition of total expatriates of Bangladesh. Tenure is also a highly significant variable in model 3 which supports the theoretical idea of the variable. Given the one-year increase in the tenure i.e. time spent in the host country, we can expect the remittances inflow to increase by 2.7 percentage.

VII. Conclusion

Education develops human capital which in turn raises productivity. This basic economics is also true for the remittance inflow of a country. Well trained skilled expatriates can send more money compared the unskilled expatriates. This research brings up evidence that additional education year can significantly increase remittance inflow for Bangladesh. The result essentially has noteworthy

policy implications for Bangladesh. Our research outcome outlines the necessity of skill development of potential expatriate workers which should help the policymakers realize the importance of developing an infrastructure ensuring proper training of expatriate workers before leaving for abroad. In a nutshell, the result of this result statistically ratifies the importance of education for the expatriate workers. So, relevant authority may be attentive to introduce policy measures to confirm the minimum level of education of an expatriate worker for starting his/her journey in the host country. Higher education of expatriates not only encourages higher remittances inflow but also a sustainable inflow of remittances. In addition, the government may attenuate the investment shortfall through stimulating remittance inflow of Bangladesh which consequently plays a significant role to create domestic employment opportunity. So, Bangladesh has a potential opportunity to raise its remittance inflow significantly through raising expatriates' education level before leaving for the host country. Besides, the research result argues that the age of the expatriates affects remittance inflow significantly too which implies that adult people can send more money than teenagers. The outcome of the study also finds that duration of stay abroad i.e. tenure significantly affects remittance inflow. Finally, our research is not free of flaws too, especially this research would be more interesting if the overtime change could be examined. As we did not have any relevant longitudinal data, we could not examine the time dimension of the variables. So, future research on the micro determinants of remittances inflow of Bangladesh may consider doing an economic analysis using longitudinal data.

Bibliography

Ahmad, N., Hussain, Z., and Sial, M.H. (2007). Economic Determinants of International Remittances in Pakistan. *European Journal of Scientific Research,* 18(1), 79-85.

Bangladesh Bank Annual Report. (2018-2019). *Bangladesh Bank,* 124 -126.

Bangladesh Economic Review. (2019). *Finance Division, Ministry of Finance, Government of the People's Republic of Bangladesh,* 273-370.

Barua, S.,Majumder, M. A., and Akhtaruzzaman, M. (2007). Determinants of Workers' Remittances in Bangladesh: An Empirical Study. *Bangladesh Bank Working Paper Series,(WP0713)*

Beno, N., & Karagiannis, S. (2016). Do education quality and spillovers matter? Evidence on human capital and productivity in Greece. *Economic Modelling,* (54), 563-573.

Bollard, A., McKenzie, D., Morten, M., & Rapoport, H. (2009). Remittances and the Brain Drain Revisited: The micro data show that more educated migrants remit more. *The Word Bank Policy Research Working Papers,* 1-41.

Hasan, M. M. (2010, December). The macroeconomic determinants of remittances in Bangladesh. *Munich Personal RePEc Archive,*(27744)

Islam, M. S., & Nasrin, S. (2015). Driving Forces of Remittance Inflow in Bangladesh: An Empirical Study. *International Journal of Economics and Finance,* 7(6), 126-138

Karunarathne, W., & Gibson, J. (2013, February). Financial Literacy and Remittance Behaviour of Skilled and Unskilled Immigrant Groups in Australia. *Working Paper Series, department of Economics, University of Melbourne*.(1170)

Long, G. T., & Pfau, W. D. (2008). Gender and Remittance Flows in Vietnam During Economic Transformation. *GRIPS Policy Information Center Discussion Paper*, 08-06.

Mamun, A. K., & Nath, H. K. (2010). Workers' Migration and Remittances in Bangladesh. *Journal of Business Strategies,* 27(1), 29-52.

Niimi, Y., Ozden, C., & Schiff, M. (2008). Remittances and Brain Drain: Skilled Migrants Do Remit less!.*ADB Economics Working Paper Series,*(126)

Rahman, S. M. A., & Wadud, M. A. (2014).Macroeconomic Determinants of Remittances in South Asian Countries: A Dynamic Panel Study. *The Biennial Conference Paper, Bangladesh Economic Association.*

Rapoport, H.,&Docquier, F. (2005). The Economics of Migrants' Remittances. *The Institute for the Study of Labor (IZA)*, (1531).

Riccardo, F. (2007). Remittances and the Brain Drain: Do More Skilled Migrants Remit More?.*The World Bank Economic Review,* 21(2), 177-191.

Schiopu, L., and Siegfried, N. (2006). Determinants of workers' remittances: Evidence from the European neighbouring region. *European Central Bank Working Paper Series*,(688).

Zahid, H., & Naeem, F. (2010). Remittances in Bangladesh: Determinants and 2010 Outlook. *End poverty in South Asia Blog, The World Bank.*