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Utilization of International Remittances in Bangladesh

Bezon Kumar [±]
Md. Elias Hossain ^γ
Md. Ataul Gani Osmani ^δ

Abstract

The study explores the significant factors and utilization of international remittance in Bangladesh by using primary data from 84 migrant households. The study applies multiple linear regression model estimated by OLS method. The estimated results find that household size, training, skill, years at abroad and earnings significantly affect international remittance in Bangladesh. This indicates migrants remit home motivated by mixed views like, altruistic, loan repayment and exchange view. The study also finds 50.01 percent of remittance is utilized only in consumption of food purpose. The study suggests arranging training and skill enhancing programs to migrants and creating investment opportunities.

Keywords: significant factors of remittances; utilization of remittances; Bangladesh.

JEL Classification: F22, F24

Introduction

International migration is one of the important global issues of 21st century as it plays vital role in economic development of the developing countries. At the very beginning of the current century, it was observed that about 175 million people, almost 3 percent of the world population, lived and worked outside of their home country (Adams, 2005). Now, the figure is about 247.2 million in 2014, which is roughly 3.4 percent of the world population (World Bank, 2016). Bangladesh is a developing country from where a large number of people also migrate abroad every year searching for better livelihoods. According to Bangladesh Bank (2017), 757731 people

[±] Bezon Kumar, Department of Economics, Varendra University, Rajshahi-6204, Bangladesh. E-mail: bezon.kumar3@gmail.com.

^γ Prof Md. Elias Hossain, Department of Economics, Rajshahi University, Rajshahi-6205, Bangladesh. E-mail: eliaseco@ru.ac.bd.

^δ Md. Ataul Gani Osmani, Department of Economics, Varendra University, Rajshahi-6204, Bangladesh. E-mail: ataul@vu.edu.bd.



migrated abroad from Bangladesh in 2016 and received \$13.62 billion remittance. In 2014, India and China received \$72.2 and \$63.9 billion remittance while Bangladesh received \$15.8 billion (World Bank, 2016). Moreover, Bangladesh is the tenth largest remittance recipient country in the world despite being the seventh largest emigrant country (World Bank, 2016).

However a significant number of researchers like, Carling, 2008; Adams, 2005; Mouhoud et al., 2008; Schiopu and Siegfried, 2006; Hor and Pheang, 2017; Agarwal and Horowitz, 2002; Tabit and Moussir, 2016; Jackman, 2013; Ahmed et al., 2008; Anwar and Mughal, 2012; Lueth and Ruizi-Arranz, 2007; Darkhaw and Verter, 2014 and Koksai, 2006 studied the determinants of international remittance in macroeconomic context. Whereas Bouoiyou and Miftah, 2015; Nathan, 2014; Emmanuel et al. 2012; Olatomide and Awoyemi, 2012; Khan and Shah, 2012; Goschin and Roman, 2012; Miotti et al., 2010; Sackey, 2011; Mccoy, 2007; Zanker and Siegel, 2007; Holst and Schrooten, 2006; Havolli, 2009 and Unan, 2009 studied in microeconomic context. There are some studies like, Kundu, 2016; Islam and Nasrin, (2015); Mannan and Farhana, (2014, 2015); Rahman and Wadud, (2014); Begum and Sutradhar, (2012); Hasan, (2008); Hasan and Rubayyat, (2015) and Ali, (2012) have researched the determinants of international remittance in the context of Bangladesh.

Previous studies identified different motivations and utilizations of international remittance. It is observed that there are three separate sets of motivations to remit such as altruistic motive, a self-interest motive and enlightened self-interest motive (Lucas and Stark, 1985; Zanker and Siegel, 2007; and Nathan, 2014). Altruistic motive implies that migrants transfer earnings to their families with the intention to help left behind family members. The altruistic motivation factors are migrants' income, household size, migrants' household income etc. (Zanker and Siegel, 2007; Lucas and Stark, 1985; Cox et al., 1998). The self-interest motivation tells that migrants send money to their families if and only if they have the probabilities to return home. The self-interest motivation factors are migrants' asset, income in home country, the probability of inheriting, risk aversion and so on (Lucas and Stark, 1985 and Zanker and Siegel, 2007). Finally, enlightened self-interest motivation includes all sorts of contractual arrangements such as co-insurance, exchange motive and loan repayment between migrants and their families (Zanker and Siegel, 2007). The effects of these motives are presented in Table 1.

By influencing with these motivations, migrants remit their earnings to their families in the home country. Migrant families utilize that



remittance in many purposes. They spend remittance mostly on consumption purposes like, consumption of food and non-food items and durable goods. In addition, remittances are utilized in many other purposes like, education, housing, buying of lands and properties, business and so on (Abbas et al., 2014 and Raihan et al., 2009)

Table 1: The effects of factors to remittance motives

Explanatory variables	Motives				
	Altruistic	Self-interested	Co-insurance	Loan repayment	Exchange motives
Education				+	+
Household size	+				
Dependency ratio	-				
Years at abroad	-			+/-	
Migrant's income	+	+		+	+
Migrant's household income	-	+	-	+/-	+/-
Risk aversion		-			
Intention to return	+				

Source: Authors' modification from previous literature

It is obvious from the above discussion that the motivating determinants of international remittance are vital to investigate. Havolli (2009) also argued that what drives international remittance is an important question in remittance literature. Scholars classified the determinants of international remittance into two categories, namely, (1) microeconomic or socio-economic characteristics of migrants like age, sex, education, marital status, household size, skill, training, experience, monthly earnings and so on, and (2) macroeconomic determinants like GDP growth rate, inflation, exchange rate, wages of host country and so on (Kelly and Solomon, 2009). However, researchers found that microeconomic factors are the significant factors of remittance inflow in the long run and macroeconomic factors affects remittance channel used (Nathan, 2014). The effects of various microeconomic factors on remittance sending are presented in Table 2.

Remittance inflow is mainly reflected by the microeconomic factors which help migrants in adopting decisions to remit (El-Sakka and McNabb, 1999). Therefore, the study proposes to explore:

- the significant factors of international remittance.
- the utilization of international remittance.

Table 2: Empirical effects found for remittance sending

Existing literature	Explanatory variables									
	Age	Sex	Edu	HS	DR	Tra	Ski	YaA	MI	HI
Kundu (2016)	+	+	-		+		+			
Nathan (2014)	+	-	+	-				-		
Emmanuel, et al. (2012)	+	-	+	+				+		-
Goschin and Roman (2012)	+	+	-					-	+	
Olatomide and Awoyemi (2012)	+	-		-						
Khan and Shah (2012)	+		+			+	+	+		
Mioti et al. (2010)	-									+
Sackey (2011)		+		+				+	+	
Havoli (2009)	+	+	+		+			+		+

Note: Edu = Education, HS = Household size, DR = Dependency ratio, Tra = Training, Ski = Skill, YaA = Years at abroad, MI = Migrant's income, HI = Migrant's household income.

+ reveals the positive effects and - reveals the negative effects

Source: Authors' modification from previous literature

Data and Materials

Study area and data collection

This study mainly uses primary data collected from migrant households. To carry out the study, *Naogaon* district of Bangladesh is selected as study area because many people of the region migrate abroad every year searching for better livelihoods.

Naogaon district consists of 11 police stations. Following multi-stage random sampling technique, the study selects *Raninagar* police station randomly from those police stations. Then, two unions are selected randomly from the police station. In the next step, from each union three villages are selected randomly. Finally, fourteen households are selected randomly from each village. Consequently, a total of 84 households are selected for interviewing for the study from January to February, 2017.

Empirical methods

The study applies both statistical and econometric methods in the analysis. Firstly, the study applies descriptive statistics to present the demographic features of migrants as well as to present the scenario of migration and remittance related features in the study area. In this regard, the study analyzes data through frequency and percentage, and the results are presented in tabular form.



As remittance affects the economy of Bangladesh in many ways, it is necessarily required to find out the significant factors affecting international remittance. In doing so, the study secondly applies a multiple regression model. As dependent variable is continuous, the paper applies OLS method to find out the cause and effect relationship between total amount of remittance transferred per year and a set of explanatory variables following Goschin and Roman, 2012; Havolli, 2009 and Unan, 2009. Equation 1 states the relationship as follows:

$$R = bx_i + u_i \quad (1)$$

Where, R is the total amount of remittance transferred per year and x_i is a set of explanatory variables that affect total amount of remittance transferred per year. Therefore, the specified model for multiple regression is:

$$Remit = b_0 + b_1age + b_2edu + b_3hhs + b_4tra + b_5yab + b_6ski + b_7ear + u_i \quad (2)$$

Where, Remit is total amount of remittance transferred per year, b_0, \dots, b_7 are parameters to be estimated and u_i is the stochastic disturbance term. The explanatory variables used in above model are explained in Table 3.

Table 3. Description of explanatory variables used in multiple regression model

Name of Variables	Type	Measurement	Expected Sign
Age (age)	Continuous	Age of migrants (years)	+
Education (edu)	Continuous	Migrants' years of schooling (years)	+
Household size (hhs)	Continuous	Total number of family members	+
Training (tra)	Dummy	1 if migrant took training, otherwise 0	+
Years at abroad (yab)	Continuous	Years at abroad of migrants (years)	+
Skill (ski)	Dummy	1 if migrant is skilled, otherwise 0	+
Earnings (ear)	Dummy	Monthly earnings of migrants: 1 for less than Tk.30000, 2 for Tk.30000 to Tk.49999 and 3 for Tk. 50000 and above.	+

Results and Discussion

Demographic features of migrants

This section presents demographic features of migrants including age, sex, level of education, marital status, household size, skill and training

are analyzed with SPSS 23 and the result is presented in the following table.

Table 4. Demographic features of sampled migrants

Characteristics	Categories	Frequency	Percentage
Age (years)	Less than 25	15	17.86
	25 to 35	27	32.14
	35 to 45	25	29.76
	45 and above	17	20.24
Sex	Male	79	94.05
	Female	5	5.95
Level of education	Primary (1 to 5 years)	25	29.76
	Secondary (6 to 10 years)	28	33.33
	Higher Secondary (11 to 12)	17	20.24
	Graduation (12 years and above)	14	16.67
Marital status	Unmarried	36	42.86
	Married	48	57.14
Household size (No. of family members)	1 to 3	7	8.33
	4 to 6	60	71.43
	7 to 9	15	17.86
	10 and above	2	2.38
Skill	Unskilled	44	52.38
	Semi-skilled	25	29.76
	Skilled	13	15.48
	Professional	2	2.38
Training	Yes	37	44.05
	No	47	55.95

Source: Field survey, 2017

Table 4 reveals that most of the migrants are young aged between 25 and 35 years. It is also found that 94.05 percent migrants are male. The level of education of migrants is not higher rather mostly they have secondary level of education. It is found that most of the migrants are married and they have 4 to 6 family members. The table also shows that while 52.38 percent migrants are unskilled, 55.95 percent migrants have not taken any training.

Migration related features

The migration and remittances related features of migrants are analyzed with SPSS 23 and the result is presented in the following table.



Table 5. Migration and remittance related features of sampled migrants

Characteristics	Categories	Frequency	Percentage
Causes of migration	Escaping from unemployment	13	15.50
	Escaping from poverty	28	33.30
	Searching for better life	19	22.60
	More income earning	24	28.60
Medium of migration	Broker	54	64.29
	Private agencies	25	29.80
	Government	5	5.95
Migration loan (Tk.)	Less than 100000	15	17.86
	100000 to 200000	47	55.95
	200000 and above	22	26.19
Regions of migration	Asian countries	19	22.60
	Middle-East countries	54	64.30
	African countries	7	8.30
	European countries	2	2.40
	American countries	2	2.40
Years at abroad	Less than 4.00 years	24	28.57
	4.00 to 7.99 years	23	27.38
	8.00 to 11.99 years	27	32.14
	12.00 years and more	10	11.90
Monthly earnings (Tk.)	Less than 30000	36	42.86
	30000 to 49999	27	32.14
	50000 and above	21	25.00
Remittance transferring channel	Bank	35	41.67
	Western Union	15	17.86
	Money Gram	8	9.52
	bKash	15	17.85
	Unfair ways	10	11.09

Source: Field survey, 2017

Table 5 reveals that most of the workers migrated abroad with a view to escaping from the hardship of poverty and they migrated with the help of broker. From the analysis, it is also found that all migrants meet up their migration cost taking loan from various sources. Most of them take loan between Tk.100000 and Tk.200000. Table 5 also reveals that 54 percent people migrated in Middle-East countries and most of the migrants have average years at abroad by 8.00 to 11.99 years. The study finds that majority of migrants transfer their monthly earnings below Tk. 30000 through banks.

Significant factors of international remittance

The significant factors that affect international remittance are estimated by a multiple regression model. The regression is analyzed

with Stata-13 and the estimated result is presented in the following table.

Table 6. Results for the significant factors of international remittance

Variable	Coefficient	Robust Std. Err.	t-ratio	p > t
Constant	270993.4	27813.11	9.74	0.00
Age	47.74	980.40	0.05	0.96
Education	866.31	1856.70	0.47	0.64
Household size	4956.68*	2610.65	1.90	0.06
Training	71791.24***	29819.65	2.41	0.01
Years at abroad	6095.20**	2809.69	2.17	0.03
Skill	43655.91*	24999.87	1.75	0.09
Earnings	32219.12*	19816.54	1.63	0.10

F(7, 76) = 408.47; Prob.> F = 0.0000; R² = 0.8529; Root MSE = 45044;

Note: ***, ** and * 1%, 5% and 10% level of significance

Source: Authors' calculation based on survey data, 2017

Table 6 shows that the value of R² is 0.8529 indicate that explanatory variables of the model explain the dependent variable by 85 percent. On the other hand, the value of F statistic is 408.47 with Prob.>F=0.0000 expresses the good overall significance and fitness of the model. Since the paper is studied with primary data, heteroscedasticity may exist in data. To make the estimated result free from this problem, the study takes Robust Standard Error action. The study also calculates VIF for multicollinearity diagnosis and the values of VIF reveals that there is no multicollinearity among explanatory variables. The estimated Durbin-Watson test reveals that no autocorrelation exists in model. The study finds household size, training, skill, years at abroad and earnings as significant variables although all variables exhibits the expected sign.

The estimated coefficient of household size is 4956.68 reveals that total amount of remittance transferred per year may be increased by Tk.4956.68 if an extra unit of family members is added with household size. This is significant at 10 percent level of significance. The rational explanation may be that the more the number of family member, the more the demand for basic needs in the family. To meet up this demand, migrants have to work more and transfer more remittance to the families. Emanuel et al. (2012); Sackey (2011); Miotti et al. (2010) and Olatomide and Awoyemi (2012) have also found the similar result.

Total amount of remittance transferred per year may be increased by Tk.71791.24 if migrants are trained which is significant at 1 percent level of significance. The result may be interpreted by the fact that migrants who take training acquire technical and vocational



knowledge which accelerates their productivity and goes up the level of earnings. Consequently, they can transfer more remittance. The result is in line with Khan and Shah (2012).

Similarly, total amount of remittance transferred per year may be increased by Tk.6095.20 if migrants years at abroad is increased by one unit is significant at 5 percent level of significance. The result is interpreted by the fact that after some periods of time, migrants can adopt with the environment of host country, establish social networks and gain more experience. Consequently, they get highly salaried jobs and remit more continuously. Nathan (2014); Khan and Shah (2012); Miotti et al. (2010); Sackey (2011); Emanuel et al. (2012) and Kundu (2016) have also found the similar result.

The coefficient of skill reveals that if migrants are skilled, total amount of remittance transferred per year may be increased by Tk.43655.91 which is significant at 10 percent level of significance. The result is supported by the fact that skill enhances the productivity and capability of migrants in doing jobs which ultimately induces them to the better paid jobs. The result is in line with Khan and Shah (2012) and Kundu (2016).

The study also finds that if migrants' monthly earnings are increased by one unit, total amount of remittance transferred per year may be increased by Tk.32219.12 which is significant at 10 percent level of significance. The rational explanation may be such that if migrants earn more income, they remit more to the home country. Goschin and Roman (2012); Unan (2009); Havoli (2009) and Mccoy (2007) have also found the similar result.

From the above analysis, it is revealed that household size, years abroad, and migrants earnings are positively related to total amount of remittance transferred. This result supports that migrants of Bangladesh send their earnings to their families motivated by mixed views such as altruistic, loan repayment and exchange view.

Utilization of remittance

The more the easy of earning remittance, the more the difficult to get benefit from it because of the proper utilization of remittance is not easy. Without proper using the received remittances, it is never possible to reduce poverty and enhance welfare. The utilization of remittance is analyzed with descriptive statistics including minimum, maximum, standard deviation, mean and percentage. The estimated result is presented in the following Table.

Table 7: Utilizations of international remittance

Sectors of utilization	Minimum	Maximum	Std. Deviation	Mean	Percentage
Food	4800.00	17700.00	2726.59	9123.97	50.01
Non-food	400.00	33512.00	5795.87	3778.37	20.71
Housing	0.00	21600.00	4668.62	2665.67	14.61
Durable goods	0.00	17500.00	3193.51	1092.36	5.99
Medical treatment	0.00	10000.00	1498.29	930.58	5.10
Education	0.00	14000.00	2146.59	374.76	2.05
Investment	0.00	9571.00	1193.63	277.01	1.52

Source: Authors' calculation based on survey data, 2017

Table 7 shows that remittance is utilized in various sectors like, food, non-food items (clothing and shoes, utility bills, cosmetics and stationary goods, festivals and donations, travelling and entertainment), housing, durable goods (fridge, TV, furniture, ornaments, computer, mobile phone, solar panel and so on), medical treatment, education and investment sectors. Among these sectors, remittance is mostly utilized in consumption of food purpose and it is about 50.01 percent. Beyond food sector, remittance is utilized in non-food sector and it is about 20.71 percent. On the other hand, remittance recipient households utilized their receipt remittance lowest in investment sectors and it is about 1.52 percent.

This result interprets that very few households utilize remittance for investment purposes like business, savings and real estate which would create new employment and income earning opportunities. That is, to get proper benefit from remittance, households have to be encouraged to spend it on productive purposes.

Conclusion and Policy Recommendations

The study emanates three conclusions and three relevant policy recommendations. Firstly, the study finds that most of the migrants of Bangladesh are less educated, unskilled, untrained and low experienced. On the other hand, they mostly migrate Middle-East countries with the help of broker taking huge amount of loan. The study also finds that majority of the migrants are engaged with cleaning, housekeeping, driving and so on as occupation. As a result, they get lower wage. Secondly, the study reveals that household size, years at abroad, training, skill and earnings are the significant factors that affect migrants to remit more in the country. These factors support that migrants remit their earnings in the country motivated by



mixed views altruistic, loan repayment and exchange view. Finally, the study finds that majority of migrant households utilize remittance for consumption of food and very few households utilize remittance in investment purposes like business, real estate, savings and so on what would create more employment opportunities.

Based on these findings, the study recommends three policies. The first policy is, with respect to migration, that if proper vocational and technical education and training, migration loan facilities are provided to migrants of Bangladesh, their demand in host countries may be increased significantly. The second policy is, with respect to remittance receiving, that if the government of Bangladesh takes care of significant factors, the country may receive more remittance. The third policy is, with respect to utilization of remittance, to get the anticipated benefit from remittance, the government and non-government authorities have to take initiatives to aware people in utilizing remittance on investment purposes.

References

- Abbas, K., Sabir, H. M., Shehzadi, A. and Abbas, Q. (2014). Impact of workers' remittance on household welfare in district Jhang (a case study of Tehsil 18 Hazari). *Journal of Finance and Economics*, 2 (4): 131-135. doi: <http://pubs.sciepub.com/jfe/2/4/5/index.html>.
- Adam, R. H. J. and Page, J. (2005). "Do international migration, remittance reduce poverty in developing countries?" *World Development*, 33 (10): 1645-1669. doi: 10.1016/j.worlddev.2005.05.004.
- Agarwal, R. and Horowitz, A. W. (2002). "Are international remittances altruism or insurance? Evidence from Guyana using multiple-migrant households". *World Development*, 30 (11): 2033-2044. URL: [https://doi.org/10.1016/S0305-750X\(02\)00118-3](https://doi.org/10.1016/S0305-750X(02)00118-3).
- Ahmed, N., Hussain, Z., Sial, M. and Akram, W. (2008). "Macroeconomic determinants of international migration from Pakistan". *Pakistan Economic and Social Review*, 46 (2): 85-99. URL: <https://www.researchgate.net/publication/264540344>.
- Ali, M. B. (2012). "Macroeconomic factors of influencing foreign remittance: the case of Bangladesh". *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 2 (3): 217-229. URL: <http://www.hrmars.com/admin/pics/1145.pdf>.
- Anawar, A. and Mughal, M. Y. (2012). "Motives to Remit: Some Microeconomic Evidence from Pakistan". *Economics Bulletin*, 32 (1): 574-585. URL: <http://www.accessecon.com/Pubs/EB/2012/Volume32/EB-12-V32-I1-P54.pdf>
- Bangladesh Bank. (2017). *Economic data: Wage earners' remittance flow*. URL: <https://www.bb.org.bd/econdata/wageremittance.php>.
- Begum, M. N. and Sutradhar, R. R. (2012). "Behavior of remittance inflows and its determinants on Bangladesh". Bangladesh: Bangladesh Bank. URL: <https://www.bb.org.bd/pub/research/workingpaper/wp1202.pdf>.

- Bouoiyour, J. and Mitfah, A. (2015). "Why do migrants remit? Testing hypotheses for the case of Morocco". *IZA Journal of Migration*, 4 (2): 2-20. doi: 10.1186/s40176-014-0027-2.
- Carling, J. (2008). "The determinants of migrant remittances". *Oxford Review of Economic Policy*, 24 (3): 581-598. URL: <https://doi.org/10.1093/oxrep/grm022>.
- Cox, D., Eser, Z. and Jimenez, E. (1998). "Motives for private transfers over the life cycle: An analytical framework and evidence for Peru". *Journal of Development Economics*, 55 (1): 57-80. URL: [https://doi.org/10.1016/S0304-3878\(97\)00056-4](https://doi.org/10.1016/S0304-3878(97)00056-4).
- Darkwah, S. A. and Verter, N. (2014). "Determinants of international migration: the Nigerian experience". *Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis*, 62 (34): 321-327. URL: <http://dx.doi.org/10.11118/actaun201462020321>.
- El-Sakka, M. I. T. and McNabb, R. (1999). "The macroeconomic determinants of emigrant remittances". *World Development*, 27 (8): 1493-1502. doi: 10.1016/S0305-750X(99) 00067-4
- Emmanuel, N. O., William, F. M., Gladys, A. and Denis, Y. N. (2012). "Microeconomic determinants of migrant remittances to Nigerian households". *Economics Bulletin*, 32 (4): 3425-3438. doi: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2192198.
- Goschin, Z. and Roman, M. (2012). "Determinants of remitting behavior of Romanian emigrants in an economic crisis context". *Eastern Journal of European Studies*, 3(2): 87-103. URL: https://www.researchgate.net/publication/241769176_Determinants_of_Romanian_International_Migrants%27_Remittances.
- Hasan, M. M. (2008). *The macroeconomic determinants of remittances in Bangladesh*. Bangladesh: Institute of Microfinance. URL: https://mpr.aub.unimuenchen.de/27744/1/MPPA_paper_27744.pdf.
- Hasan, R. R. and Rubayyat, H. (2015). "The determinants of worker remittance in terms of foreign factors: the case of Bangladesh". *Studies in Business and Economics*, 10 (3): 81-93. URL: <https://ideas.repec.org/a/blg/journal/v10y2015i3p81-93.html>.
- Havolli, S. (2009). "Determinants of remittances: the case of Kosovo". Kosovo: Central bank of Kosovo. URL: http://bqkkos.org/repository/docs/2010/Determinants_of_Remittances_The_case_of_Kosovo.pdf.
- Holst, E., and Schrooten, M. (2006) "Migration and money-what determines remittances? Evidence from Germany". Berlin: German Institute of Economic Research. URL: <https://ideas.repec.org/p/diw/diwwpp/dp566.html>.
- Hor, C. and Peang, P. (2017). "Analysis determinant factors effect on migrant workers' remittances flow to the CLMV Countries". *International Journal of Economics and Financial Issues*, 7 (2): 202-207. URL: <https://www.econjournals.com/index.php/ijefi/article/view/3939/pdf>.
- Islam, M. S. and Nasrin, S. (2015). "Driving forces of remittance inflows in Bangladesh: an empirical study". *International Journal of Economics and Finance*, 7 (6): 126-138. URL: <http://ccsenet.org/journal/index.php/ijef/article/view/49276/26494>.



- Jackman, M. (2013). "Macroeconomic determinants of remittance volatility: an empirical test". *International Migration*, 51 (S1): 36-52. URL: 10.1111/imig.12100.
- Kelly, C. S. and Solomon, B. (2009). "The influence of religion on remittances sent to relatives and friends back home". *Journal of Business & Economics Research*, 7 (1): 91-101. URL: <https://www.cluteinstitute.com/ojs/index.php/JBER/article/viewFile/2253/2301>.
- Khan, M. and Shah, M. K. (2012). "An empirical analysis of the determinants of overseas workers income in rural area of district Swabi, Pakistan". *Sharhad Journal of Agriculture*, 28 (1): 115-120. URL: https://www.aup.edu.pk/sj_pdf/AN%20EMPIRICAL%20ANALYSIS%20OF%20THE%20DETERMINANTS%20OF%20OVERSEAS1922010.pdf.
- Koksal, N. E. (2006). "Determinants and impact on the Turkish economy of remittances". *Topics in Middle Eastern and African Economies*, 8 (September): 1-21. URL: <http://meea.sites.luc.edu/volume8/PDFS/koksal.pdf>.
- Kundu, N. (2016). "An enquiry into the sluggish growth of workers' remittance determinants: a case of Comilla". *Journal of Economics and Business Research*, 22 (1): 152-167. URL: <http://www.uav.ro/jour/index.php/jebr/article/view/699/0>.
- Lucas, R. E. B. and Stark, O. (1985). "Motivations to remit: evidence from Botswana". *The Journal of Political Economy*, 93 (5): 901-918. URL: <http://www.jstor.org/stable/1833062>.
- Lueth, E. and Ruiz-Arranz, M. (2007). "Macroeconomic determinants of workers' remittances". Japan: IMF and JBIC. URL: https://www.imf.org/External/NP/seminars/eng/2007/jbic/pdf/s4/04_9%20present.pdf
- Mannan, K. A. and Farhana, K. M. (2014). "Micro determinants of international remittances: a household unit analysis of marital status of rural household members in Bangladesh". *Research Journal of Social Science and Management*, 4 (8): 47-61. URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2532284.
- Mannan, K. A. and Farhana, K. M. (2015). "Determinants of remittances in Bangladesh: an econometric analysis of the educational attainments of the household members". *Research Journal of Social Science and Management*, 4 (12): 177-198. URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2588324.
- Mccoy, A. C. (2007). "Determinants of remittances: a generalized ordered probit approach". Master's thesis, Washington State University, USA. URL: https://books.google.com.bd/books/about/Determinants_of_Remittances.html?id=z3n6jwEACAAJ&redir_esc=y.
- Miotti, L., Mouhoud, E., M. and Oudinet, J. (2010). "Determinants and uses of remittances to southern and eastern Mediterranean countries: insights from a new survey". Italy: centro studi luca d'agliano development studies. doi: 10.2139/ssrn.1619887.
- Mouhoud, E. M., Oudinet, J. and Unan, E., (2008). "Macroeconomic determinants of migrants' remittances in the Southern and Eastern Mediterranean countries". Dubai: CEPN. URL: http://www2.warwick.ac.uk/fac/soc/pais/research/researchcentres/csgr/research/projects/ineq/cepn-wp4-ineq_mm_paper_4.pdf.

- Nathan, M. (2014). "Microeconomic determinants of migrant remittances into Zimbabwe: a survey of Zimbabwe in Botswana and South Africa". *International Journal of Economics, Commerce and Management*, 11 (9): 1-15. URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2671245.
- Olowa, O. W and Awoyemi, T. T. (2012). "Determinants of migration and remittances in rural Nigeria" *Journal of Development and Agricultural Economics*, 4 (7): 191-198. doi: 10.5897/JDAE11.053.
- Rahman, S. M. A. and Wadud, M. A. (2014). "Macroeconomic determinants of remittances in South Asian countries: a dynamic panel study". Dhaka: Bangladesh Economic Association. URL: <http://bea-bd.org/site/images/pdf/089.pdf>.
- Raihan, S., Khondker, B. H., Sugiyarto, G. and Jha, S. (2009). *Remittance and household welfare: a case study of Bangladesh*. Asian Development Bank. doi: <https://www.adb.org/sites/default/files/publication/28402/economics-wp189.pdf>.
- Sackey, M. F. G. (2011). "Microeconomic determinants of privates of private inward remittances to households in Ghana: a case study". *Journal of Economics and Sustainable Development*, 2 (2). URL: <http://iiste.org/Journals/index.php/JEDS/article/view/136/15>.
- Schiopu, L. and Siegfried, N. (2006). "Determinants of workers' remittances evidence from the European Neighboring region". URL: <https://papers.ssrn.com/sol3/papers.cfm?abstractid=936947>.
- Stark, O. (1991). "The Migration of Labour", Oxford: Blackwell Publishers. URL: https://books.google.com.bd/books/about/The_Migration_of_Labor.html?id=zhWLQgAACAAJ&redir_esc=y.
- Tabit, S. and Moussir, C. E. (2016). Macroeconomic determinants of migrants' remittances: evidence from a panel of developing countries. *International Journal of Business and Social Research*, 6 (7): 1-11. URL: <https://thejournalofbusiness.org/index.php/site/article/viewFile/969/614>.
- Unan, E. (2009). "Microeconomic determinants of Turkish workers' remittances: survey results for France-Turkey". Turkey: Galatasaray University. URL: <http://gdri.dreem.free.fr/wp-content/g3-1unan-dreem-1.pdf>.
- World Bank. (2016). "Migration and Remittance Factbook". URL: <https://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1199807908806/45490251450455807487/Factbookpart1.pdf>.
- Zanker, J. H. and Siegel, M. (2007). "The determinants of remittances: A review of the literature". USA: Maastricht University. URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1095719.

