



The Contribution of remittances on woman empowerment in Bangladesh

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Abstract

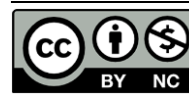
Purpose of the study: This paper emphasizes on the impact of remittances on women empowerment in Bangladesh. The word women empowerment has been justified by using six variables that covers socio-economic aspects.

Methodology: To investigate the relationship this study mainly depends on time series data for the period of 1990 to 2021. The person correlation, regression analysis has been conducted to justify the proposition of contrition of remittances on women empowerment. The robustness check was done by employing fully modified OLS method.

Findings: The results of regression show that secondary and tertiary education level, women role as employers, women involvement in the services sectors and first marriage decision at the age of 18 have significant relationship with remittances received by individual family. Moreover, the results of FMOLS also in favor of regression findings.

Implications(practical): These findings are insightful and beneficial for the government bodies, policy makers to make strategic decision for women in the forthcoming days. This paper will also add to the existing literature on women's empowerment in Bangladesh and beyond.

Limitations and Future Directions: Quantitative analysis was used to complete the study, but additional interviews or focus groups would lend credibility and make the study more policy relevant. In the future, researchers may choose to employ a mixed method. Women's economic contributions as migrants will be discussed along with associated issues.



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1. Introduction

Remittances are one of the most pressing concerns in development economics, yet they are not the most recent topic of conversation in the development discourse (Karine, 2014). For countries that profit from the export of labor, remittances from overseas workers are considered an integral part of the country's overall social growth (Al-Assaf, Al-Malki & Abdullah, 2014). A comparatively large amount of unemployed people are available to work in Bangladesh's rural agricultural industry. Due to social perception and economic challenges most of them are not interested to continue their traditional occupation. This is why many young people from Bangladesh seek work chances in other countries. Many developing nations in the 21st century have prioritized international labor migration because of a lack of domestic economic prospects. At this moment 7.40 million Bangladeshi migrants are working abroad and sending remittances approximately 18 billion dollar in 2019.

The migrants remittance are playing vital role in economic as well as social development. These two are prerequisite for inclusive development, which is the key focus of sustainable development goal. Bangladesh is an emerging country which has many backlog both economic and social aspect. The social development is treated as indispensable part of economic development. Women empowerment is the momentum issue in this country since a decade. The percentage of female population is 49.47% compare to 50.53% male population in this country, that why empowering women will be demographic dividend for economic and social development. Empowering women is the path way for developing socially and to capitalize a huge pool of women to the main stream of the economy.

The households' consumption motive is criticism against huge amount remittances inflows is and is not used for productive long run economic development. Although in reality remittance is spending on education and training and welfare of the family members, which is an investment in human capital. The findings of research also suggest that the use of remittances for educational purposes has substantial socioeconomic benefits not just for individuals, but also for their families and society as a whole (Kifle, 2007). In general, those that received remittances spent a greater amount on things like consumption, healthcare, and education when compared to households that did not receive remittances (Thapa & Acharya, 2017). The vast majority of women across the globe are forced to contend with more challenging working conditions than males are in order to participate in educational and other social activities. The child marriage is one of the major problems in addition to other social barriers. However, due to government policy supports many barriers for women are in the face of elimination for socio-economic development of Bangladesh.

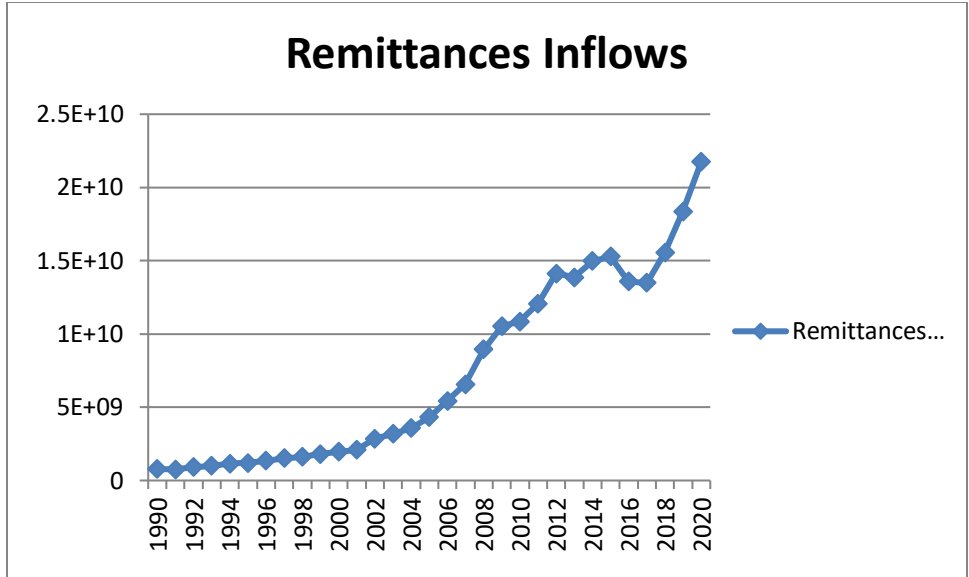


Figure1. The remittances inflows from 1990 to 2021 in Bangladesh.

Figure1 shows that the remittances inflows in Bangladesh for the period of 1990 to 2021. The figure illustrates a straight sloping curve, that means from 1990 and onwards the remittances inflows are increasing at an increasing rate. Even in the Covid period migrants’ remittances inflows were increased much higher rate than earlier years.

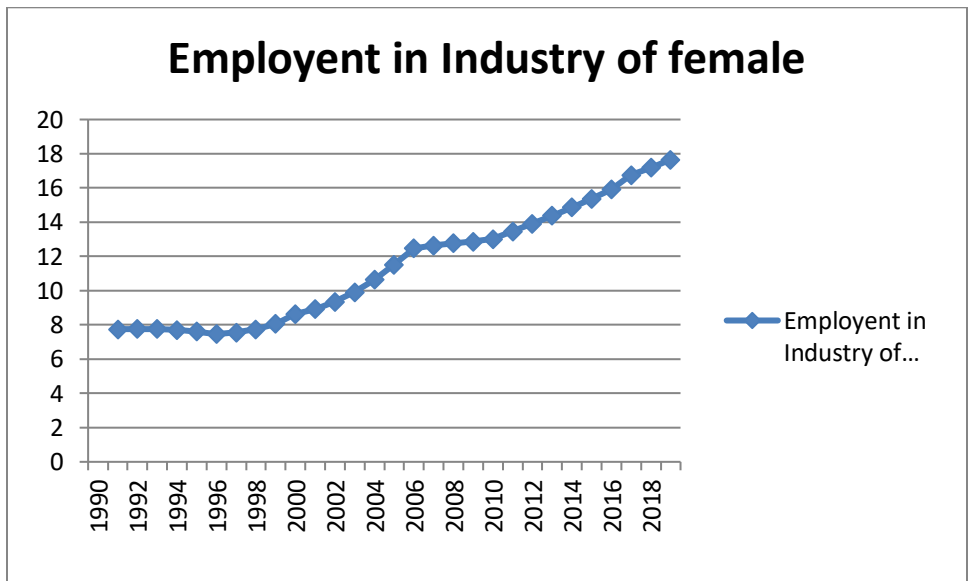


Figure2. Employment in Industry of female

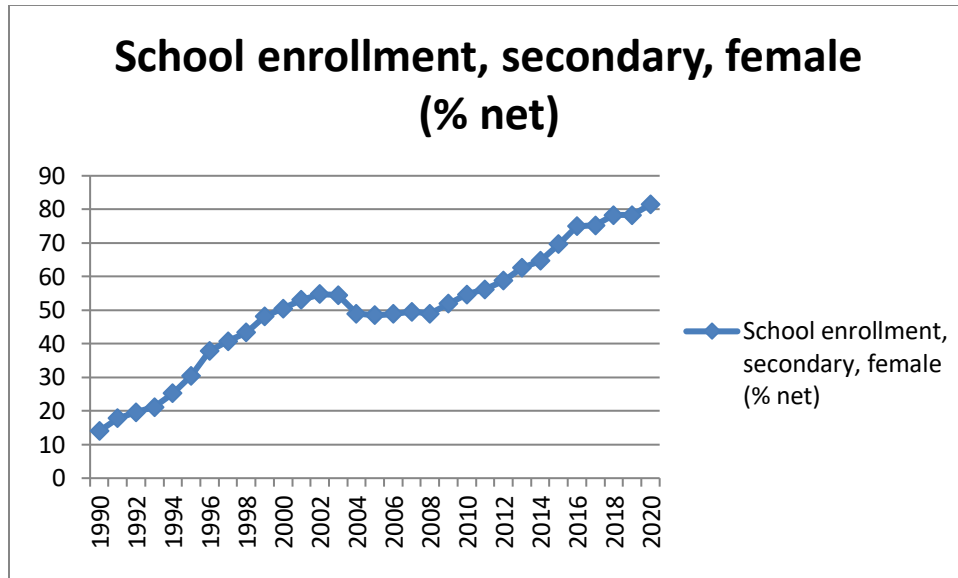


Figure3. School enrollment, Secondary, female (% net)

This research looked at how women in Bangladesh might benefit from receiving remittances and how that would change their level of independence. Women's education and empowerment, in particular, will guarantee social progress and growth as access to education increases. This research explores the role of remittances in empowering women in Bangladesh from that vantage point. This research would be extremely helpful in determining the specific function of remittance for women's empowerment via enhanced education, increased career opportunities, and other factors.

2. Relevant of Literature

The active participation of women's in economic activities still has backlog position all over the world. Four economic theories put efforts to justify women's involvement in economic aspect: the human capital theory, the theory of survival strategies, the theory of social reproduction, and the neoclassical theory. The neo classic theory justify that increase of real wage will ensure more women participation in the labor market. a number of empirical investigations (Bowen and Finegan, 1969; Goldin, 1990) have poised counter argument against the theory. In general, the social awareness and education to women create interest among women to involve more the blue collar and white collar job market. Moschion, (2007) found that this is not only the monetary issue to motivate them rather; other social factors that influence female to engage in the economic activities.

In his study on Angola, Alvarez (2009) discovered that while men are typically the heads of homes, such as the migrant's brother, father, or uncle, who decide how to use remittances, 84% of respondents insisted that women should always be consulted. The women empowerment has several dimensions to measure. Decision-making ability of women dependent on education level, age, and marital status when money is sent by spouse (Debnath and Selim, 2009). Sometimes, women are holding entrepreneurship position; in that case they have full ability

to utilize the remittances of spouse. However, in Bangladesh most of the case spouse depends less on his wife to send money rather relies on brother, or in laws of the family. The wife and her children may become more vulnerable as a result to abuse, including sexual abuse, deprivation of their rights, and poverty (Debnath and Selim, 2009).

Additionally, remittances have a substantial impact on women who remain in their home countries, as migration enhances the status of women there by giving them the autonomy to make decisions for themselves and their families about socioeconomic matters like marriage, education, and health (Ait Hamza, 1995; Fadloulah et al., 2000). The 2000 Eurostat study indicated that non-migrant women have significant roles in the country. It contemplates that role changes due to migration of the husband, so female are headed in the family. Thus, female headed directions lead to women empowerment in the community, which is working as a catalyst for the empowerment of women due to betterment of the family.

In his study of migratory women in the Todra Valley, Van Rooij (2000) shown that women have less influence when remittances are sent to families with male heads. However, this remittances spending for the betterment of the family, for examples; education, health, better food etc. Sometimes women take on the role of the leader of a nuclear family, at which point they are able to make decisions about the education of children, particularly girls. Remittances can occasionally be used by migrant women to hire other women or men to perform household and agricultural work (Ait Hamza, 1998). By doing this, they elevate their social rank and circumstances relative to other women in the society, which is regarded as positive social change.

3. Empirical Models

To empirical investigate the effect of remittances on women empowerment in Bangladesh, this paper will examine the variables of remittances; employment in services, female; employment in industry of female; school enrollment of female in secondary level; school enrolment of female in tertiary level; employers of women and women who got married before they were 18 years old. Details of the variables are listed below.

Y: Remittances Received

X1: Employment in services, female (% of female employment)

X2: Employment in industry, female (% of female employment)

X3: School enrollment, secondary, female (% gross)

X4: School enrollment, tertiary, female (% gross)

X5: Employers, female (% of female employment)

X6: Women who were first married by age 18 (% of women ages 20-24)

To conduct this study, we have collected data from World Bank Development Indicators, and IOM statistics. The annual data are considered that cover the period of 1990 to 2021 for Bangladesh. To empirically investigate proposed relationship in this study all variables transform in natural logarithms forms.

In this study, we will investigate the relationship that exists between remittances and the other explanatory variables. The basic OLS investigate the relationship dimensions of this study in addition to descriptive statistics, Pearson correlation and variance inflation factor. The COLS and FMOLS model also employed to checks robustness in this study. Robustness check will confirm empirical validity of this research in the context of Bangladesh.

The regression model in the multivariate framework shown in the following form:

$$Y_n = \mu_1 + \alpha x_1 + \beta_1 x_2 + \beta_2 x_3 + \beta_3 x_4 + \beta_5 x_4 + \varepsilon_n \dots\dots\dots (1)$$

4. Results and Interpretations.

Table 1. Descriptive Statistics from 1990 to 2021.

	REMITTAN CES	EMPLOYE DUSTRY_O F	EMPLOYM ENT_IN_SE RVICES_O	S_ENROL_ F_IN_SECO NDRY	S_ENROL_ F_IN_TERT IARY	WOMEN_W HO_WERE _FIRST_MA R	EMPLOYER S_FEMALE
Mean	22.77213	12.33789	18.25895	60.26976	9.542912	19.34842	0.242105
Median	23.07661	12.77000	20.20000	54.74578	8.118780	0.000000	0.150000
Maximum	23.80296	17.66000	24.77000	81.48805	20.01847	68.70000	0.640000
Minimum	21.40004	0.000000	0.000000	48.47695	3.706860	0.000000	0.000000
Std. Dev.	0.776104	4.067977	5.581296	11.95022	5.578455	29.52342	0.192861
Skewness	-0.483160	-1.336018	-1.882169	0.637702	0.600754	0.846818	1.224395
Kurtosis	1.803859	5.488054	7.066637	1.778494	2.050166	1.784975	3.211908
Jarque-Bera Probability	1.871919 0.392209	10.55307 0.005110	24.31032 0.000005	2.468998 0.290981	1.857097 0.395127	3.439544 0.179107	4.782833 0.091500
Sum	432.6704	234.4200	346.9200	1145.125	181.3153	367.6199	4.600000
Sum Sq. Dev.	10.84207	297.8719	560.7156	2570.539	560.1448	15689.39	0.669516
Observations	19	19	19	19	19	19	19

All the variables in this study are found to be normally distributed in the table1. The mean-to-median ratio of each variable has shown less dispersion. The standard deviation is also low for all the variables in this study. The Jarque-Bera test statistics also accept the null hypothesis of normal distribution of each variable except employment in industry and employment in service sector.

Table 2. Correlation Analysis with Probability.

Correlation	REMITTANCE	EMPLOYMENT_IN_INDUSTRY_OF	EMPLOYMENT_IN_SERVICES_O	S_ENROL_SECONDARY	S_ENROL_TERTIARY	WOMEN_WHO_WERE_FIRST_MAR	EMPLOYERS_FEMALE
REMITTANCE	1.0000						
S	00						

EMPLOYMENT_IN_INDUSTRY_OF	0.3689	1.000000					
	0.1200	-----					
EMPLOYMENT_IN_SERVICES_O	0.2931	0.978291	1.000000				
	0.2232	0.0000	-----				
S_ENROL_SECONDARY	0.7326	0.197018	0.031489	1.000000			
	0.0004	0.4188	0.8982	-----			
S_ENROL_TERTIARY	0.8709	0.237786	0.112343	0.936529	1.000000		
	0.0000	0.3269	0.6470	0.0000	-----		
WOMEN_WHO_WERE_FIRST_MAR	-	-0.185850	-0.156407	-0.324182	-0.456218	1.000000	
	0.4294	0.0665	0.4462	0.5225	0.1757	0.0496	-----
EMPLOYERS_FEMALE	0.5043	0.768624	0.666965	0.680155	0.642308	-0.278154	1.000000
	0.0277	0.0001	0.0018	0.0014	0.0030	0.2489	-----

The Pearson correlation analysis indicates the directions of the explanatory variables with remittances in this study. We found strong positive impact of remittances on female school enrolment at tertiary level and secondary level. The moderate positive relationship has been confirmed between remittances inflows with female employers. These variables are working as catalyst as women empowerment in Bangladesh. The women employment in industry and services sector both variables have positive but moderately impact on women empowerment of Bangladesh. These findings logically support proposition of impact of remittances. The

correlation between women who first married at 18 years and remittances inflows are negatively strong. This is truly interesting findings as because more women are involved in higher education thus, marriage at 18 years gradually decreasing due to remittances received by the family.

Table 3. Variance Inflation Factors

Variable	Coefficient Variance	Centered VIF
EMPLOYMENT_IN_INDUSTRY_OF	0.020953	26.1410
EMPLOYMENT_IN_SERVICES_O	0.009713	25.2461
S_ENROL_F_IN_SECONDARY	0.000909	20.7608
S_ENROL_F_IN_TERTIARY	0.002740	14.0377
WOMEN_WHO_WERE_FIRST_MAR	2.96E-06	2.719616
EMPLOYERS_FEMALE	0.795226	18.82456
C	1.971875	NA

Table 3 explains the paths of relationship spuriousness in this study among the variables. To check the multi-collinearity, we have investigated the VIF test. The results confirm that there is no multi-collinearity issue persists in this study among the variables.

Table 4. Results of Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EMPLOYMENT_IN_INDUSTRY_OF	0.099508	0.144753	-0.687434	0.5049
EMPLOYMENT_IN_SERVICES_O	0.190951	0.098552	4.937565	0.0466
S_ENROL_F_IN_SECONDARY	0.044065	0.030147	3.461706	0.0195
S_ENROL_F_IN_TERTIARY	0.121887	0.052345	2.328523	0.0382
WOMEN_WHO_WERE_FIRST_MAR	-0.000574	0.001719	-3.333901	0.0442
EMPLOYERS_FEMALE	4.140153	0.891754	4.642706	0.0006
C	17.68556	1.404235	12.59445	0.0000
R-squared	0.942050	Mean dependent var		22.77213
Adjusted R-squared	0.913075	S.D. dependent var		0.776104
S.E. of regression	0.228819	Akaike info criterion		0.165541
Sum squared resid	0.628299	Schwarz criterion		0.513492
Log likelihood	5.427365	Hannan-Quinn criter.		0.224428
F-statistic	32.51248	Durbin-Watson stat		2.490087
Prob(F-statistic)	0.000001	Wald F-statistic		186.2955
Prob(Wald F-statistic)	0.000000			

To examine in this study how remittances affect women's empowerment, we have conducted the regression analysis. The results show that the employment of female in service sector, school enrolment in both secondary and tertiary level, female employers and women who first married at 18 years have significant relationship with remittances.. The independent variables are use as the proxies of women empowerment, is the key underlying question in this study. The regression results confirmed that in Bangladesh the remittances inflows ensured women empowerment despite of many persist criticisms.

Table 5. Fully Modified Least Squares (FMOLS)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
S_ENROL_F_IN_SECONDARY	0.060096	0.043272	1.388785	0.1983
S_ENROL_F_IN_TERTIARY	0.112120	0.053238	2.105999	0.0645
WOMEN_WHO_WERE_FIRST_MAR	-0.000501	0.002421	-3.206850	0.0407
EMPLOYMENT_IN_INDUSTRY_OF	0.238882	0.191765	1.245701	0.2443
EMPLOYMENT_IN_SERVICES_O	0.306788	0.161415	1.900613	0.0898
EMPLOYERS_FEMALE	4.719818	1.173617	4.021600	0.0030
C	16.57787	2.509676	6.605584	0.0001
R-squared	0.949015	Mean dependent var		22.78784
Adjusted R-squared	0.915024	S.D. dependent var		0.743844
S.E. of regression	0.216835	Sum squared resid		0.423156
Durbin-Watson stat	2.447628	Long-run variance		0.025879

The full modified least square model also employed to check the robustness of findings in this study. The results also support in the same line of findings of regression test. Here, all the explanatory variables found significant at 1% and 5% percent level except employment of female in the industry. The coefficients also render the same story which that is remittances has strong and positive impact on women empowerment in Bangladesh.

5. Conclusions and Policy Implications

Women empowerment is vital issue for a country like Bangladesh, as gender ration is very close to each other. Moreover, women in this country were deprived from main social and economic stream participation since long. However, scenario has changed radically for last decade. Now a days women are holding better economic and social position in this country. This study makes an effort to investigate the relationship between remittances received and women's empowerment in Bangladesh based on such linkages. The women empowerment proxies using six soci-economic macro indicators. The results show that education level has empowered women in Bangladesh as both secondary and tertiary education level attracted more women. This variables has positive and 5% level significant impact on women empowerment due to remittance received by migrants workers. Another interesting finding of this study is women who are married at 18 years old has also 5% level significant relationship with remittances as, women involved in education and they have ambition for economic freedom to take marriage decision. The women jobs in the services and industry reflected the earlier discussions. The women are more involved in the job market and regression result is significant. Finally,

women engagement in entrepreneurial activities is another milestone in Bangladesh. The result also significant from regression analysis.

The government agencies, planners, politicians, and other interested parties who can have an impact on the strategic choice of women's entrepreneurship activities would therefore find the conclusions of this study valuable and informative. This paper will add value to the existing literature of women empowerment in the context of Bangladesh as well as globally.

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