DO INTERNATIONAL MIGRATION AND REMITTANCES REDUCE POVERTY IN DEVELOPING COUNTRIES?

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ABSTRACT: *International migration and remittances have an important role in economic and social development of the developing countries as it helps in achieving the gains of globalization. This paper endeavors to explore the relationship by forming and evaluating a new data set on foreign remittances, international migration, poverty and inequality in South Asian countries. As poverty and income inequality are the prime issues faced by the developing countries meanwhile a handsome number of skilled and educated workers of such countries is employed abroad in the high income countries, so the foreign remittances sent by these workers to home countries is expected to have positive impacts on poverty reduction. The contribution of foreign remittances in the total income of South Asia is 4.2% which shows a significant proportion of GDP and it has significant impact on poverty alleviation.*

Key words: Poverty, Remittances, Migration, Inequality

INTRODUCTION:

Migrants' remittances to their country of origin play an important role for development in the case of developing countries in particular. According to World Bank statistics, migrants' remittances were 401 billion US$ in 2012 at global level and have rising trend. The internationally flows of remittances show that developing world is relatively a very larger beneficiary of the circulation of this global wealth. It represents a key role for alleviating the level of poverty in the underdeveloped countries. In addition, remittances are coupled with the human development in different fields such as health, education and equality. It helps in increasing income of poor communities living in the deprived regions of the world.

Furthermore, remittances positively affect the consumption and investments. On the contrary of monetary effects, remittances are countercyclical where family members abroad are more motivated to suffer with the difficult period. In this way, remittances provide financial leverage and helping families at their hard times.

Whereas migration has positive as well as negative impact on the economy, and it has also social, economic, and cultural implications.

Remittances are the most solid and smallest contentious association between development and migration. Policy research studies in this regard can exploit the positive impacts of remittances. In South Asia, migrants have to pay heavy transaction cost of the amount they send, however; the cost is reduced due to the rivalry behavior of institutions providing the services of transfer of money.

Specific to country of origin, more productive opportunities and technology is available according to the market conditions of every country for connecting remittances directly to existing programs. Furthermore, governments should take steps to make the most productive use of remittances in capital enhancing programs which is beneficial for the economy.

The current study evaluates the effect of migration led remittances on the poverty of South Asian region. Being a developing region a large number of skilled and unskilled workers of the expanse are working abroad and contributing a huge amount of remittances to their country of origin which is playing a significant role in boosting the income levels of their countrymen and alleviating the poverty.

Foreign Remittances in South Asia:

As mentioned earlier, a huge number of workers from South Asia are employed abroad and they send a significant amount of remittances to their homeland which makes considerable share of GDP of their countries.

In South Asian case, foreign remittances contribute 4.28% in the accumulated sum of GDPs of South Asian economies. This contribution is the highest in case of Nepal in South Asia, where the share of foreign remittances in GDP is 22.22%. Similarly, Bangladesh, Sri Lanka and Pakistan come after Nepal receiving the highest shares in GDPs from foreign remittances. This factor is playing a significant role in increasing the per capita income and declining the poverty rates in countries receiving foreign remittances.

If the foreign remittances are seen volume wise, India is receiving the largest amount in terms of foreign remittances in South Asian region worth US$ 73 billion. The huge amount shows the financial importance of foreign remittances in case of India.

Similarly, Pakistan, Bangladesh and Sri Lanka are the 2nd, 3rd and 4th in this case bringing the revenues worth US$ 13.5

billion, US$ 12.76 billion and US$ 6 billion respectively.

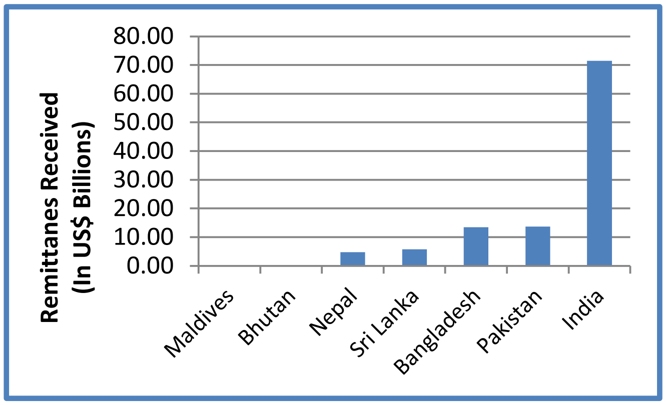

Figure 1: Remittances as Share of GDP, 2012

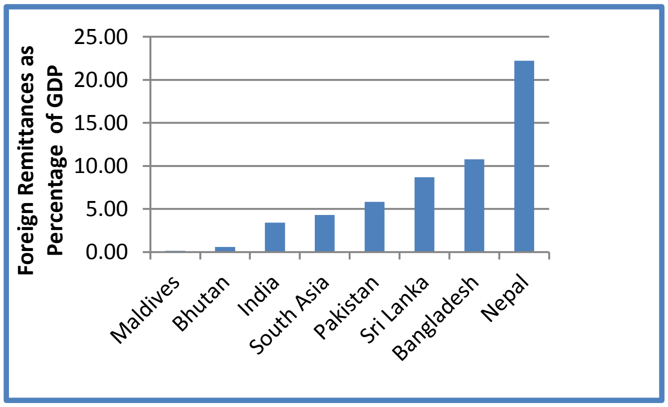

Figure 2: Remittances Recipients in South Asia with Foreign Remittances Amounts, 2012

Relationship between International Migration and Poverty:

There is a lot of information in the past literature with reference to the impact of international migration on poverty in the developing economies. It has been observed that the most migration from labor abundant or poor countries to the labor scarce economies due to the wage differences. The migration from poor and developing countries to the rich and developed economies increases the income of poorer and helps in the reduction of poverty. For example, the study [1] recommended a multilaterally negotiated visa scheme that will allow expanding the entry into the rich countries of a mix of skill and unskilled workers from poor nations. This scheme would raise the income larger than all the schemes of World Trade Organization taken together. Taylor in [2] examined the relationship between migration and development. They concluded that preceding work has been excessively doubtful about the views for development as outcome of international migration.

In [3], the researchers have concluded that international migration expressively reduces the poverty rate in the developing countries. After using instrumenting technique due to the control of endogeneity in international migration, and monitoring several factors, they concluded that on average, a 10% rise in the share of international migrants in a country's population will lead to a 2.1% decline in extreme poverty.

In [4] the author found that the international migration contains the movement of education and the mainstream migrants have higher education, also concluded that international migration does cause brain drain.

In [5] the authors studied the empirical literature on the relationship between remittances and several dimensions of social development in the developing nations within a wider theoretical framework of migration and development theory. He explored that migration and remittances improve welfare, excite economic growth and reduce poverty, but their impacts on inequality are much more confusing.

Relationship between Remittances and Poverty:

The theoretical and empirical literature with respect to international migration generating a cycle of dependency and a little development in sending communities and the earnings are spent on consumption and productive investment.

The authors have discussed that this view is confusing because the conditions under which productive investment is suitable and profitable are ignored. They examined the contributing factor of remittances savings and decisions, and also identified the conditions under which U.S. earnings are deported to Mexico in form of remittances and savings, and indicate the factors leading to their productive investment [6].

The authors examined in [7] the role of remittances in domestic investment and poverty in Ghana. They found that, the major part of remittances spend on education, housing, and health while less spend on food. The results also show that remittances significantly reduces the household poverty in Ghana.

In [8] authors explored that remittances increase economic growth and reduced poverty in Latin American and Caribbean countries. He also found that remittances have negative and poverty plummeting effects. In [9] author exposed that remittances have not only direct positive impact on per capita GDP growth rate, but also on saving rates and education expenditures. They also found that emigration is helpful in reducing the saving rates and labor growth rate.

In [10], authors concluded that remittances use for consumption and investment purposes and it has multifaceted positive and negative impacts on development. The role of remittances in development is examined on the base of experience of countries.

MATERIAL AND METHODS:

Data:

In this section this paper describes the change in the level of Poverty due to the change in GINI index, GDP per capita, Migration and Personal remittances, received, including the theory of the impact of Migration and Personal remittances, received on Poverty, data sources from which we have taken data, variables and model.

The data of the variables for the study has been taken from World development indicator (WDI). The data on Poverty at $2 a day, percentage of purchasing power parities, GINI index, GDP per capita, Migration and Personal remittances are taken from WDI. The data is used for the period of 1980 to 2012 of 6 South Asian countries that are Maldives, Bangladesh, Sri Lanka, India, Pakistan and Nepal as the data for Afghanistan and Bhutan was not available.

GDP is the sum of all gross value of goods and services added by all resident producers in the economy within a specific period, it is calculated without deductions of depreciation of assets or of depletion of natural resources. While the variable GDP per capita is the ratio of ‘GDP and population of the economy’. Data are in current US dollars and Dollar figures for GDP per capita are converted from domestic currencies using 2000 official exchange rates.

Poverty rate redirects the deepness of poverty and its rate. International comparisons of poverty estimates involve both theoretical and applied problems. Every country has defined poverty in its own way, so the reliable comparison across countries is not an easy task. In rich countries, domestic poverty lines tend to have higher purchasing power as compare to in poor countries. The prosperity of people living in different economies can be measured on a joint scale on the base of purchasing power of currencies that is different in every economy. The different basements are used for defining the criteria of poverty like as 1$ per day, 2$ per day and 1.25$ per day, etc. Here we have used 2$ per day and below this criteria people consider to be poor that is estimated by the International Comparison Program in 2005.

GINI index measures the inequality in income distribution among the households within a country and there is no perfectly equal distribution in any country. The Gini index exposes the area between the Lorenz curve and a hypothetical line, stated as the share of as much as area under the line. When the value of Gini index will zero it represents perfect equality and it gives a suitable summary of a measure of the degree of inequality.

Personal remittances contain personal transfers of employees and it consists of all current transfers between resident and non-resident individuals. Data is designed in current US$. The two key components of personal remittances, "personal transfers" and "compensation of employees", are items in the balance of payments framework and both are recorded in the current account. Net migration is the net total of migrants under the specified time scale.

Econometric Model:

In this section current study defined two econometric models for checking the separately effect of both migration and remittances on poverty with the help of five variables, poverty rate that is dependent variable, GINI index, GDP per capita, Personal remittances, received and Migration are treated as independent variables.

Poverty = f (GDP per capita, GINI index, Migration, Personal Remittances)

It shows the poverty is a function of GDP per capita, GINI index, Migration and Personal remittances.

$$\boldsymbol{pov_{it}} = \boldsymbol{a_o} + \boldsymbol{a_1}\, \boldsymbol{lmig_{it}} + \boldsymbol{a_2}\, \boldsymbol{lgini_{it}} + \boldsymbol{a_3}\, \boldsymbol{lgdpc_{it}} + \mu_{it}$$

Where pov = poverty measure, lmig = log of net migration, lgini = log of GINI index, lgdpc = log of GDP per capita, α_o = fixed effect reflecting time differences between countries, α_1 = elasticity of poverty with respect to migration, α_2 = coefficient of income inequality, α_3 = coefficient of GDP per capita;

Table 1: The effect of International migration on poverty

Poverty	Coeff.	Std. Err.	z	P>|z|
lmig	-0.64	0.35	-1.84	0.06
lgini	13.47	3.03	4.44	0.00
lgdpc	-10.68	0.55	-19.12	0.00
Con	55.35	10.33	5.35	0.00

i = 1…..6 countries;
t = 1…..33 time periods; and
μ = error term.
R-square = 0.70

$$\boldsymbol{pov_{it}} = \boldsymbol{\beta_o} + \boldsymbol{\beta_1}\, \boldsymbol{lrem_{it}} + \boldsymbol{\beta_2}\, \boldsymbol{lgini_{it}} + \boldsymbol{\beta_3}\, \boldsymbol{lgdpc_{it}} + \boldsymbol{\varepsilon_{it}}$$

Where the pov is the poverty in country i at time t, β_o is fixed effect which is reflecting time differences between countries, β_1 is the coefficient of remittances, lgini stands for GINI index and β_2 is the coefficient of income inequality given by GINI coefficient, lgdpc stands for log of GDP per capita and β_3 is the elasticity of poverty with respect to GDP per capita and ε is the error term.

According to the past literature the both models assume that every independent variable have an inverse relation with dependent variable. The expected association between poverty and GDP per capita is negative. The literature also shows that a given rate of growth decreases poverty.

METHODOLOGY:

In this section two models are estimated that are discussed in the previous section. There is a panel depends upon a six cross sections or countries for time period from 1980 to 2012. Before using any panel estimation technique we have to check that the data is pooled or not, for this purpose, we applied a “Chow Pool-ability test”. If the value of F-statistics is less than 2.5, the data is pooled data and our value of F-statistics is 0.138 so our data is pooled data. When data is pooled, then there are two most prominent techniques are used “Fixed effect model (FEM)” and “Random effect model (REM)”, both have different characteristics. But how can we decide which technique is preferable and suitable. The Hausman test can be used to decide between FEM and REM. So we have estimated the model with both FEM and REM techniques because the Hausman test is used in the comparison of two techniques. The null hypothesis was “difference in coefficients not systematic” the probability value of Hausman test is 0.9344 that is greater than the 0.1, so the null is not rejected it means it is not systematic and REM is applicable in this case.

RESULTS AND DISCUSSION

The estimation results of both models are given below in the tables. Table 1, shows the impact of international migration on Poverty. Table 2 shows the impact of international Remittances on Poverty.

In Table 1 the signs of coefficients for both GDP per capita and migration are negative and the sign of GINI coefficient is positive, and all coefficients are highly significant at level of 0.05. The R-square is 0.61.

The elasticity of poverty with respect to Migration is -0.64 means that if the migration increases by 1% the poverty will reduce by 0.64% which is according to the past literature and has shown the inverse relationship between migration and poverty. When the labor force of developing and poor countries migrates to the developed and rich economies then their income increases because in rich economies the wages of labor are higher than the wages in developing economies. This process generates the remittances to the poor countries and the consumption and saving level of migrants' family will rise from its level. The migrants can be able to do investment in different sectors through their savings in their own countries and it will create employment opportunities.

In [1] the author mentioned a multilaterally negotiated visa scheme that will allow the migration into the developed economies of a mix of skill and unskilled workers from poor nations. This scheme would raise the income larger than all the schemes of World Trade Organization taken together. The Migration or labor mobility to the advanced nation produces benefits for developing countries and it also generate the incentives for return to host nations. While remittances can be very important for the support of poor families, they are cannot spark and sustain long run economic growth.

The GINI coefficient is also significant and shows the direct and positive relationship. The "WORLD ECONOMIC OUTLOOK (October 2007): Globalization and Inequality, chapter 4," is concluded that the technological progress is the main factor to increase the inequality in developing countries while income is growing and advance technology both in developing and developed countries increase the skill premium. Among developing countries the impact of technological progress is stronger in Asia than in Latin America.

The coefficient of GDP per capita is -10.68, which is negative, it means that if the GDP per capita increases the poverty will reduce and the coefficient is significant and the magnitude is according to the past literature.

Table2: The impact of International Remittances on Poverty

Poverty	Coeff.	Std. Error	z	P>|z|
lrem	-2.48	0.38	-6.48	0.00
lgini	18.84	2.92	6.43	0.00
lgdpc	-7.15	0.68	-10.53	0.00
Cons.	56.47	10.89	5.19	0.00

R-square = 0.71

In Table 2 the signs of coefficients for both GDP per capita and remittances are negative and the sign of GINI coefficient is positive, and all coefficients are highly significant at level of 0.05.

The elasticity of poverty with respect to remittances is according to the past literature and the coefficient of remittances is significant and negative. Due to the migration from poor countries to the rich nations, the workers generate the remittances to the poor countries. In the poor economies the consumption and saving level of migrants' family will rise from its level. If the more people migrate from poor countries to the rich nations and it will generate more remittances, and that kind of people can be able to do investment in different sectors through their savings in their own countries and it will create employment opportunities for others.

The coefficient of GINI coefficient is also significant and shows the direct and positive relationship. The "world economic outlook (October 2007): Globalization and Inequality" is determined that the technological progress is the main factor to increase the inequality in developing countries while income is growing and advance technology both in developing and developed countries increase the skill premium. Among developing countries the impact of technological progress is stronger in Asia than in Latin America.

The coefficient of GDP per capita is negative, it means that if the GDP per capita increases the poverty will reduce and the coefficient is significant and the magnitude is according to the past literature.

CONCLUSION

International migration and remittances play an important role in development as it helps in achieving the gains of globalization. This paper endeavors to explore the relationship by reshaping and studying a new data set on migration, poverty, foreign remittances and inequality in South Asian countries by using the Random Effect Model technique. We developed a significant and positive impact of remittances, migration and GDP per capita on poverty reduction, and we have estimated a significant and positive relationship between GINI coefficient and Poverty. It is a significant channel through which wealth is transferred from rich countries to the poor nations.

Our findings support several empirical results on the positive and significant impact of Remittances and Migration on Poverty reduction. The Remittances also provides some necessary support for the effectiveness in increasing growth, development and poverty reduction in poor and developing countries. Migration from poor countries to developed countries is beneficial for both developing and developed countries as migration or labor mobility produces benefits for developing countries and it also generates the incentives for return to host nations.

Developed countries should have to relax and flexible policies for the mobility of skilled and unskilled labor force from poor and developing countries to the developed countries irrespective of the policies of World Trade Organization (WTO). The government of poor nations should enforce the WTO for introducing a visa scheme for skilled and unskilled labors from poor countries to the developed economies. To mitigate the poverty and deprivation, policy makers should make such policies that may assist the poor workers to go abroad. It will not only help the poor families but also will help the governments to raise foreign reserves.

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