Chapter 2
Impact of International Migration on Human Development: A South Asian Perspective

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Abstract This study is going to empirically investigate the impact of international migration on human development in South Asian perspective because human development is the essential part for sustainable development by enhancing capabilities. For empirical investigation of the impact of international migration on human development in South Asian region, human development index of UNDP is taken as dependent variable and international remittances as independent variable and also used as proxy for international migration. To check robustness of the findings, different control variables are used for comprehensive model and policy recommendations. Control variables are selected on the basis of their theoretical justification and cover almost all sectors. Findings of this study guide us that if we want to use our remittances for the development and expansion of capabilities, then we should focus on political stability and institutional strength of this region. Empirics of this study are relevant for administrators, policy makers, social partners, media, and the researchers because they mainly focus on how best to address capability-based human development. At the end, policy makers should move away from a narrow perspective toward a wider perspective by understanding the valid reasons that can help in policy design that is supportive and effective for the well-being of the people of South Asia, which holds half of the world’s poor.

Keywords Migration • Human development • South Asia

2.1 Introduction

The starting point of human development approach is based on Sen’s expansion of capabilities, and the main focus of development is well-being of human life by expansion of choices that a person can be and do, such as awareness in terms of education, long and healthy life, and decent standard of living in the community. If these three basic requirements are not fulfilled, then they are unable to efficiently
perform in social, economic, and political spheres of life. So, development is considered as removing the barriers on what any individual can perform in life, and empowered by these, and other, capabilities, individuals can achieve their desired state of being. Overall, HDI embodies Sen’s capability approach in understanding human well-being, which focused on the importance of ends over means (Sen 1985).

The 2012 report of the UN System Task Team on the Post-2015 UN Development Agenda, with the theme “Realizing the Future We Want for All,” which recognized migration as a key dimension of inclusive economic and social development of the globe, with special emphasis on capability-based human development. Currently, migration is increasingly coming into sharp focus on the global agenda and is also recognized as a powerful vehicle for boosting development in both countries of origin and destination.

As far as South Asia is concerned, which holds half of the world’s poor, migration has been a critical indicator as a source of employment generation and livelihood for workers, and it also provides a stable flow of external finances to fill the budget and trade gap. Remittances have contributed in various natural and economic shocks and significantly contribute in GDP and economic stability of this region which further contribute in enhancing the indicators of human development.

According to IMF and World Bank recent data, US$404 billion remittances of international migration were transferred to developing nations in 2013 and forecast its growth to an average of 8.4% annually in the next 3 years by enhancing the amount of remittances US$516 billion to developing countries in 2016. The main focus of this study is to empirically investigate the impact of international migration on human development in South Asian perspective. South Asian countries are selected for this study because a massive number of migrants belong to this area. According to World Bank (2014) figures, India, Bangladesh, and Pakistan are in top 10 recipients of migrant remittance countries. India is the world’s largest recipient of remittances followed by Pakistan, Bangladesh, and Sri Lanka, with strong growth of remittances as Pakistan with 16.6%, Nepal with 12.2%, and Sri Lanka with 12.1% in 2014. Overall international migrant remittance stance is favorable in South Asian region with accelerated growth and expansion in India, Pakistan, Nepal, Bangladesh, and Sri Lanka in 2015. Remittances in this region remain the largest source of external financial flows for the development of poor and marginalized part of the society.

In South Asian countries, where half of the world’s poor are living, it become difficult for individuals to find opportunities within limited geographical arena. In this case, people have to move from one place to another which includes long and short distances. Currently, millions of people move geographically and socially to work across the globe and communicate without ever meeting in person. This mobility creates favorable environment for the people to develop and channelize their competencies and skills for the improvement of living standard and well-being in terms of educational attainment. Mobility of migrants is an important factor which enhances the education, healthcare services, knowledge, freedoms, and human development. It is also worthwhile to mention here that greater freedom obtained by migrants as a result of their mobility may either enhance the freedom of nonmigrants.
2.2 South Asian Perspective

According to World Bank (2014) statistics, remittances inflow toward developing countries has been estimated at US$404 billion which is 3.5% higher as compared to 2012. It is expected that flow of remittances toward developing countries will accelerate up to 8.4% on average in the next 3 years and the number may touch to US$516 billion in 2016. It is worthwhile to mention here that South Asia is the only region where many countries (India, Bangladesh, and Pakistan) are receiving remittances in top 10 country category, as shown in Fig. 2.1. This is also to share that remittance is one of the major contributors in overall financial inflows in South Asia.

In South Asian region, there is significant increase in remittances and migration since the 1970s by expansion of economic activities in the Middle East region, especially in construction and other developmental projects. During the time period of 2002–2008 with increase in oil prices, this increase further pushes growth and demand for labor in the Middle East. This increase in demand is one of the sources of international migration to provide employment opportunities in labor surplus region of South Asia.

Currently, official remittances are increased at 5.5% and cross US$117 billion in 2014 which is a slight increase as compared to 2013. All South Asian countries are considered as remittance countries, especially India, Pakistan, Sri Lanka, and Bangladesh. India is the world’s largest recipient of remittances with US$71 billion in 2014 which is 1.5% higher as compared to 2013. There is also strong growth in remittances for Pakistan which is 16.6% higher as compared to 2013. This growth is favorable for the economy of Pakistan to sustain its balance of payment and social sector development. Sri Lanka and Nepal both showed 12% increase in receipt of

![Fig. 2.1 Top 10 remittance recipients (US$ billion) 2012. Source: World Development Indicators (2013)]
remittances as compared to previous year. There is also significant contribution of remittances in GDP of almost all countries, as shown in Fig. 2.2.

In South Asian region, India is ranked as top recipient of remittance in 2014, and there is also significant growth from the last many decades, as in 1970 remittances were US$80 million, in 1980 remittances increase to US$2.78 billion, with rapid increase it reached to US$52 billion in 2008, and currently the number crossed US$70 billion.

In case of Sri Lanka, there is low-pace growth in international migration which was 1.6% from 1980 to 2007. There is slight growth in the twenty-first century, and remittances increase from US$111 million in 2000 to US$3.09 billion in 2009. It is worthwhile to mention here that official figures of remittances grossly underestimate the real situation of remittance inflow because many informal channels are used for remitting money in South Asia, especially in Sri Lanka.

The outflow of migrants was stagnant during the 1980s in Bangladesh but slightly increased in the era of 1990s. In the 2000s, international migration declined because of the 9/11 event in the USA, but the migration rate increased by more than 60% in 2007. In 2008, there were 6.26 million labor migrated under labor migration classification from Bangladesh. Currently, it is expected to rebound remittances from the GCC, and it is worthwhile to mention that average remittances to receiving households in Bangladesh are worth twice the income per capita and equivalent to almost 80% of receiving household’s income.

In Pakistan, there is rapid increase in inflow of remittances even in the years of financial crisis because this growth may be motivated on humanitarian basis from the earth quack 2005 to recent floods. This increase is being led by inflow from GCC countries where the number of skilled and semiskilled labor has increased and expansion of employment opportunities.
Overall the prospect of remittances for South Asian countries is favorable with rapid growth that is expected in the coming years for India, Bangladesh, Pakistan, and Nepal. Remittances still remain the largest source of financial inflows for this region by covering imports and contributing in foreign reserves, and detail is given in Fig. 2.3. So remittances are favorable for the economic growth and sustainable development of the masses. Figure 2.3 gives a new look for the importance of remittances for developing regions; especially Pakistan, Sri Lanka, and Bangladesh are among those countries where remittances are equal or much higher than foreign reserves.

Figure 2.4 gives statistics regarding growth in labor force from 2012 to 2020 and shows that South Asian countries will earn and grow at rapid rate because labor force is one of the important indicators of economic performance. In the globe, Pakistan has the potential of increase in labor force up to 22.90% followed by Nepal, Bangladesh, and India from South Asian perspective. Many of the emerging and developed economies availed this sharp increase in their labor market, and if policymakers focused on this perspective, then it becomes one of the blessings or signs of sustainable development for this region.

2.3 Literature Review

The various indicators that can determine human development and literature suggested (Henderson and Clark 1990; Kim 1995; Becker et al. 1999; Chelliah and Shanmugam 2000; Hanson and Woodruff 2003; Córdova 2005; UNDP 2005; Lopez et al. 2007; Fayissa and Nsiah 2010; and Tripathi and Pandey 2012) that population dependency ratio, social infrastructure/communication, industrial revolution, and worker’s remittances may determine level of human well-being at the country and
region level. This section will also shed light on different studies in the field of human development and important influential factors.

Iqbal and Sattar (2005) analyzed how workers’ remittances are contributing in the development process of Pakistan by using time series data from 1972 to 2003. This study found that workers’ remittances are positively and significantly impacting the economic development.

Adams (2006) empirically investigated that workers’ remittances are favorable for poverty alleviation and income redistribution. Castaldo and Reilly (2007) highlighted expenditure pattern of household before and after the receipt of remittances in Albania on social development in health and education, as compared with other goods by the household. Overall, this study found that workers’ remittances are positively impacting on human development.

Antman (2012) analyzed impact of parental migration decision on the educational attainment of their children. This study focused on one of the interesting aspects by focusing on the family to exploit variation in the ages of siblings at the time of migration. The findings are positive that international migration leads to increase in educational level of their children, but domestic migration does not play any role in determining the educational level of children. So, this study suggested that international migration can be seen as one of the potential pathways which raise educational outcome with special emphasis on girls’ education.

Kibikyo and Omar (2012) checked impact of remittances on poverty and social development in Somalia by using 300 questionnaires from Mogadishu City. They surveyed remittance-recipient and non-recipient households by using qualitative and quantitative analysis. Empirical findings of this study indicate that remittances boosted income, health, and education but reduce poverty in the study area. It was observed that remittances are not contributing in employment generation and recommended to address employment policy related to workers’ remittances.
Davis (2005) highlighted the growth of financial inflows and impact on social and economic sphere of households. This study indicates that remittances are playing significant role in economic performance/GDP through multiplier effect. Results of this study indicate that workers’ remittances contribute in expansion of tourism industry along with other economic sectors. It also shows that remittances enhance purchasing power from home while living outside the destination followed by investment activities in home countries which further support developmental and philanthropic initiatives at home.

Ratha (2003) investigated the impact of remittances on incidence of poverty for 74 low- and middle-income countries. Findings of this study show that due to 10% increase in the share of remittances, there will be 1.6% decrease in incidence of poverty to those who are living less than US$1 a day. This study also verifies that if there is 10% increase in remittances, then there will be 2% decrease in severity and depth of poverty. This study highlighted limitation that impact of remittances on poverty was underestimated because large unknown amount remitted through unofficial channels has been excluded from figures.

UNCTAD (2010) analyzed impact of remittances on poverty by using panel of 77 developing countries from 1980 to 2009. The findings of this study show that results are more worthwhile for countries where remittance inflow is more than 5% of GDP. For this panel, there is 3.9% decrease in incidence of poverty due to 10% increase in workers’ remittances. Remittances are also significantly contributing in poverty gap reduction. Empirical findings for Kerala (India) indicate that increase in remittances has put positive effect on per capita income and capital formation for sustainable development of developing countries.

Qasim and Amatul (ed) empirically investigated the impact socioeconomic determinants of human development index and non-income human development index for 35 districts of Punjab, Pakistan. Findings of this study showed that remittances, industrial revolution, social infrastructure, and population density are important determinants of human development. Out of these variables, population density is not significantly impacting non-income human development. This study also recommended that South and West Punjab districts require special policy incentive for the promotion of human development.

Kapur and McHale (2003) used microlevel analysis and found that remittances can settle down household budget that further push up expenditures on children’s education, health, and activities of human capital. At macrolevel, Adams and Page (2005) found correlation that workers’ remittances can alleviate poverty incidence in 71 developing countries. Empirics of this study indicated that if there is 10% increase in remittances, then there will be 2% decline in incidence of poverty to those who are living less than US$1 a day.
2.4 Methodology, Variables, and Data

An overview of literature showed that numerous indicators are impacting human development among the countries and the regions. This study is going to empirically analyze different factors of human development with special emphasis on international migration in South Asian perspective. Generally, per capita income is used to measure well-being of the community, but it hides so many economic dimensions of society. Dasgupta and Weale (1992) highlighted that income per capita is not a sophisticated measure for human well-being of the society. For this purpose, HDI of UNDP is used as a proxy for human development in this study, and its main objective is to measure the progress level in any society in enlarging people’s choices, capacities, and freedoms leading to enjoy a decent standard of living (UNDP 2005). This index is a weighted composite measure which comprises (1) life expectancy at birth for long and healthy life, (2) adult literacy, (3) gross enrollment ratio of awareness and knowledge, and (4) GDP per capita at PPP for standard of living. HDI is a well-known index, and having many merits, as, in contrast, certain indicators measuring human well-being and related concepts having focus on one side on either the end or the means, the HDI is specifically designed to include both in a comprehensive way (Booysen 2002). Hagerty et al. (2001) made a detailed assessment and comparison of almost all quality of life indexes; after a detailed discussion on all indices, the HDI was evaluated as “satisfactory in having a clear public focus” and “excellent in the general level of aggregation in its purpose of providing an assessment of development in a broader view, education, health and standard of living.”

Workers’ remittances (REMT) are generally considered as current private transfers from workers, those are migrated residents in the host country for more than a year, while their immigration status is not considered, to recipients in their country of origin. Migrants’ transfers are defined as the net worth of migrants who are expected to remain in the host country for more than 1 year that is transferred to another country at the time of migration. Compensation of employees is the income of migrants who have lived in the host country for less than a year. Workers’ remittances are one of the major sources of foreign inflow in many developing countries and also put incentive to many developed economies, but still brain drain is a debatable topic. This variable indicates flow of labor from one nation to another and in the literature; it is measured with the help of workers’ remittance inflow as a percent of GDP.

Workers’ remittance may contribute to human development by affecting education and health outcomes (Kibikyo and Omar 2012; Hassan et al. 2013). The above discussion indicates that human development is the essential part for sustainable development by enhancing capabilities and South Asian region is the largest recipient of remittances. For empirical investigation of the impact of international migration on human development in South Asian region, human development index of UNDP is taken as dependent variable and international remittances as independent variable and also used as proxy for international migration. To check
robustness of the findings, different control variables are used for comprehensive model and policy recommendations. Control variables are selected on the basis of their theoretical justification and cover almost all sectors: social, economic, institutional, and political. Control variables for this study are foreign direct investment, supply of money, foreign aid, ICT, privatization, population growth, urbanization, law and order, investment profile, ethnotensions, and government stability.

The following model will be estimated for empirical investigation of objectives of the study:

$$\text{HDI}_{it} = \beta_0 + \beta_0 \text{REMT}_{it} + \beta_0 X_{it} + \epsilon_{it}$$

where HDI is the human development index, REMT is the workers’ remittances, X is the vector of control variables.

Data has been collected from World Development Indicators and International Country Risk Guide from 1990 to 2013 for four South Asian countries (India, Pakistan, Bangladesh, and Sri Lanka) selected on the basis of data availability. After collection of data on above-stated variables, descriptive statistics and characteristics of each variable have been discussed, and this is helpful in understanding empirical analysis of this study.

For empirical analysis of study objectives, panel data is used because of increase precision of regression estimates, study dynamics, and causal inference which is enhanced by temporal ordering, to model temporal effects along with control for variables that vary over time and allow for the possibilities of the isolating effects of unobserved differences between individuals.

“If individual effect \( \mu_i \) (time-specific or cross-sectional effect) does not exist (\( \mu_i = 0 \)), then ordinary least squares (OLS) give more consistent and efficient parameter estimates”:

$$Y_{it} = \alpha + X_{it}\beta + \epsilon_{it} \quad (\mu = 0)$$

After regression estimation, if individual effect \( \mu_i \) is nonzero, then heterogeneity may influence assumptions. Specifically, if errors may not have the similar variant, but change across individuals, then there is another problem of heteroskedasticity, and if these errors are correlated with each other, then there is another problem of autocorrelation. If a violation of abovementioned assumptions exists, then estimator of the OLS is no longer the best linear unbiased estimator (BLUE).

If the individual (time or group) effect is not correlated with any regressors and heterogeneity is detected in the disturbance term, then the random effect model is the appropriate one. On the other hand, if heterogeneity is dealt with specifically intercept and the individual effect may possibly be correlated with any regressor, then the fixed effect model will be the best option. If each individual or group has its own initial capacity and shares the same disturbance variances with
other individuals, a fixed effect model is preferred. If each individual has its own
disturbance, then the random effect will be better at figuring out heteroskedastic
disturbances.

After these basic estimations, the next step is to check the time/individual group
effect. If the null hypothesis of the LM test is not accepted, then panel effect/random
effect model is more suitable than that of pooled OLS, and if the null hypothesis
of \( F \)-test is not accepted, then fixed effect model is more appropriate than simply
pooled OLS. At the end, if both hypotheses are accepted, then it is required to fit
pooled OLS for efficient and consistent findings.

After estimation of fixed and random effect models, Hausman specification test
will be applied to examine which effect is more dominating and significant in this
specific case. The Hausman specification test will make a comparison of fixed effect
and random effect models to the hypothesis that individual effects are uncorrelated
with regressors in the model (Hausman 1978). Hausman specification test observes,
if the findings of the random effect model are insignificantly different from that of
the unbiased fixed effect estimate (Kennedy 2008).

### 2.5 Descriptive Analysis

This section consists of statistical description of all the variables used in this study.
The focus of this section is on characteristics of individual variables in selected
South Asian countries and will be discussed on the basis of their mean, median,
maximum, and minimum value and their standard deviations. In the first step, we
exclude all variables that have zero standard deviation at any level (overall, between,
or within) and include only those variables having some deviation for empirical
analysis of our study objectives. We use three different types of statistics, overall,
between, and within, where “overall” statistics are ordinary statistics that are based
on 96 observations. “Between” statistics are calculated on the basis of summary
statistics of four selected South Asian countries, regardless of the time period, and
“within” statistics by summary statistics of 24 time periods regardless of country.

Table 2.1 gives a comprehensive summary statistics of all variables used in
this study. These findings are helpful for understanding empirics of the study
and description of South Asian countries. Main focus of this study is on human
development because HDI is at the worst stage and highest value is 0.661 in selected
South Asian region with 0.513 as mean and 0.083 as standard deviation. So this
study will highlight indicators that can enhance human development for the South
Asian region because people are the real wealth of any nation.

Descriptive analysis of remittances indicates that there is significant share in
GDP of all countries and its average is 4.97% of GDP. FDI is high in Asian
countries but is limited in South Asian countries. ODA per capita shows significant
contribution in this region, but alarming thing is high standard deviation which
indicates that there is volatility in foreign aid which further disturbs developmental
projects because of uncertainty.
Table 2.1  Descriptive statistics

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<td>10.79175</td>
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</table>
Currently, we are living and growing in the era of technological advancement, but South Asian countries are still lagging in ICT access with average 6.23% people having access to ICT, and maximum number is only 31.81% for this region. ICT is one of the significant contributors in human development, and its expansion should be on top priority of the policy makers to break the vicious circle of backwardness.

As far as social sector is concerned, statistics are not encouraging. Population growth is very high, even average population growth is 1.6% in four South Asian countries. Rural population is the major portion of this region without access to facilities, infrastructure, and societal development projects. Urbanization can positively contribute for the well-being of individuals, but in South Asian countries, there is average of 25.55% urban population with maximum 38.85% in the region.

At the end, this study introduced some control variables from political perspectives, and data indicates that IP and LO are above average in South Asian countries, but the major issue is ET which is one of the current problems for this region.

### 2.6 Empirical Analysis

This section covers empirical investigation of study objectives for South Asian perspective. Panel data for South Asian countries is used, and econometric technique of fixed and random effect model is used for empirical analysis. Detail of variables, models, and technique has already been discussed in previous sections (Table 2.2).

The first model indicates that international migration is positively and significantly contributing in human development of the South Asian region. Remittances are favorable for human development because empirics indicate that due to 1% increase in workers’ remittances, there will be 1.76% increase in human development. These findings are in line with previous studies (Iqbal and Sattar 2005; Adams 2006; Antman 2012). As the previous section indicated, remittances can enhance income of the family which further enhances the educational and health outcomes of the recipient families.

By introducing some control variables, it has been empirically checked that migration is useful for enhancing human development in the presence of economic indicators but at very low pace. FDI and ODA both are contributing, but money supply shows very low contribution in South Asian perspective. In the presence of social indicators, migration has efficiently contributed in the development of livelihood of the masses and expansion of capabilities. If there is control on population growth, then it will put positive impact on human development in the presence of increase in remittance. ICT is another indicator of access to health and education, and sustainable development is not possible without expansion of ICT. South Asian countries are lagging behind in ICT services and will become one of the best contributors of well-being.

At the end, in the presence of political and institutional indicators, migration performed at the best in human development of this region which indicates that
Table 2.2  Empirical analysis of migration on human development in South Asian perspective

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model1</th>
<th>Model2</th>
<th>Model3</th>
<th>Model4</th>
<th>Model5</th>
<th>Model6</th>
<th>Model7</th>
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<th>Model9</th>
<th>Model10</th>
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<tr>
<td>REMT</td>
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<td>0.90*</td>
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<td>0.62</td>
<td>0.74</td>
<td>0.60</td>
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</table>

Note: * indicates 5 percent level of significance.
migration becomes more development oriented if there are political stability and institutional quality. For this purpose, regional cooperative agencies should focus on the political stability for pro-poor growth in the vulnerable region of South Asia.

2.7 Conclusion

The main focus of this study was to empirically investigate the impact of international migration on human development in South Asian perspective. South Asia is the region where three countries are in top 10 remittance-recipient countries, and half of the world’s poor are living in this region. It has also been discussed that human development is the essential part for sustainable development by enhancing capabilities. For empirical investigation of the impact of international migration on human development in South Asian region, human development index of UNDP is taken as dependent variable and international remittances as independent variable and also used as proxy for international migration. To check robustness of the findings, different control variables are used for comprehensive model and policy recommendations. Control variables are selected on the basis of their theoretical justification and cover almost all sectors: social, economic, institutional, and political. Control variables for this study are foreign direct investment, supply of money, foreign aid, ICT, privatization, population growth, urbanization, law and order, investment profile, ethnotensions, and government stability.

Findings of this study guide us that if we want to use our remittances for the development and expansion of capabilities, then we should focus on political stability and institutional strength of this region. Empirics of this study are relevant for administrators, policy makers, social partners, media, and the researchers because they mainly focus on how best to address capability-based human development. At the end, policy makers should move away from a narrow perspective toward a wider perspective by understanding the valid reasons that can help in policy design that is supportive and effective for the well-being of South Asia, which holds half of the world’s poor.

At the end, it is suggested that South Asian countries should optimally utilize remittances by enhancing formal channels through reduction of transaction cost. Formal transfer of remittances is the sign of foreign exchange earnings and pushes up the poor and vulnerable to savings and investment in human capital.

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