

Empirical Evidence on the Impact of Remittance on Human Development in South Asia

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Abstract

The main objective of this study is to investigate the impact of remittances on human development in the South Asian region. This region has experienced a substantial increase in remittance inflows over the past three decades, which has contributed to strengthening economies and improving human development. The study is based on a panel dataset covering the period from 1996 to 2020. The impact of remittances on human development is empirically examined using standard panel estimation techniques, specifically the fixed effects model. Five different empirical regression models are estimated. The findings reveal that remittances have a positive impact on human development in the South Asian region. Control of corruption also exerts a positive influence on human development, whereas population growth adversely affects it. Furthermore, all independent variables, except urbanization, including remittance inflows, foreign direct investment per capita, labor force participation rate, and control of corruption, demonstrate a favorable effect on human development.

Keywords: Remittances, Human Development, South Asia, industrialization,

JEL Classification: F24, O15

Introduction

Remittances are transfers of payments from migrant workers to their relatives in their home country (Al-Malk et al., 2024). The rapidly growing economy of the world, from agrarian to industrialization, exerts pressure on the globalization of migration, as migration boosts inflows of remittances, especially in developing countries; hence, it is inevitable to consider the significance of those financial inflows for economic growth and human development in economies (Nyath et al., 2025). The remittance influx has been a key factor behind a record \$ 48,060 billion in 2021 (Ali et al., 2024; Siddiquee & Faruk, 2024). Remittances are a lifeline in a crisis (Namazzi, 2025) and perform as a stabilizer in occurrences of high macroeconomic volatility. For the challenges of external economic shocks, remittances are much steadier and sustained to minimize the impact of such shocks (Ratha et al. 2010). In the last three decades, inflows of remittances to the developing world drastically augmented from

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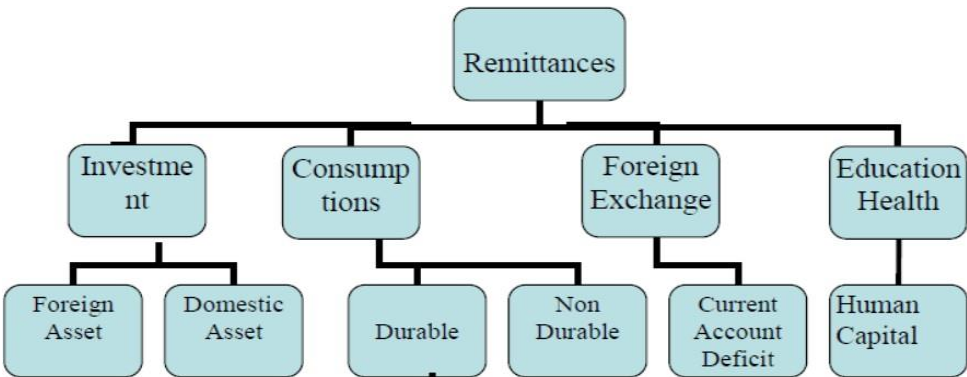
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\$29 billion in 1990 to \$626 billion in 2022, even though there is a worsening global situation due to covid-19 and economic insecurities.

Existing literature linked remittances positively with various indicators of economic growth and human development, such as better healthcare facilities, quality education, improving standards of living, and promoting gender equality (see for instance Borja, 2020). Remittance inflows can significantly impact development in economies by increasing consumption through higher personal income, as well as enhancing social insurance and investment in lower-income countries via lending, purchasing, and philanthropy; these activities provide opportunities for small businesses, support small farmers, and improve education standards, leading to long-term benefits for economic and human development. The influence of remittances on human development works through a number of interconnected links. Figure 1 summarizes the major pathways through which remittance inflows are likely to enhance human development. How remittances are utilized by the recipient family to increase their living standards and help the economy can be understood by referring to Figure 1.

Figure 1: *The Impact of Remittances on Key Indicators*



Remittance and Migration Trends in South Asia

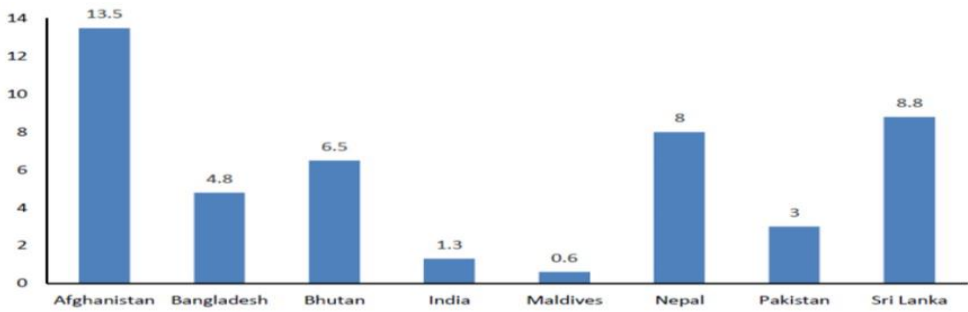
The pattern of international migration is a macro movement across international boundaries that are shaped by many reasons, such as financial development, political causes, and sub-regional social development. Globalization and technological development have fast-tracked the global movement, especially the labour movement. Agarkov et al. (2024) and Han (2024) argue that the force that accelerated migration is wage differentiation between developing and developed countries. The regional territories located in the southern part of the Asian continent are known as SAARC countries, comprising eight countries: Bangladesh,

Afghanistan, India, Bhutan, the Maldives, Pakistan, Nepal, and Sri Lanka. A quarter of the world's population lives in South Asia⁴ (Gupta, 2025), home to the most culturally and ethnically diverse people, which makes it one of the most populated regions on earth. This large and growing population, as well as the geopolitical importance of the region, filled with natural resources and intensive human capital, presents major opportunities for economic growth and development.

Global migrants' stock from Asia is estimated at around 84 million. By its size, South Asia had the largest number of settlers in the world in 2019—approximately 41.2 million people in the region lived outside their country of origin. Yet, as a percentage of the population, South Asia was small, with an average of just 2.2%. The migrant profile of this region is sustainable and has become more volatile over time, as in the 1970s, the mainstream migration population was male for mega infrastructure development projects. Later, in 1980, GDP growth in South Asia encouraged both high-skilled and low-skilled labour internationally; as a result, America, Australia, and the oil economies in the GCC became major destinations for that skilled and low-skilled labour in the late 1990s. The demand for domestic workers significantly increased, and the number of women workers also rose to the Middle East and other Asian regions (Bangladesh and Sri Lanka account for 50 percent of women labour emigrants). GCC countries have been the main destination for migrants from South Asia. Saudi Arabia captures 50 percent of emigrants from Pakistan and 42 percent from Bangladesh, about 20 percent of Nepali workers, and 25 percent of Sri Lankan workers were employed, but a steady structural transformation is in practice, supporting high-income nations for Indian migrants.

South Asian emigration is highly motivated and driven by economic and developmental purposes, unlike Afghanistan, where conflict forced emigration. In the labour force, the Indian share of emigration was 1.3 percent of their population, while the share was above 8 percent in Afghanistan. The least share of emigration relative to the population was experienced by the Maldives, at around 0.6 percent. The challenges posed by COVID-19 in 2020 severely affected the pattern of migration, as almost 22 percent of remittances declined due to job loss; one out of six migrants lost their job (ILO, 2020), borders were closed, and about 2.5 million people were stranded. Figure 2 provides a snapshot of the international stock of migration as a percentage of the population in 2022.

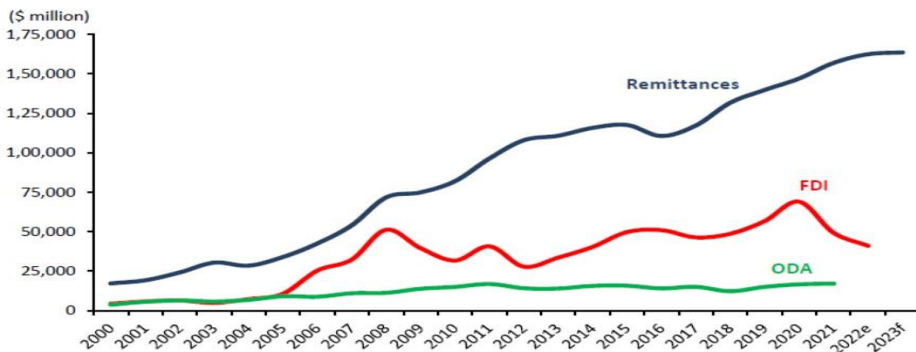
⁴ Note: In this study, South Asia refers to Bangladesh, Afghanistan, India, Bhutan, Pakistan, Maldives, Sri Lanka, and Nepal.

Figure 2: International Stock of Migration as a Percentage of Population

Source: World Bank staff calculations based on UNDESA (2019) and World Bank (2022).

Remittance Trend and Human Development

The constant, smooth, and stable flow of international transfers of migrants to home countries has become a key and significant source of foreign exchange and family income for many developing and emerging economies for their development and sustainable growth. Therefore, these migrant inflows have captured the attention of economists and policymakers. Remittance, being the opposite face of the coin, has great significance to South Asian countries due to its constant and rapid increase as external inflows. Reducing the cost of remittance is the 10th agenda of the Sustainable Development Goal, which emphasizes a decrease in remittance costs by 3 % and no more than 5% in any corridor by 2030 (UNDP). In addition, socio-economic development is achieved by improving educational choices and standard health facilities. South Asia is the largest recipient of remittances with steady projections and was estimated to have a 2.397 percent increase in the last three decades, from \$5.57 billion in 1990 to \$147.5 billion in 2020. The remittance inflows remain much higher in South Asian nations than FDI and ODA and remain constant throughout 2022, as demonstrated in Figure 3.

Figure 3: Comparison of Remittances, FDI, and ODA for South Asia

Sources: World Bank-KNOMAD staff estimates; World Development Indicators; IMF Balance of Payments Statistics.

Over the years, South Asia has witnessed a remarkable increase in remittance inflows, underscoring the growing contribution of overseas workers to the region's economies. This persistent upward trend suggests that remittances have become an increasingly important source of foreign exchange and support for household welfare. To illustrate this pattern, Table 1 reports the evolution of remittance inflows to South Asia over the period 1990–2024.

Table 1: *Remittance inflows to South Asia*

Year	Remittance inflow to South Asia (in \$ billion)
1990	5.57
1995	10
2000	17.19
2005	28.68
2010	82
2015	117.61
2020	147.11
2024	207

Source: World Bank dataset.

The South Asian region received a handsome amount of remittances as a percentage of its GDP in the global world, as in volume almost twenty percent of world remittances were destined to South Asian economies between 2015 and 2019 which are much higher than official development assistance (ODA) and FDI (Hahm et al., 2021). In the developing world, relative to other external money, remittances inflows are four times bigger than ODA and twice as big as foreign direct investment (FDI) (Hagen-Zanker et al., 2022). The major destination of migrant workers from South Asia is GCC countries, which measured fifty-nine percent (59%) of remittance inflows, about 12% account from US, and six percent from the UK. In 2020, the World Bank reported receiving over \$120 billion in remittances. Such large remittances are a reliable source of income for many households in the region and an important source of foreign exchange reserves for government authorities, which contribute to the strength of major economies in the region. The significance of remittances to socio-economic development in South Asia and the high trend of inflows over the last three decades have raised the interest of researchers in this area.

This study contributes to literature by investigating the influence of remittance inflows on human development in South Asia region. This study provides insights into the potential of remittances for human development, a solution to the different economic and social challenges faced by the economy. The remainder of the study is organized as follows. First, the existing literature on the relationship between remittances and human development is reviewed. This is followed by a discussion of

the theoretical framework, highlighting the channels through which remittance inflows can influence human development. Next, the study describes the data and methodology used in the analysis. The empirical findings are then presented and discussed. Finally, the study concludes by summarizing the main findings and their implications.

Review of the Literature

A voluminous literature is available on how remittances push all three dimensions of human development, such as access to education, life expectancy, and living standards, toward the state's prosperity, emphasizing channels and indicators through which remittances assist economic growth but not development directly; therefore, the following literature helps us acknowledge the importance of remittances. Orozco (2013) studied the implications of remittances in developing nations and their linkages to development. The author claimed that regulations, market stability, and access to financial services in both the host and recipient countries structure remittances and their impact on development. Warnecke-Berger (2022) also reported similar findings. Irdam and Aysen (2012) examined the connection between remittances and migration by analysing the effect of remittances on human development through both qualitative and quantitative frameworks; the results indicate that the impact of remittances on human development is significantly higher than that of other foreign inflows, such as FDI and ODA. Mohammed (2022) also reported similar findings. Aziz et al. (2015) examined the economic growth rate and migrants by using panel data from 72 nations from 1980 to 2010, with the role of financial development utilizing GMM and fixed-effect estimation. The study reveals that financial development provides favourable circumstances for migrants' remittances, enabling productive investments to gain economic growth.

Similarly, Mohammed (2022) documented that improved remittances significantly stimulate human development in developing nations; however, in the area under study, sub-Saharan countries, the effect of remittances is less significant for human development. Wahab et al. (2013) analyse the relationship among remittances, human resource development, and migration in the South Asian region, both through qualitative and quantitative estimates of panel data. The OLS estimation shows that remittances have a negative relation to the infant mortality rate, and primary and secondary enrolment negatively impacts remittances, while tertiary school enrolment has a positive effect. The stock of human resources promotes growing remittances, which help in developing the economy of the country. Huay et al. (2019) conduct a study with the objective of analysing the effect of remittances on human development, particularly in developing nations, by using usual panel estimates, fixed effects, pooled OLS, and random effects. The data sampling includes sixty-seven developing countries, with panel estimation having a time range from 1980 to 2014. The estimation results also support Irdam and Aysen (2012), Khan (2025), and Nasrin et al. (2024), found evidence that remittances are positively

associated with human development.

Further, Kamalu et al. (2022) examined the impact of international inflows of remittances on human development, targeting the data set of fifty-seven organizations of Islamic countries over twenty-eight years from 1990 to 2018. Dynamic Common Correlated Effects (DCCE) and Cross-Sectional Autoregressive Distributed Lags (CS-ARDL) techniques are used to investigate the impact of remittances on human development, which shows a positive relation of remittances to human development. Larsson and Ångman (2014), using HDI as a dependent variable, analysed the relationship of remittances to human development by supporting their studies with empirical evidence from 99 developing countries. The estimation tools and techniques used in the study are OLS and the fixed effects model, which reveal that remittances positively influence human development in developing economies. Hassan and Shakur (2017) analysed the impact of remittances on the GDP growth of Bangladesh by using econometric modelling such as OLS, IV-GMM estimators, and IV-2SLS for the data period from 1976 to 2012, and found that in the short run or initial phase, the inflow of remittances drops per capita GDP; however, in the long run or later phase, remittances enhance the growth rate significantly.

Conceptual Framework

With the advancement in technology and globalization, the societal transition due to migration, trade, war and conflict shaped new theories and philosophies concerning the sustainability and prosperity of the state and its territories. The argument between migration and development has since acquired the core attention of both societal and developmental theories and swung back and forth like a pendulum to acknowledge the way forward of development, from developmental optimism in the 1950s and 1960s to neo-Marxist pessimism over the 1970s and 1980s, towards more optimistic views in the 1990s and 2000s. Such contrary schools of thoughts views on migration and development reflect the deeper paradigmatic division in social theories such as functionalist versus structuralism paradigms, Neo-classical versus Neo-Marxist, Modernization versus Disintegration Brain gain versus drain, more equality versus inequality and remittances consumption versus investment. In general three main theories are important to understand the behavior of remittances for development with the perspective of migration. The developmental optimistic school of thought has emerged from the neoclassical migration hypothesis and developmental pessimist school of thought of structuralism dependency preference. a newly emerge concept of summarizing both the optimist and pessimist school of thought, the remittance–developmental pluralist was flourished in recent decades which attribute remittances as a backbone for developing countries to strengthen their foreign reserves.

Optimistic Views: Neo-Classical and Developmental Theory

Optimistic theories perceive migration as the most advantageous allocation

for sending as well as receiving economies in the factor of production to gain economic growth and development. Such optimistic views were embedded in and based on previous surveys of rural-urban migration in the United States and Europe that historically experienced emigration to North America from Europe. The prevailing theories of 1950 to 1960 of development state that returning migrants were regarded as important agents of innovation and change. Migrants were expected to generate not only foreign inflows, but also knowledge, new ideas, and entrepreneurial behaviors, so, immigrants were expected to play an important role in the development and pay to the accelerated human development and modernization of developing nations. On a macro level, remittances were perceived as an important source of hard currency. Overall there was an expectation that migration would come about and Lead to the economic development of the emigrating country. Remittances would strengthen income distribution and improve quality of life beyond any other alternative developmental approaches that could be undertaken. Remittances have also played a major role in GDP growth and development by channelizing experience, skills, money, and knowledge that migrants acquire abroad to investing, and standardized way of living by improving health and education in the home country.

Pessimistic View; Structuralism

The optimist school of thought was highly criticized and increasingly challenged by the pessimist school of thought after the onward phase of development in the 1960s under the collective impact of a prototype change in development and social theory towards historical structuralism and dependency, those views are over and over again supported by empirical studies and policy experiences (Taylor, 1999). The advocate of this theory also argues that gaining skills and migrating to do so is a daydream for the poor because of high mobility and migration cost which leads to widening the income gap and inequalities in the developing world. In general, the inflows also build pressure on the external real exchange rate and caused a situation known as Dutch disease by strengthening the local currency, this would make imported goods cheaper as compared to domestic ones, this situation would further facilitated by trade openness, which increases imports further and create a cycle of dependency (De-Haas, 2010).

The Pluralistic View

An advocate of pluralistic remittance–development theory takes into account that both remittance development optimism and remittance development pessimistic theories are unable to handle the dynamic behavior of remittance development nexus. The Developmental pluralistic view flourishes after 1980 by undertaking both optimistic and pluralistic schools of thought to enable us to handle the heterogeneity of migration-development links (Adenutsi, 2010; De-Haas, 2010). The pluralistic approach and its advocates explain the mix impact of remittance on development and consider the impact as a complex issue that was to elaborate with new theories which

may resolve the relationship between remittances and development

Data and Methodology

To investigate the determinants of human development, the study estimates the following model. The functional relationship between the dependent variable and the explanatory variables is specified in equation (1) as follows:

$$HDI = f(PREM, FDI, GDP, PGR, UPG, LFPR, CC)$$

The dependent variable is the human development index (HDI), the main independent variable is log of remittances received (PREM), and other variables include log of FDI, labor force participation rate (LFPR), log of GDP, UPG (urban population growth), PG (population growth), and CC (corruption control). Hence, the objective of the current study is to explore the impact of remittance inflows and other important factors on human development in South Asia. In Table 2 we provide the variable measurement and source.

Table 2: Variable Descriptions

Variables	Symbo l	Measurement	Source of Data
Human development index (dependent variable)	HDI	Average achievement of long & healthy life, standard of living, and literacy rate	UNDP
Remittances	PREM	Personal remittances, received as % of GDP	WDI
Foreign direct investment	FDI	Foreign direct investment, net inflows (% of GDP)	WDI
Growth of Gross domestic product	GDP	GDP growth (annual %)	WDI
Population growth	PGR	Population growth (annual)	WDI
Urbanization	UPG	Urban population growth	WDI
Labor force participation rate	LFPR	Labor force participation rate, (% of total population ages 15- 64) (modeled ILO estimate)	WDI) (modeled ILO estimate)
Control on Corruption	CC	Index	WGI

Econometric Model

The objective of the current study is to explore the impact of remittance inflows and other important factors on Human Development Index (HDI) by using panel data set of 6 South Asian economies over the period of 1996 to 2020. Theoretical as well as existing empirical literature prophesies a positive influence of remittances on human development in long and short term in developing countries. In this regard, the current study give us deep analyses of South Asian region by using fixed effect model through selective addition of control variable in each model. The regression equation tracing the impact of remittance and other important factors on HDI is given below.

$$HDI_{it} = \alpha_0 + a_1PREM_{it} + a_2GDPS_{it} + a_3FDI_{it} + a_4LFPR_{it} + a_5UPG_{it} + a_6PRG_{it} + a_7CC_{it} + \varepsilon_{it}$$

Fixed effect model reflect each unit to have its own intercept value and consider heterogeneity among the cross sectional units, In the given equation of our model HDI is dependent variable and α_0 is used as intercept with subscript i shows each unit have own intercept however intercept of each entity is time invariant. α 's, are slope coefficients and ε is the random error term. Hausman (1978) test is applied to choose between FE and RE and conclusively, the results support FE model.

Table 3: Hausman Specification Test

	Coef.
Chi-square test value	31627.305
P-value	0000

We have estimated the following five models for examining the impact of remittances on human development

Model 1

$$HDI_{it} = \alpha_0 + a_1PREM_{it} + a_2GDP_{it} + \varepsilon_{it} \quad (1)$$

In model 1 we regress HDI on remittance received and control variable is log of GDP per-capita.

Model 2

$$HDI_{it} = \alpha_0 + a_1PREM_{it} + a_2GDP_{it} + a_3FDI_{it} + \varepsilon_{it} \quad (2)$$

In model 2 we extend our regression to investigate, impact of remittances on HDI including foreign direct investment as independent variable into the model 1. Human development is improved by progressive economic growth, If the given statement is correct, then FDI must have an indirect impact on human development due to its connection with economic growth.

Model 3

$$HDI_{it} = \alpha_0 + a_1PREM_{it} + a_2GDP_{it} + a_3FDI_{it} + a_4LFPR_{it} + \varepsilon_{it} \quad (3)$$

In model 3 our regression model is further extended to incorporate one more variable that is labor force participation rate owing to its importance for contributing in GDP growth and human development. Labor being one of the main factor of production enhance the human development.

Model 4

$$HDI_{it} = \alpha_0 + a_1PREM_{it} + a_2GDPS_{it} + a_3FDI_{it} + a_4LFPR_{it} + a_5UPG_{it} + \varepsilon_{it} \quad (4)$$

In model 4 we stretch over model variable to demographical transition as south Asian region is one of dense populated region in the world making it one fourth of world populated region including two out of five most populated countries such as India and Pakistan. Dependency ratio, migration pattern and migration policies influence the nature of remittance inflows and human development there for we include urban population of total population and population growth rate into model 4.

Model 5

$$HDI_{it} = \alpha_0 + a_1PREM_{it} + a_2GDPS_{it} + a_3FDI_{it} + a_4LFPR_{it} + a_5UPG_{it} + a_6PRG_{it} + a_7CC_{it} + \varepsilon_{it} \quad (5)$$

In the final model institutional performance is included because stability and progress of any particular area is pre-dominantly linked with institutional performance which governs effective policy implementation. The variable of Control of corruption is added in this model to investigate influence of remittances and control of corruption along with other independent variables on human development.

Results and Discussion**Table 3: Descriptive Statistics**

Mean	.587	21.18	7.072	.05	62.799	3.005	1.69	- 0.590
Median	.5775	2.3235	6.9882	0.06199	58.8300	2.8283	1.6566	-0.5989
Minimum	.423	4.416	5.321	-4.837	51.06	.047	-.268	-1.597
Max	.78	5.146	9.265	2.841	88.53	6.324	4.568	.406
Std.Dev	.099	3.131	.962	1.201	11.407	1.414	.942	.409

Descriptive statistic of data has been shown in the Table 3 it provides basic feature, characteristic and behavior of data for both dependent and independent variables in average values such as mean, median, minimum, maximum, and standard deviation. Deviation from mean is represent by standard deviation with maximum value of 11.407% and minimum. 099% in our data for LFPR and HDI respectively

whereas median shows middle vale arranging data from highest to lower. Maximum and minimum return of remittances for corresponding SAARC countries in given time period is 25.146% and 14.416 respectively.

Correlation Matrix

Table 4: *Matrix of Correlations*

Variables	HDI	PREM	GDP	FDI	LFPR	UPG	PGR	CC
HDI	1.000							
PREM	-0.273	1.000						
GDP	0.833	-0.430	1.000					
FDI	0.532	-0.439	0.719	1.000				
LFPR	-0.039	-0.163	-0.201	-0.381	1.000			
UPG	-0.313	-0.568	0.007	0.129	0.233	1.000		
PGR	-0.105	-0.605	0.310	0.437	-0.114	0.672	1.000	
CC	0.452	-0.001	0.264	0.298	-0.065	-0.347	-0.232	1.000

Correlation matrix shows the relation between variables as well as direction (positive/negative) often it examines multivariate analyses of variables and statistic. Correlation matrix value range between +1 and -1, which demonstrates the strength of correlation among the variable higher the value, the stronger will be the correlation and vice versa. Direction of relation is provided by coefficient sign. HDI of SAARC countries negatively correlate with PREMS, LFPR, UPG and PGR while positively correlate with other variable.in our data log of GDP per capita is strongly positive correlated with log of FDI with a value of 0.719 other value such as LFPR is negative correlated with CC with a value of 0.065. Serial correlation trend to create problems of multicollinearity (having perfect or exact relationship between the regression explanatory variable) in regress a term described by Ragnar Frisch. Estimating without adjusting multicollinearity give insignificant results with higher variance and standard error, low t stat value, and signs of coefficients trend to be changed. Multicollinearity is detected through multi tools; here is one of the statistical methods Variance Inflation Factor (VIF) introduce by Cuthbert Daniel to check multicollinearity which measure variance or behavior influenced by repressors' due to its interaction or correlation. VIF measure value between 1 and 10 reflect that there is no significant correlation or multicollinearity. Higher than 10 or lower than one value of VIF is problematic multicollinearity in regression analyses Table 5 shows

that mean VIF is 2.3 which implies that there is no problem of multicollinearity in the regression model.

Table: 5 *Variance Inflation Factor*

	VIF	1/VIF
FDI	3.033	.33
PGR	2.805	.357
UPG	2.738	.365
GDP	2.361	.424
PREM	2.346	.426
LFPR	1.572	.636
CC	1.435	.697
Mean VIF	2.327	.

The regression results for the impact of remittance on human development by using fixed effect mode are compiled for five models are reported in Table 6 for the panel of six South Asian countries.

Table 6: *Fixed Effect Model*

Variables	Model1	Model2	Model3	Model4	Model5
PREM	.005** (.002)	.007*** (.002)	.008*** (.002)	.005 (.003)	.008** (.003)
GDP	.076*** (.004)	.072*** (.004)	.068*** (.004)	.072*** (.005)	.068*** (.0049)
FDI		.006*** (.002)	.006*** (.002)	.005*** (.002)	.005*** (.002)
LFPR			.001** (0.00)	.001*** (0.000)	.002*** (.00046)
UPG				.001 (.003)	.002 (.0027)
PGR				-.008** (.001)	-.006* (.003)
CC					.023*** (.0067)
Constant	-.062** (.026)	-.06** (.026)	-.128*** (.041)	-.114* (.062)	-.161*** (.009)
R-square	0.926	0.930	0.932	0.936	0.941
Observatio n	150	150	150	150	150

F.test	882.215	608.299	469.620	324.308	301.232
*** p<.01, ** p<.05, * p<.1					

The result shows that remittance inflows have positive association with human development; existing literature and research papers thoroughly support this positive impact of remittance on human development through economic cycle or social mobilization mainly in developing world. Remittances are the most significant among the factors which positively affect HDI. As opposed to FDI and ODA it is hypothesized that direct transfer of remittances to families enhances human development through standard access to basic needs, education, access to social services and healthcare (Irdam, 2012). From regression analysis it is confirmed that when remittances received increases by 1 unit than the human development increased significantly by 0.005 index points.

The results also confirm positive and significant relation of GDP per capita to human development as one unit increase in GDP per capita results in improved human development by 0.067 index points. GDP being a valuable and strength measuring tool of economy can increased human development as a strong GDP tend to allocate more budget toward schooling, healthcare, creating millions of jobs, infrastructure development, boost investment and increase income per-capita. Although there is significant positive association between GDP and HDI it's important to make out that GDP alone does not provide complete picture of country HDI but other factors such as wealth, distribution of wealth access to education, political and social stability also required to boost country HDI. Our result are in line with (Siddique et al., 2012). The regression result after the inclusion of foreign direct invest to model 1 resulted in highly significant and positive result of main independent variable PREMS and control variable such as GDP and FDI with human development. Foreign direct investment create multiple opportunities to local works as south Asian region is labor intensive region there for FDI play a crucial rule to build standard of living by increasing personal income. Highest inflows of FDI recorded to this region as per cent of GDP in 2008 equal to 3.3% and in 2020 it was record as 2% (World Bank).

The third model investigate the influence of remittances on human development index in presence of labor force participation the results shows positive association between labor force participation and human development, unit increase in labor force participation rate result into 0.001 index point increase in human development. Labor market is a major economic development component since skilled and trained professions improve labor income per capita, attracting more individuals to join the labor force and entrepreneurial endeavors, ultimately raising living standards and boosting economies. South Asian labor market entrants will increase faster than home economies' ability to absorb them; forcing employees to compete in the global labor force (Wahab et al, 2013). The variable of remittance

inflows along with other variable in this model show positive relation with human development. The model resulted that increasing one unit of remittance result into increase human development index with index points of 0.008. The primary approach via which workers' remittances can affect domestic economic growth and development of the receiving country is by supporting domestic investment activity; others include reducing financial limitations.

We find did not find a significant connection between the remittance received and human development after re-estimating the model with two more independent demographical variables to study the impact of remittance on human development that is increasing remittance by one percent give insignificant value of human development with point's index of 0.005. Result shows the significantly negative relationship of population growth and human development, as increasing population by one unit lead to decrease in human development by 0.008 index points. It articulates that the countries with high population growth rates might struggle to provide adequate healthcare, education, resource constraint and other essential services to their growing populations. Malthus the theory also argues about negative relation of population growth to per capita income which trend to deteriorate human development index. A negative association of HDI and population growth is found on observing data of HDI from UNDP and population growth from World Bank. Urbanization in our regression show positive but insignificant results with dependent variable. Urbanization has both positive and negative effects on human development depending upon how it can manage and organize with innovations. The urbanization with value index of 0.001 and 0.002 in model 4 and 5 shows positive and insignificant relation with human development index.

A major factor influencing the results of human development is institutional performance. Effective institutions offer the framework for confronting socioeconomic issues, improving equality, and enhancing a society's general wellbeing. In the fifth model the estimation is carried out by including control of corruption. The regression result of fixed effect model shows significant positive impact of personal remittance received on human development index with index value of 0.008. The investigation for economies from different HDI groups shows that remittances have a positive impact on percentage changes in HDI (Irdam, 2012). Control of corruption also show significant and positive relation with HDI, Implying one index improvement in control on corruption result in improvement in human development index by 0.023 index points. Corruption results in inefficient economic and socio-political outcome. It negatively affects economic growth and foreign and domestic investment, enhance inflation, depreciate the currency, reduce expenditure on health and education and misallocate resources. Consequently, HDI drop there for the more control of corruption stronger will be the HDI. The model shows a substantial negative relationship between population increase and HDI, whereas all independent variables PREMS, LGDP, FDI, LFPR and CC indicates a positive

connection with HDI except the variable of urbanization, which is positive and insignificant.

Conclusion and Recommendations

The current study is based on a panel data set of South Asian economies over the period from 1996 to 2020. The impact of remittances on human development is empirically tested by employing standard panel estimation techniques that include the fixed or random effects model. Furthermore, the Hausman test is used to choose between the fixed or random effects model. The impact of remittances on human development is investigated by carrying out comprehensive empirical regressions. Five different versions of empirical regressions are estimated to trace the impact of remittances on human development by employing the fixed effects model. The empirical findings indicate a positive impact of remittance inflows on human development in the South Asian region. The effect of remittances on human development is positive in almost all versions of the empirical models, which implies that the importance of remittance inflows cannot be denied for human development and for improving the social and economic conditions of the region. The results further show that the control of corruption also has a significant and positive impact on human development; however, an increase in population adversely affects human development.

Due to its magnitude and significance, global policymakers are paying more and more attention to migration and remittances. Reducing the transaction cost of migrants' remittances to less than 3% and eliminating corridors charging more than 5% is one of the important Sustainable Development Goals of the United Nations to increase remittance inflows. The region experienced rapid growth in remittance inflows due to effective immigration policies, which enhance the standard of living and act as a major foreign exchange. Moreover, it is imperative to take concrete policy initiatives by governments, the private sector, and international development partners to protect migrant workers' rights and welfare so that maximum economic benefits can be availed.

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