DOI: 10.52131/pjhss.2024.v12i2.2256

Pakistan Journal of Humanities and Social Sciences

Volume 12, Number 02, 2024, Page 1480–1491
Journal Homepage:
https://journals.internationalrasd.org/index.php/pjhss

The Impact of Remittances and Official Development Assistance on Human Capital: An Evidence from Pakistan

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ARTICLE INFO

Article History:
Received: April 25, 2024
Revised: May 22, 2024
Accepted: May 24, 2024
Available Online: May 26, 2024

Keywords:
Pakistan
Human Capital Development
Remittances
Official Development Assistance
HDI

Funding:
This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

Emerging nations have taken benefits from foreign capital inflows for increasing the amount of human capital, ultimately contributing to both economic development and growth. This research work evaluates the influence of foreign inflow of money and assistance from foreign countries on the lives of people in Pakistan. The study utilizes the post-facto design has and analyzed a sample of 32 years of secondary data ranging from 1990 to 2021, extracted from different data banks. The human capital is taken as a response variable. On the other hand, explanatory variables include official development assistance and remittance. Urban population and financial development are taken as control variables. The outcomes provide evidence that remittances, financial development and urban population provides a favorable and significant influence on the enhancement of human capital, while official development assistance provides no effect for the development of human capital in Pakistan. These findings establish a broader picture of this relationship and are in line with the related theories of economics. Furthermore, efforts should be made to provide policymakers with an understanding of critical factors which link foreign financial support, money transfers, growth in the economy, and improved human development.

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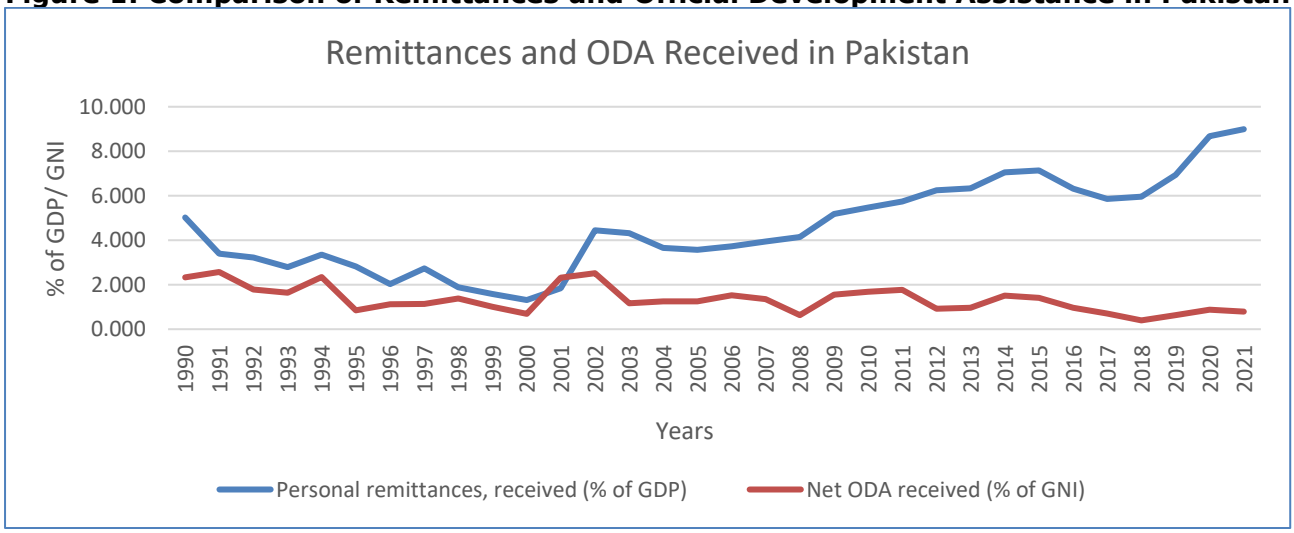
1. Introduction

A variety of elements influence an economic well-being society and standard of living. However, some of the most important elements are unique to a specific group. Human capital corresponds to the individuals' expertise, capacity and ability to use the country's resources effectively. Alternatively, human capital development is to create a knowledgeable, experienced and trained workforce for the expansion and growth of the economy of a nation (Anaduaka, 2014). As per the theory of Lucas (1988) and Romer (1990), developing a workforce is critical to economic success. According to defenders who support the Human Capital Theory, a country's socioeconomic progress is dependent on continual investments in its population's health and educational attainment (Abro, Ul Mustafa, Ali, & Nayyar, 2021; Affandi, Anugrah, & Bary, 2019; Schultz, 1961). Upon cessation of the 20th century, the United Nations (UN) actively promoted the idea of the evolution of human capital, the basic objective is to extend each person's opportunity to achieve their fullest potential and goals and to live an active, full-fledged productive lifestyle (UNDP, 2018). The post-2015 worldview changed the initiatives for development and centred the focus on Sustainable Development. Leaders around the globe have committed to carrying out the new worldwide development plan, "Transforming our World: The 2030 Agenda for Sustainable Development," and was launched during general assembly in the United Nations (UN) on 25th September 2015. As part of the 2030 Agenda, all Members of UNO gathered at the same pace of 17 Sustainable Development Goals (SDGs) (Perveen & Khan, 2021). According to an approach that investigates the connections between

well-being and sustainable development, there has been a significant association between the core intentions of the the "determinants of well-being" and the sustainable development goals (SDGs) (De Neve & Sachs, 2020). The economy's inclination to boost the accumulation of capital and ultimately support a country's long-term well-being is when the gap between savings and investments closes (Oloke, Olabisi, Johnson, Awofala, & Aderemi, 2022). Official development aid, foreign direct investment and remittances are considered as three important and primary elements of foreign capital inflows (Abro et al., 2021; Musibau, Yusuf, & Gold, 2019). Studies prove that the migrant's family is often more financially prosperous as compared to the homes with no family member working overseas (Imran, Cheok, & Devadason, 2018; Kamalu, Wan Ibrahim, Ahmad, & Mustapha, 2019). The World Bank identified many characteristics as predictors of the tendency to invest remittances, including family poverty, accessible possibilities, and sender-conditioned transfers. Remittances are critical to developing nations' long-term growth (Musibau, Yusuf, & Gold, 2019; Welde, Emovwodo, Saud, & Wardhani, 2022). It is not possible to overstate the importance of international remittances as a form of outside financial assistance for middle- and low-income nations (Bank.wb, 2020).

During the past twenty years, the sheer amount of funds sent by overseas migrants to the countries considered poor nations has outpaced the amount of foreign aid which in a broader sense is called official development assistance (ODA). The sponsor economies offer ODA to underdeveloped countries to help them enhance their financial stability and standard of living. The funds in the form of ODA may be sent straight from the donor to an eventual beneficiary or it may go through an international body (Awan & Abro, 2021; Zardoub, 2023). ODA refers to subsidies or debts provided by a particular nation or multilateral body to a nation that is developing to foster economic growth and social welfare (Girma, 2015; Hussain, Maitlo, Raza-ul-Mustafa, & Mujahid, 2022). Development Assistance Committee (DAC) is an international body which provides developing nations with financial support so they can build their human capital and infrastructure (OECD, 2021). The focus of the official development aid is to encourage the supply of affordable services and goods in developing and least developed nations. As a result, help to emerging economies is customized to promote growth in the economy, decrease poverty, and upgrade the standard of living (Githaiga & Kilong'i, 2023). Pakistan is ranked 27 in the World for largest economy concerning buying power and ranked 45th largest in absolute monetary terms. The financial system of Pakistan is full of diverse faces. Based on a Pakistani economic assessment, foreign debt constitutes the majority of overall foreign capital inflows, whereas foreign aid provides for an insignificant proportion (Javaid, 2017). The following graph provides a visual history of the status of remittances and official development assistance in Pakistan.

Figure 1: Comparison of Remittances and Official Development Assistance in Pakistan



Depending on the enormous number of abroad migrants with an ongoing trend of worker migration, remittances into Pakistan totaled $ 22.5 billion for 2019, accounting for nearly 7.9% of the GDP of the nation. The amount achieved stood as the eighth highest around the globe (Oda, 2023). In 2022, Pakistan received $29 billion in form inward remittances which was 7.38% less than the amount received in 2021, part of the total $794 billion sent worldwide

(KNOMAD, 2022). Alongside the remittances, Pakistan has also been a significant receiver of development funding for many decades. For instance, during the years 2010 and 2017, Pakistan became the 5th greatest receiver of ODA, accounting for 2% of the overall net ODA beneficiaries (OECD, 2019). Following the United Nations (UN) assessment of Pakistan in 2014, the biggest contributors include the United States of America (USA), Japan, Australia, the European Union (EU), the United Kingdom (UK), Canada, Switzerland, the Asian Development Bank (ADB) and the World Bank (Javed & Amir-ud-Din, 2021). Pakistan is one of those developing nations that have been facing economic and political instability since its independence. Among the several development factors, inward remittance and official development assistance stand out as important economic figures for Pakistan with their direct influence on the growth of the economy and human capital development. But after visualizing the trend of available information about remittances and ODA during the past few years; it can easily be observed that there is instability in remittances while the ODA is found to be decreasing continuously, due to some internal and external affairs. Backing with these factors, it is decided to build the pillars of this research to concrete the evidence on the relationship of inward remittance and official development assistance with human capital development in the case of Pakistan. Furthermore, this study can provide economists and policymakers with a broader spectrum of the importance of these demographic and economic indicators and support them in creating policies which support human development opportunities in Pakistan.

2. Theoretical Framework of the Research

The article's theoretical foundation is built on the demographic transition theory proposed by Warren Thompson in 1929 and human capital theory which was initiated by Gary Becker in 1962. The economic growth is generally stimulated by human capital. The nations that are striving with challenges like human capital development, gender inequality and poverty, specifically in the areas of health and education are imperative for economic prosperity. Warren Thompson in 1929 made an important contribution to the creation of the starting version of demographic transition theory by proposing that modernization promotes a drop in fertility to facilitate economic progress. It was concluded that high per capita incomes and thriving human capital can be achieved by reducing fertility which assists the country's progress from stagnant growth to modern economies in terms of population growth. Furthermore, he expanded the theory and emphasize the important relationship of human capital with demographic evolution (Becker, 1992).

2.1. Empirical Framework of the Research

In some Asian countries, the influence of financial development, foreign aid, and remittances, on human development was investigated by Gillani (2023). They employed a random effect technique. The findings of this study demonstrate how increasing foreign aid and remittances have improved human development with living standards in the Asian economies. Furthermore, the study emphasizes that the role of financial prosperity is to support both human accumulation and urbanization. Emara and Mohamed (2023) have taken Egypt into account to identify the relation between human development and global economic fluctuations as an open developing economy from 1990 to 2015 taking four channels which are; official development aid, foreign direct investment (FDI), earnings from exports and remittances. Variance decompositions and the impulse response functions were examined by applying a vector auto-regressive method. Results provide evidence that the most efficient transmission routes in long run are export profits while foreign direct investment are in the short run. Bibi and Ali (2021) took panel data from 100 underdeveloped nations for the year 2014 for identifying the influence of remittances over human capital 4development. Findings indicate that trade possess an adverse and insignificant influence over development of human capital while gender inequality has an adverse and significant influence. Human development is positively impacted by effective government, the rule of law and internet users (per 100 people) while negatively by remittances and poor regulatory quality.

Mohammed (2022) used the data since 2004 till 2018 for investigating the relation among institutions, development of human capital and remittances in SSA region (Sub-Saharan Africa). System Generalized Method of Moments (Sys-GMM) technique was employed in the investigation. According to the estimates, remittances encourage human development in nations with underdeveloped institutional frameworks. The results also show that in nations with developed systems, remittances taken as a main junction of capital for human

development bear a lower marginal significance.Kamalu, Binti Wan Ibrahim, and Umar Ahmad (2022) have taken the data of the members of the Organization of Islamic Cooperation (OIC) since the years 1990 till 2018 and investigated the impact of the inflow of remittance on human development. Remittance inflows improve human growth, according to the short-run and as well as long-run estimates using Cross-Sectional Autoregressive Distributive Lags (CS-ARDL) and Dynamic Common Correlated Effects (DCCE) approaches. As a result, the research finalized that the inflow of remittances certainly boosts the human capital progress in the case of OIC member countries. Huay, Winterton, Bani, and Matemilola (2019) used panel data from 1980 to 2014 for checking the relation of human development and remittances in poor nations. The research employed dynamic panel estimates built over the System Generalized Method of Moment (Sys-GMM). Holding other variables equal, an upsurge of the flow of remittances was correlated with the advances in growth and development in human capital. Frank and Garry (2015) assessed the influence of foreign funding transfers on Nigeria's human resources expansion. The OLS findings were employed in the data assessment for the research. Results indicated that the foreign funds produced a significant and favorable influence on the development of Nigeria's human resources throughout the research time frame.

Ångman and Larsson (2014) used yearly panel information from 99 nations with limited resources to examine remittances and progress. The ordinary least squares (OLS), random effect framework and fixed effect model were used to estimate this association. The information set included the annual panel from 2005 to 2012. The findings show a link between the degree of development of human capital and remittances within the poor nations. Hassan, Mehmood, and Shahid Hassan (2013) examine the consequences of worker remittances over the growth of human capital in Pakistan considering the thirty years data since 1981 to 2011, employing the Autoregressive Distributed Lag (ARDL) technique. The outcomes provide evidence that worker's remittances influence the human capital adversely. Worker remittances' good impact in the form of income inflows is made ineffective due to the negative effect of parental negligence, and human capital is performing poorly rather than developing.

3. Methodology

This study analyzes the post-facto, secondary data using a sample size of 32 years, from 1990 to 2021 and is extracted from different sources which include; the World Bank (World Development Indicator), Global Data Lab, Trading Economics, Asian Development Bank (ADB) and United Nations Development Program (UNDP).

3.1. Data Description

Human development index (HDI) is taken as a response variable which is the combination of three important demographic factors: living standard, health and education and assessed by GNI per capita, and is the proxy for human capital development. Explanatory variables consist of two indicators which are net official development assistance received (% of GNI) and remittances received (% of GDP). In addition, financial development and urban population are taken as control variables. Advances to deposit ratio (in percentage) is the proxy for financial development.

3.2. Econometric Model

According to the chosen factors in this research, the generalized form of the model is;

$$HCD_i = f(REM_i, ODA_i, FID_i, URP_i)$$

The econometric form of the model will be defined as;

$$HCD_i = \beta_0 + \beta_1 REM_i + \beta_2 ODA_i + \beta_3 FID_i + \beta_4 URP_i + \varepsilon_i$$

Here, the natural log is applied to the above model. The natural log can be used in statistics to attain constant variance or to make slightly skewed information more regularly distributed (normal). Furthermore, coefficients on the natural-log scale can be simply interpreted as approximately corresponding differences, for example in percentage change or unit change.

$$lnHCD_i = \ln(\beta_0 + \beta_1 REM_i + \beta_2 ODA_i + \beta_3 FID_i + \beta_4 URP_i + \varepsilon_i)$$
$$lnHCD_i = \beta_0 + \beta_1\, lnREM_i + \beta_2\, lnODA_i + \beta_3\, lnFID_i + \beta_4\, lnURP_i + \varepsilon_i$$

Now, substituting the response and explanatory proxies to the above equation;

$$lnHDI_i = \beta_0 + \beta_1\, lnREM_i + \beta_2\, lnODA_i + \beta_3\, lnADR_i + \beta_4\, lnURP_i + \varepsilon_i$$

Where HDI shows the human development index. REM implies remittances and ODA stands for official development assistance. ADR shows the advances to deposit ratio, and URP shows the urban population. The subscript *i* shows that the data follows a time series pattern.

3.3. Estimation Techniques

The Autoregressive Distributed Lag (ARDL) framework is especially beneficial when the data sets have varied integration order, i.e., some are I(0), while others are I(1). Furthermore, the coefficients for both short-run and long-run may be reliably computed in a single step. Pesaran and Shin (1995) pioneered the autoregressive distributed lag (ARDL) technique, and Pesaran, Shin, and Smith (2001) continued to refine it. Generalized form for the ARDL equation is;

$$Y_t = \alpha_* + \sum_{j=1}^{p} \gamma_{j*} Y_{t-j} + \sum_{j=0}^{q} \beta_{j*} X_{t-j} + \mu_t$$

This is calculated through the application of the distributed lag formulation to an integrated time series. Pesaran and Shin refer to the above equation as an ARDL (p, q) mechanism (Cho, Greenwood-Nimmo, & Shin, 2023).

4. Results And Discussion

As per the requirement of this research and the nature of the data, the following statistical and econometric techniques were employed for the analysis and interpretation.

4.1. Descriptive Facts

Table 1 provides the detailed summary of descriptive statistics which indicate that the mean and variance of our chosen factors, their standard deviation, which describes the extent to which the information has been dispersed, the factors' lowest and highest values, and the overall form of the distribution.

Table 1: Descriptive Statistics

	LNHDI	LNREM	LNODA	LNADR	LNURP
Mean	-0.74406	1.328981	0.087571	4.108875	3.526326
Median	-0.71646	1.253985	0.027124	4.147581	3.528794
Maximum	-0.60514	2.195486	0.944341	4.600454	3.62274
Minimum	-0.91629	0.077486	-0.92764	3.707033	3.420215
St. Dev.	0.107151	0.514885	0.464039	0.238824	0.058972
Skewness	-0.18084	-0.44018	-0.00462	-0.02625	-0.13065
Kurtosis	1.559707	2.713523	2.400804	2.071802	1.916211
Jarque-Bera	2.940345	1.142817	0.478829	1.15241	1.65717
Probability	0.229886	0.56473	0.787089	0.562027	0.436667
Sum	-23.8098	42.52741	2.802268	131.484	112.8424
Sum Sq. Dev.	0.355923	8.218301	6.67531	1.768149	0.10781
Observations	32	32	32	32	32

Author's Estimates

By observing the values of Table 1, it is found that most of the estimates provide sufficient evidence that the data sets follow normal distribution.

4.2. Stationarity Test – Data (Time Series) Diagnostic

The most common tests used in the research are ADF, PP and KPSS.

Table 2 and Table 3 provide the detailed stationarity status of all selected variables of this research. Results of ADF and PP test shows that the data sets are stationary at level I(0) or first difference I(1) except for urban population (URP) which is not stationary through the ADF-test but stationary at level through the PP-test. Therefore, the KPSS test was used to validate

the stationarity of the urban population (URP). Table 4 provides a brief outcome the KPSS test which verifies that all selected variables have an integration of a combination of level or first difference. Therefore, Auto Regressive Distributed Lag Model (ARDL) will be employed in this scenario (Pesaran, Shin, & Smith, 2001).

Table 2: Results of Augmented Dickey-Fuller (ADF) Test

	Level		1st Difference		Level of	Order
	t stats	p value	t stats	p value	Significance	
lnHDI	-1.340398	0.5975	-2.636034	0.0972	10%	I (1)
lnREM	-0.853331	0.7893	-4.379329	0.0018	1%	I (1)
lnODA	-4.872057	0.0025	-	-	1%	I (0)
lnADR	-2.552437	0.3028	-4.932041	0.0022	1%	I (I)
lnURP	-2.788082	0.2122	-1.867757	0.3420	-	-

Author's Estimates

Table 3: Results of the Phillips-Peron (PP) Test

	Level		1st Difference		Level of	Order
	t stats	p value	t stats	p value	Significance	
lnHDI	-0.641921	0.9689	-2.659003	0.0929	10%	I (1)
lnREM	-0.872305	0.7835	-5.395074	0.0001	1%	I (1)
lnODA	-5.266208	0.0009	-		1%	I (0)
lnADR	-2.638068	0.2673	-4.879162	0.0025	1%	I (1)
lnURP	-3.705405	0.0370	-	-	5%	I (0)

Author's Estimates

Table 4: Kwiatkowski Phillips Schmidt Shin (KPSS) Test

		t-stats	1%	5%	10%
lnHDI	Level	0.136475	0.216000	0.146000	0.119000
	1st Difference	0.124058	0.216000	0.146000	0.119000
lnREM	Level	0.529633	0.739000	0.463000	0.347000
	1st Difference	0.342313	0.739000	0.463000	0.347000
lnODA	Level	0.100313	0.216000	0.146000	0.119000
	1st Difference	0.203381	0.216000	0.146000	0.119000
lnADR	Level	0.063683	0.216000	0.146000	0.119000
	1st Difference	0.068168	0.216000	0.146000	0.119000
lnURP	Level	0.754745	0.739000	0.463000	0.347000
	1st Difference	0.406337	0.739000	0.463000	0.347000

Author's Estimates

4.3. The Auto Regressive Distributed Lag (ARDL) Model

The autoregressive distributed lag (ARDL) technique make use of ordinary least square (OLS) and could be utilized in mixed-order and non-stationary time series analysis. The framework employs appropriate lag/delays for explaining the data creation procedure in a general to particular modelling approach (Shrestha & Bhatta, 2018).

4.4. Optimal Lag Length Selection

Here Vector Autoregression (VAR) model has been employed to find appropriate lag selection.

Table 5: VAR Results

Lag	Log L	LR	FPE	AIC	SC	HQ
0	131.3485	NA	8.28e-11	-9.024892	-8.786999	-8.952166
1	325.3929	304.9270	4.89e-16	-21.09949	-19.67213	-20.66314
2	374.1218	59.17080	1.08e-16	-22.79441	-20.17758	-21.99442
3	430.4924	48.31767	2.02e-17	-25.03517	-21.22887	-23.87155
4	520.7793	45.14342*	8.09e-19*	-29.69852*	-24.70275*	-28.17126*

Author's Estimates

Table 5 explains the best option for lag length selection. Following FPE, LR, HQ, SC, and AIC the acceptable lag is 4. The lowest value indicates that the model will always be excellent.

4.5. ARDL Bound Test

Pesaran et al. (2001) developed a cointegration approach to identify the long run association among the factors which is known as the ARDL bounds testing.

Table 6: F-Bound Test

Statistic	Values	Significance	I(0)	I(1)
F statistic	9.505696	10%	2.2	3.09
k	4	5%	2.56	3.49
		2.5%	2.88	3.87
		1%	3.29	4.37

Author's Estimates

Table 6 explains about the value of F-calculative which is over the upper threshold of 5%. This scenario indicates that there is long run relation among factors and co-integration exists.

4.6. ARDL Regression Results

ARDL results obtained in the selected model provide the values of R-squared 0.999485 and adjusted R-squared 0.998931, which interprets goodness of fit condition for this model with minimum error sum of square. Standard error (SE) which is a minimum value of 0.003092 for this regression also verifies that the model is stable. Durbin-Watson stat provides the existence of auto-correlation in the selected variables. The value of this test falls between 0 and 4 and the considerable scale is from 1.5 till 2.5. Here the value is 2.298399 which lies at the boundary of the acceptable limit. As a result, the Breusch Godfrey Serial Correlation (LM) analysis shall be employed as a tool for diagnosis to determine the presence of autocorrelation.

4.7. Coefficient Diagnostic – Short Run (Error Correction) Form

The table below describes the short run connection among the selected variables, along with the speed of adjustment.

Table 7: Short Run Coefficient Results

Var.	Coeff.	Std. Er.	t Stat	Probability
D(LNHDI(-1))	0.313087	0.094435	3.315381	0.0056
D(LNHDI(-2))	0.575692	0.105544	5.454521	0.0001
D(LNHDI(-3))	0.551937	0.126925	4.348533	0.0008
D(LNREM)	0.000503	0.002712	0.185400	0.8558
D(LNREM(-1))	-0.011095	0.002902	-3.823693	0.0021
D(LNODA)	0.006687	0.001274	5.248673	0.0002
D(LNADR100)	-0.006545	0.006438	-1.016694	0.3278
D(LNURP)	-0.363127	1.840292	-0.197320	0.8466
D(LNURP(-1))	-10.91287	2.478311	-4.403350	0.0007
CointEq(-1)*	-0.614035	0.069097	-8.886529	0.0000

Author's Estimates

Table 7 provides the short-run findings which confirm that the dependent variable; the human development index (HDI) is significant for short run with three lags. The explanatory variables remittances (REM) and urban population (URP) are significant at the first lag, while official development assistance (ODA) is significant at the first lag. The coefficient of error term which is also called the speed of adjustment found out to be -0.614035 which shows the model will adjust monotonically. In this case, the value is -0.614035 which is an average value as per the described limit.

4.8. Coefficient Diagnostic - Long Run Form

The following findings give a detailed examination of the data concerning the long-term relationship among both independent and dependent variables.

Table 8: Long Run Coefficient Result

Var.	Coeff.	Std. Er.	t Stat	Probability
LNREM	0.046076	0.004844	9.511351	0.0000
LNODA	0.006367	0.006307	1.009506	0.3312
LNADR	0.024645	0.012112	2.034799	0.0628
LNURP	1.403028	0.110872	12.65443	0.0000
C	-5.740085	0.443203	-12.95136	0.0000

Author's Estimates

$$lnHDI = -5.740085 + 0.046076lnREM + 0.006367lnODA + 0.024645\ lnADR + 1.403028\ lnURP$$

The results of Table 8 confirm that remittances (REM), advances to deposit ratio (ADR) and urban population (URP) are significantly and positively affecting the human development index (HDI). While official development assistance (ODA) shows no influence over response variable; the human development index in the long run.

4.9. Diagnostic Test – Error Diagnostic

The Breusch-Godfrey Serial Correlation (LM) Test was performed for determining the existence of serial correlation. Similarly, the Breusch-Pagan-Godfrey (BPG) test is employed to determine heteroscedasticity in the data set and to check the specification error in the selected model, the Ramsey RESET test is used.

Table 9: (BG) Serial Correlation LM test, Heteroskedasticity BPG test and Ramsey Test

Diagnostic Tests	Values
BG Serial Correlation LM test	4.708273 (0.095)
Heteroskedasticity BPG test	9.597917 (0.791)
Ramsey RESET test	0.772331 (0.3968)

Author's Estimates

The observed R-squared has a probability value of 0.0950 in the Breusch-Godfrey Serial Correlation LM Test, indicating that autocorrelation is not present, however, at 10%, the null hypothesis of no serial correlation may not be rejected. Therefore, the HAC (heteroskedasticity-and-autocorrelation-consistent) test was employed to rectify the problem of a serial correlation inside the error term in the regression (Hansen, 2017). The probability of observed R-squared in Breusch-Pagan-Godfrey is 0.7910, which is higher than 0.05. It provides evidence that there is no problem with heteroskedasticity. Table 9 also provides the probability values greater than 0.05 which proves that there is no specification error exists in the selected model.

4.10. Stability Test

The cumulative-sum identifies the structured shifts in the regression of coefficients; however, the cumulative-sum of squares checks unanticipated changes determined by reliability of coefficient of regression.

Figure 2*:* Model Stability (CUSUM)

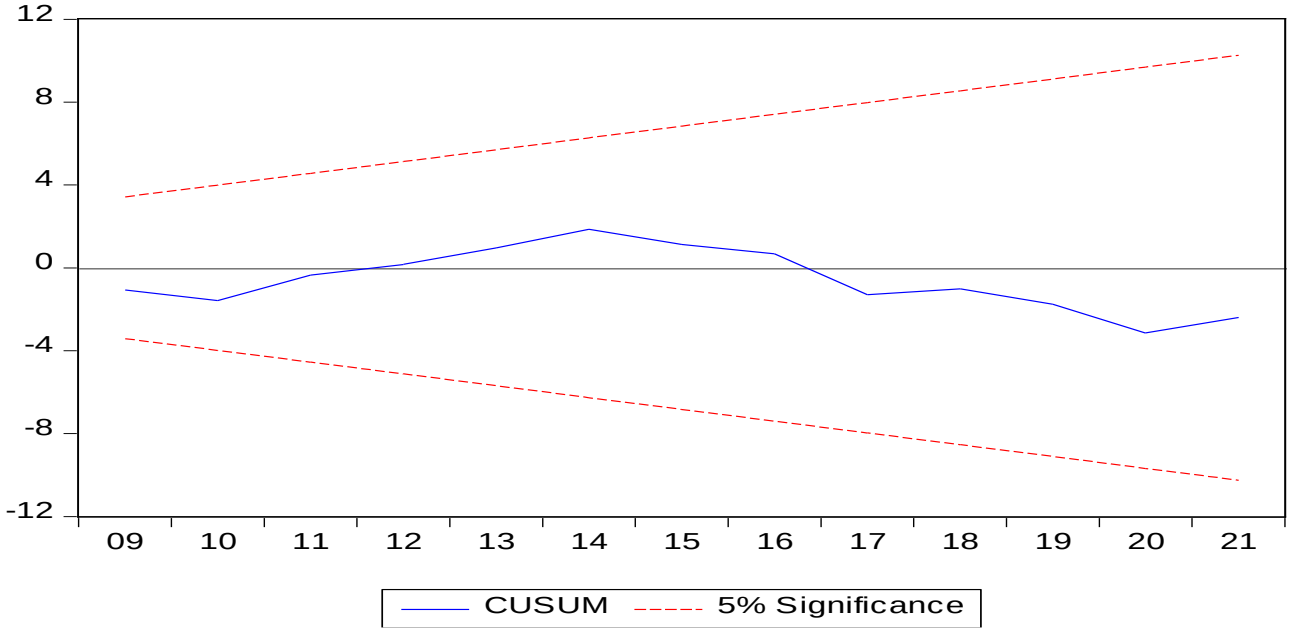


Figure 3: Model Stability (CUSUM of squares)

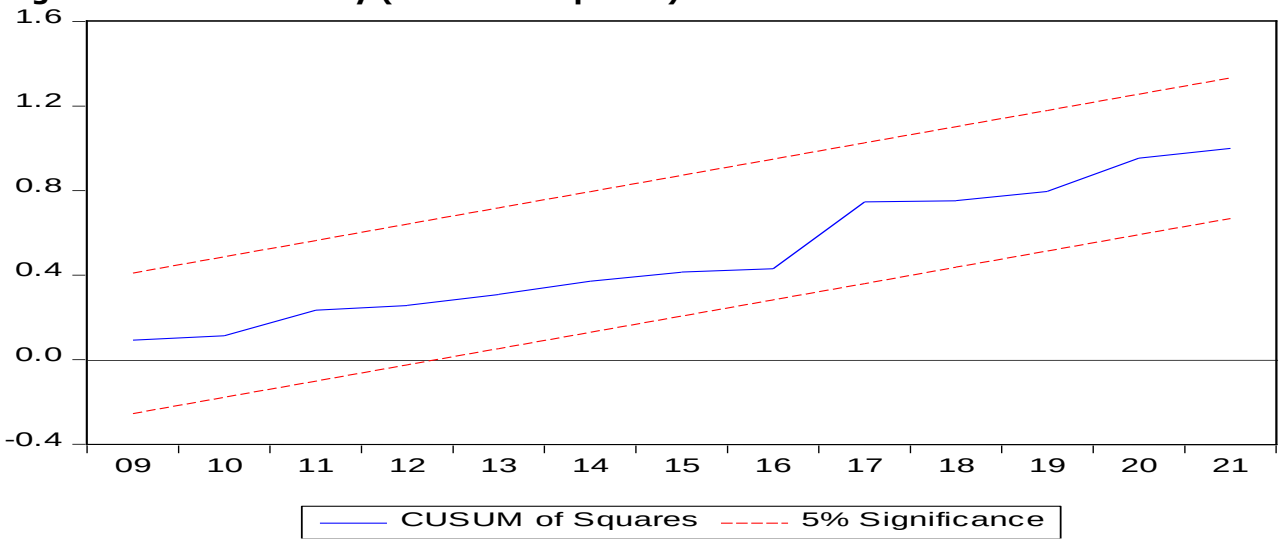


Figure 2 and Figure 3 demonstrates the outcomes for CUSUM and CUSUMSQ tests respectively. The findings show evidence about the stability of coefficients since the visualizations in the CUSUM and CUSUMSQ are well within the crucial regions of the confidence intervals at 5% for the stability of parameters. As a result, the approach is functionally strong and suitable for the development of economic policy.

5. Conclusion & Implications

The outcomes put forward that remittances have a favorable and notable impact over the improvement of human capital in Pakistan. In summary, remittances are critical to supporting human development in Pakistan because they enable households to live decently as well as offer other essentials for daily life that include health and schooling, all of which are considered as an important aspect of human development. Results of the present research disproved the idea that ODA has a favorable and substantial influence on HDI. This analysis concludes that ODA in Pakistan has no impact on HDI. Consequently, this work adds to the contradicting evidence suggesting ODA does not affect HDI. Several variables may lead to ODA's modest beneficial influence. Corruption, war, poor institutions, a lack of technical capacity, and other factors may be major contributors. Corruption is predicted to be the most significant barrier to Pakistan's progress. Corruption is both an indication and an outcome of institutional deficiencies, and it has a significant detrimental influence on the growth of economy and human development. For the betterment of the movement of remittances, governments ought to implement measures that encourage equally trained and untrained migrants to send remittances. Nevertheless, regulations encouraging the movement of skilled-workers from one country to another are critical to increasing the volume of remittances collected in the sending nation. To boost human development, government authorities must minimize the cost of expats transferring money home. Officials may create and implement initiatives for development that employ remittances to boost progress in society and the economy, ensuring that the benefits are maximized and dispersed more equally. Pakistan could make tremendous headway toward long-term prosperity and improving the well-being of its inhabitants by effectively using remittances. To make ODA beneficial to Pakistan's human capital development, targeted spending in education, health, and vocational education must be emphasized. This includes building infrastructure, improving service and availability, supporting governance and policy reforms, and collaborating with local governments and associations. Pakistan may greatly increase its human capital by strategically distributing ODA to these specific industries, encouraging long term economic development and prosperity. It is recommended that solid economic policies be geared at increasing foreign capital accumulation and human capital development, particularly remittances and ODA, which have a favorable influence on Pakistan’s economic growth.

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