



## **EFFECTS OF DIASPORA REMITTANCES ON PER CAPITA GDP GROWTH IN KENYA**

**Kogei, Japheth Kipkemboi**

Department of Accounting and Finance, Moi University

P.O. Box 3900-30100, Eldoret, Kenya

kogei@mu.ac.ke

### **Abstract**

*Remittance is one of the major sources of development capital especially for the developing countries. This study seeks to establish the relationship between remittance and per capita GDP growth in Kenya. This study uses time series data from 2010-2019. The data is analyzed using Pearson's correlation coefficient and three multiple regression models. The findings show a significantly positive relationship between remittance and per capita GDP growth in Kenya. Besides, the rate of inflation, interest rate, exchange rate and trade openness have an adverse effect on per capita GDP growth. Thus, this study recommends that Kenya should find strategies that would encourage and formalize remittances flow that would be an important agent socio-economic development of the country*

*Keywords: Remittances, Per Capita GDP, Growth, Kenya*

### **INTRODUCTION**

With increased globalization and unprecedented international migrations, the role of migrants' remittances as a source of external developmental finance to emerging and developing countries cannot be overemphasized. According to Ramcharran (2020), migrant remittances are the sum of workers' remittances, compensation of employees, and migrants' transfers. While, International Monetary Fund (IMF) in the Balance of Payments Manual, 6th edition (IMF 2010), defines worker's remittances as the current private transfers from migrant workers who are considered residents of the host country to recipients in the workers' country of

origin. Given the surge in the flows of remittances worldwide (IMF 2005; World Bank 2005; Ratha 2007), especially in the developing countries where it is estimated that diaspora remittances are twice the size of the official development assistance (ODA) and as enormous as foreign direct investment (FDI), it is increasingly becoming important to examine the development impacts of remittances in those economies, specifically on per capita GDP growth. Potentially remittances inflows can have strong development impacts in the economy. Besides, empirical studies have revealed that remittances are even more important to developing countries since these capital flows are more stable and interest insensitive, thus providing a crucial social insurance to many countries facing both economic and political crises (Barajas, Chami, Ebeke, & Oeking, 2018; De, Islamaj, Kose, & Reza Yousefi, 2019; Kapur, 2005). Remittances are now close to triple the value of the foreign aid provided to low-income countries and comprise the second-largest source of external funding for developing countries after foreign direct investment (FDI) ( GCIM, 2005). Though remittances are private financial resources for recipient families, these capital flows cannot be considered as being secondary to foreign direct investment, official development assistance, debt relief or other public sources of finance development, inferring that external finances are complementary (Unceta, Gutierrez, & Amiano, 2010).

Migrants' decision to remit is usually driven by self-motive, altruism as well as the prevailing economic conditions both at the home and host country (Azizi, 2017; Guetat & Sridi, 2017; Bunduchi, Vasile, Comes, & Stefan, 2019). Similarly, the benefits of diaspora remittances are two folds; at the microeconomic level and the macroeconomic level. First, studies have shown that remittances influence the recipient's household consumption, educational attainment and investment (Mondal, & Khanam, 2018; Pickbourn, 2016; Thapa & Acharya, 2017). Second, extant literature has shown that diaspora remittances affect various microeconomic dimensions; financial sector development, inflation, interest rate, exchange rate and level of employment (Akçay, 2019; Fuentes & Herrera, 2018; Abdul-Mumuni & Quaidoo, 2016). Moreover, there is a line of literature that claims that remittances improve income distribution and quality of life beyond what other available development approaches could deliver, especially if the poor, unskilled labor emigrated, thus a vital in poverty eradication (Karunaratne, & Dassanayake, 2018; Kumar, 2019; Azam, Haseeb, & Samsudin, 2016). Most studies, focusing on how recipient households spend these cash flows, suggest that diaspora remittances are usually allocated to current consumption, healthcare and education, which implies that emigrant households enjoy a comparatively higher standard of living compared to non-emigrant households (Pickbourn, 2016; Thapa & Acharya, 2017). Since the bulk of remittances are channeled through unofficial means, and the spending patterns of the household is largely

undocumented, the importance of remittances can only be evaluated at the macro level; the effect of these external capital flows on the recipient country economic development as measured by the per capita GDP growth. The remittances- per capita GDP growth has elicited a lot of interest among researchers, which has been exacerbated by the increased cross- border trade and the free movement of people and technologies across national frontiers. One strand of research claims that diaspora remittances have positive growth effects on recipient economies (Fayissa & Nsiah, 2010). While, other scholars highlight the negative growth effects of remittances (Karagoz, 2009). The latter argue that remittances do not result in positive economic growth since the two variables are negatively correlated. Some scholars claim that remittances have no impact on the economic growth of recipient countries (Rao & Hassan, 2011). Therefore, this study seeks to establish the impact of remittances on per capita GDP growth in an emerging economy, using Kenya as a case study.

## LITERATURE REVIEW

The growing volume of diaspora remittances that have crowded-out the impact of foreign direct investment, particularly in developing countries, has attracted a lot of attention among researchers and policymakers (Eggho, Bangake & Semedo, 2019). Some developing countries consider remittance as a substitute for external debt (Batool & Zulfiqar, 2012). Moreover, studies have shown that remittances are substitutes for under-developed financial markets, thus helping developing countries lessen credit restraint thus positively impact investments and economic growth (Bettin & Zazzaro, 2012). Remittances flow has a huge impact both on emigrants' household and the receiving country's per capita GDP growth (Giuliano *et al.*, 2009). At the micro-level, studies have shown that remittances have a significant impact on health care, education and the level of poverty of the emigrant families relative to non-migrants' families (Ratha, 2013; Uzochukwu and Chukwunonso, 2014). Additionally, remittance flows through formal channels provide opportunities for encouraging savings, increasing deposits, and deepening financial inclusion (Al-Tarawneh, 2016; Meyer and Shera, 2016). On the dark-side, migrations to foreign countries causes a shortage of labor and brain drain to the migrants' home country besides creating an over-reliance on remittances as the sole source of income for the immigrant family, which may adversely affect the level of investments and capital accumulation (Guha, 2013).

Remittance inflows into Sub-Saharan Africa are not only from developed countries. It is estimated that about 20% of Sub-Saharan African migrants are within the region and also remit regularly (Chami., Barajas, Garg & Fullenkamp, (2010). According to the World Bank estimates of 2018, Kenya is one of the top five highest remittance recipient countries in Africa, after Egypt,

Nigeria, Morocco and Ghana (World Bank, 2019). Remittances flowing to Kenya have steadily grown at an average annual rate of 15.8% in the last decade; increasing from US\$934 million in 2011 to an estimated US\$2.7 billion in 2018, which translates to about 3.0% of the country's Gross Domestic Product (GDP). The monetary value of remittance flowing to Kenya might be higher considering that remittances are usually channeled through unofficial means in the form of cash and noncash items such as clothes, jewelry just to mention a few. The bulk of these remittances originate from the United States (47%), Asia (15%) and the United Kingdom (11%), while the rest of the world shares the reminder (Misati, Kamau & Nassir, 2019). Similarly, approximately three million Kenyans constituting around 7.0% of the total population live abroad (Gichuki, Mwaniki & Ogolla, 2019). Given, the aforementioned figure, the debate on the remittance-per capita GDP growth is of importance to policymakers.

Extant literature demonstrates inconsistent and conflicting findings on the remittances and per capita GDP growth causality. Hassan and Shakur (2017), using panel data of the period 1976-2012, examined the impact of inward remittances flows on per capita gross domestic product (GDP) growth in Bangladesh. The authors found that the growth effect of remittances was negative at first but became positive at a later stage, inferring a non-linear relationship. The findings pointed at an unproductive use of remittances when the migrant families first received these cash transfers, however, at a later stage social and economic investments stimulated productive utilization of remittances. Using a cross-section of 60 emerging and developing economies, data of the period 1980–2003 and Instrumental variable estimation, Bugamelli and Paterno (2009), explored the effect of workers' remittances on output growth volatility (per capita GDP growth). The findings of this study indicated that remittances were negatively correlated to output growth volatility, inferring that remittances lessen output growth volatility due to their size, stability and low procyclicality.

Catrinescu, Leon-Ledesma, Piracha & Quillin (2009), sought to examine the remittances-economic growth link (per capita GDP growth, the study used a sample of twelve countries and panel dataset over 1970-2003. The study found that migrants' remittances had a weak positive effect on long-term macroeconomic growth. The authors concluded that in the long-run remittances may have a developmental impact of the receiving country's work toward sound economic policies and institutions. From the same perspective, Eggoh, Bangake & Semedo, (2019) investigated whether international remittance transfers spurred economic growth (measured as per capita GDP growth). The authors used panel data for a sample of 49 developing countries during the period 2001-2013. Panel Smooth Transition Regression (PSTR) and the system generalized methods of the moment were used to estimate the relationship. The findings of this study indicated that remittances had a positive and significant effect on economic

growth. Further, the study found that foreign aid and foreign direct investments had no significant effect on economic growth.

Abdih, Chami Dagher & Montiel (2012) noted that remittances have a negative impact on the receiving country's economic growth. The study centered on 111 and panel data for the period 1990- 2000. The authors argued that an increase in migrants' remittance inflows can lead to deterioration of institutional quality. Further, the study claims that remittances act as a buffer between the government and its citizens, create a moral hazard problem; these cash receipts allows the migrant households to purchase the public good rather than tasking the government to provide those public goods, which reduces the household's incentive to hold the government accountable. Thus, the government free rides and allocates more resources for its purposes, instead of channeling these resources to the provision of public goods and services.

The association between worker remittances and economic growth in a small country with volatile macroeconomic conditions in Jordan. Previous research determines three main channels through which the impact of remittances can be transmitted: labor supply, capital accumulation and investment, and productivity. The historical behavior of these variables from 1976 to 2016 is analyzed and discussed in the context of the Jordanian economic structure. The Autoregressive Distributed Lag (ARDL) model that allows economic growth (measured by growth in per capita GDP) and financial development (measured by bank credit) to be affected by their lagged values and by current and lagged values of remittances (measured by remittances as percentage of GDP) is used to test for equilibrating and long-term associations between remittances and economic growth and financial development indicators (Abdel-Halim & Bino, 2019). Shirazi, Javed, & Ashraf, (2018) surveyed the impact of remittance inflows on economic growth and poverty reduction in seven African countries, panel data from 1992-2010 and the Simultaneous Equation Model (SEM), the study found that diaspora remittances had statistically significant impact on economic growth-enhancing and poverty reduction, while Giuliano and Ruiz-Arranz (2005) reported that the impact of remittances on per capita GDP growth was statistically insignificant,

In general, studies that have endeavored to examine the effect of remittances on per capita GDP growth lack a consensus. The more optimistic group advocate that there exists a direct or indirect positive developmental impact of remittances; through accelerated investments in physical and human capital which may contribute to economic growth in the long term (Adams & Page 2005; Yang 2008; Gupta et al. 2009; Giuliano and Ruiz-Arranz 2009; Catrinescu *et al.*, 2009; Siddique *et al.*, 2012). Studies have also argued that remittances signify a vital source of external financing, which can lessen credit constraints and promote entrepreneurial activities thus influencing other determinants of per capita GDP growth, which

leads to a multiplier effect (Giuliano & Ruiz-Arranz, 2009). Moreover, remittances can reduce household poverty, which is an indicator of socio-economic growth (Adams and Page 2005; Hanson and Woodruff 2003; Frank and Hummer 2002; Hildebrant and McKenzie 2005). On the other hand, the less optimistic group suggests that remittances can act as a curse and lower the long-run per capita GDP growth of the recipient economies. For instance, Stahl and Arnold (1986) showed that remittances are primarily allocated to consumption with little or no savings for investment purposes. This observation is corroborated by Chami *et al.*, (2003) who contend that remittances can reduce labor force participation in addition to the appreciating the real exchange rate (Amuedo-Dorantes and Pozo 2004; Fullenkamp, Cosimano, Gapen, Chami, Montiel & Barajas, 2008; Hassan and Holmes 2013), a phenomenon referred to as the 'Dutch disease' (Lartey, Mandelman & Acosta, 2012).

## RESEARCH METHODOLOGY

### Econometric Model

This section shows the econometric model used to test the remittances- per capita GDP Growth causality in Kenya. Several alternative estimation equations are used to test the model; Ordinary Least Squares (OLS), Fixed Effect Estimator (FE) or Random Effect Estimator (RE) (based on the results of the Hausman test). The basic model for analyzing the relationship between the exogenous variable and the endogenous is illustrated below:

$$Y_{it} = b_0 + b_1 Rem_{it} + b_2 Z_{it} + \varepsilon_{it}$$

Where;

Y is the per capita GDP growth, rem, our variable of interest is the log of workers' remittances2-to-GDP ratio and Z is a vector of control variables.

Here, per capita GDP growth is the dependent variable which is measured in percentage. Diaspora remittance stand for worker remittance and is the independent variable and taken as the ratio of worker remittances received to GDP. The study has five control variables; which literature has suggested the most important variables that affect the per capita GDP growth. According to Balassa (1985) and Abdih *et al.*, (2012), greater access to international markets (trade openness) impacts on per capita GDP growth positively, therefore, these variable is measured by the ratio of exports to GDP. Prior literature shows that a high rate of inflation rate has a serious negative effect on the growth of one country's economy especially in developing countries (Barro, 2013; Vinayagathan, 2013). There is a relatively large body of literature suggesting a significant association between the real exchange rate and economic growth (Habib, Mileva & Stracca, 2017). All the research variables are converted into natural logarithms for the empirical estimation.

## Data and sample

Data for all variables were extracted from the World Development Indicator (2019) the World Bank database. Data set covered the most recent year's annual data from 1999–2019.

## Analytical approach

The data was subjected to descriptive statistics (mean, standard deviation and normality test) followed by Correlation and Regression analysis.

## FINDINGS AND DISCUSSION

The table below shows the descriptive statistics of the variables for the time period between 2010 and 2019.

Table 1. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Per capita GDP growth	120	5.2915	2.145949	.79	11.6
Remittances	120	87411.65	35318.81	38251	160941
Inflation	120	8.292333	4.787929	1.85	19.72
Interest	120	8.425583	3.484323	1.6	21.04
Trade openness	120	137073.5	39746.06	55823.34	211600.1
Foreign Exchange	120	84.01695	11.10206	61.899	105.275

The average per capita GDP growth value is 5.29; minimum value is 0.79 maximum value of 11.6 and standard deviation value of 2.146. Remittances is 87411.65 \$ (millions) minimum value of 38251, maximum value of 160941 and a standard deviation value of 35318.81. In addition, inflation has an average value of 8.2923, minimum value of 1.85, maximum value of 19.72 and a standard deviation value of 4.79. The table also show that the average interest rate is 8.42558, maximum of 21.04, minimum value pf 1.6 and standard deviation of 3.484. Additionally, trade openness has a mean value of 137073.5 \$(millions), maximum of 211600.1, minimum of 55823.34 and a standard deviation of 39746. Finally, foreign exchange has a mean of 84.02, a maximum value of 105.275, a minimum of 61.899 and a standard deviation of 11.10206

Table 2. Pairwise Correlation

	PCGG	REM	INR	IR	ER	TO
Per capita GDP growth (PCGG)	1.0000					
Remittances (REM)	0.7174*	1.0000				
Inflation rate (INR)	-0.4780*	-0.2611*	1.0000			
Interest rate (IR)	-0.3005*	0.0956	0.3106*	1.0000		
Exchange rate (ER)	-0.4440*	0.0693	0.2024*	0.4020*	1.0000	
Trade openness (TO)	-0.6468*	-0.2270*	0.2243*	0.4731*	0.4800*	1.0000

Correlation measures the degree of linear relationship among the variables. Therefore, in Table 2 below, the result shows that per capita GDP growth has a highly positive correlation with remittances ( $r=0.714$ ). In addition, a highly negative correlation exists among the explanatory variables and the dependent variable; inflation ( $r= -0.478$ ;  $p<0.05$ ), interest rate ( $r= -0.3005$ ;  $p<0.05$ ), exchange rate( $r= -0.444$ ;  $p<0.05$ ), and trade openness ( $r=-0.6468$ ;  $p<0.05$ ), This therefore means that there is a strong significant relationship among the variables under investigation. Further, the pairwise correlation matrix also revealed that no two explanatory variables were perfectly correlated; i.e. had a correlation coefficient higher that is greater than 0.8. This also suggests the absence of multicollinearity problem in our model. Multicollinearity between explanatory variables may result to wrong signs or implausible magnitudes, in the estimated model coefficients, and the bias of the standard errors of the coefficients.

Table 3. Regression Analysis

Dependent Variable	Fixed Effect	Random Effect	OLS
Remittance	0.118 (0.057)**	0.395(0.039)**	0.450(0.027)**
Inflation rate	-0.050(0.022)**	-0.073(0.024)**	-0.123(0.027)**
Interest rate	-0.118(0.035)**	-0.102(0.033)**	-0.031(0.028)
Foreign exchange	-.297(0.068)**	-0.301(0.063)**	-0.368(0.051)**
Trade openness	-.028(0.032)**	-0.101(0.033)**	-0.213(0.030)**
_cons	2.157(0.777)**	-.115(0.591)	0.777(0.485)**
Observations	120	120	120
R-squared	0.6152	0.8554	0.8662
Hausman Test chi2(5)		29.48	
Prob>chi2 =		0.000	
F/Wald chi2 -values	14.36	247.00	155.10
Prob >F/ chi2	0.000	0.000	0.000



From the result of the three regression models shown above, it would be revealed the explanatory variables statistically explain the variation in the dependent variable. Similarly, the F-statistics show that the overall model is statistically significant. This means that there exists a significant linear relationship between the dependent and independent variables in the model. Following the above, remittances had a significantly positive ( $\beta = 0.118$ ,  $p < 0.05$ ) impact on per capita GDP growth at 5% level of significance. These findings are related to those of Hassan and Shakur (2017) in Bangladesh. This therefore means that increase in remittances flow would significantly increase in per capita GDP growth. Foreign remittances inflow influences per capita GDP growth in several ways. First, remittances increases the ratio of broad Money (M2) to GDP; thus stimulating the level of credit to private sector and investment (Keho, 2020). Second, remittances are associated with entrepreneurial activities such as business starts, which are key agents of economic growth (Salas, 2014). Third, prior studies show that remittances have an effect on human capital development, through increasing all the control variables, inflation rate ( $\beta = -0.050$ ,  $p < 0.05$ ), interest rate ( $\beta = -0.119$ ,  $p < 0.05$ ), trade openness ( $\beta = -0.028$ ,  $p < 0.05$ ) and exchange rate ( $\beta = -0.297$ ,  $p < 0.05$ ) had a significant negative effect on economic growth.

## CONCLUSIONS

Workers' remittance are significant to per capita GDP growth and to the welfare of the migrants' households. Remittances are associated with household income and savings, improved quality of education and entrepreneurial activities, which may ultimately stimulating economic growth. Therefore, remittances have an enormous potential of socio-economic growth particularly in the developing countries that are the highest recipients of these capital flow. Prior studies show that the nexus between per capita GDP growth and remittance is unclear, thus requires further scrutiny. Therefore, the purpose of this study was to examine the effect of remittances on economic growth in Kenya. Using monthly data for the period 2010 to 2019, the study finds a significant positive relationship between remittances and per capita GDP growth in Kenya. Therefore, the study recommends that Kenya should formulate proper human capital export policies that would help the country in attracting higher remittance from across the globe. In addition, the country should endeavor to build strong bilateral ties with the remittance sending nations, which will increase the level of official transfer of remittances.

## REFERENCES

- Abdel-Halim, M., & Bino, A. (2019). Remittances and Economic Growth in a Small and Volatile Economy. *Int. J. Bus. Econ. Res.*, 8(1), 31.
- Abdih, Y., Chami, R., Dagher, J., & Montiel, P. (2012). Remittances and institutions: Are remittances a curse?. *World Development*, 40(4), 657-666.

- Abdul-Mumuni, A., & Quaidoo, C. (2016). Effect of International Remittances on Inflation in Ghana Using the Bounds Testing Approach. *Business and Economic Research*, 6(1), 192-209.
- Adams Jr, R. H., & Page, J. (2005). Do international migration and remittances reduce poverty in developing countries?. *World development*, 33(10), 1645-1669.
- Akcay, S. (2019). Remittances and financial development in Bangladesh: substitutes or complements?. *Applied Economics Letters*, 1-9.
- Al-Tarawneh, A. (2016). The role of workers' remittances in development of Jordanian banking sector. *International Journal of Business and Economics Research*, 5(6), 227-234.
- Amuedo-Dorantes, C., & Pozo, S. (2004). Workers' remittances and the real exchange rate: a paradox of gifts. *World development*, 32(8), 1407-1417.
- Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error-components models. *Journal of econometrics*, 68(1), 29-51.
- Azam, M., Haseeb, M., & Samsudin, S. (2016). The impact of foreign remittances on poverty alleviation: Global evidence. *Economics & Sociology*, 9(1), 264.
- Azizi, S. (2017). Altruism: primary motivation of remittances. *Applied Economics Letters*, 24(17), 1218-1221.
- Balassa, B. (1985). Exports, policy choices, and economic growth in developing countries after the 1973 oil shock. *Journal of development economics*, 18(1), 23-35.
- Barajas, A., Chami, R., Ebeke, C., & Oeking, A. (2018). What's different about monetary policy transmission in remittance-dependent countries?. *Journal of Development Economics*, 134, 272-288.
- Batool, S. A., & Zulfiqar, S. (2012). What determines external debt? Empirical evidence from Pakistan. *The Business & Management Review*, 3(1), 263.
- Bettin, G., & Zazzaro, A. (2018). The impact of natural disasters on remittances to low-and middle-income countries. *The Journal of Development Studies*, 54(3), 481-500.
- Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of econometrics*, 87(1), 115-143.
- Bodomo, A. (2013). African diaspora remittances are better than foreign aid funds. *World Economics*, 14(4), 21-29.
- Bugamelli, M., & Paternò, F. (2009). Do workers' remittances reduce the probability of current account reversals?. *World Development*, 37(12), 1821-1838.
- Bunduchi, E., Vasile, V., Comes, C. A., & Stefan, D. (2019). Macroeconomic determinants of remittances: evidence from Romania. *Applied Economics*, 51(35), 3876-3889.
- Catrinescu, N., Leon-Ledesma, M., Piracha, M., & Quillin, B. (2009). Remittances, institutions, and economic growth. *World Development*, 37(1), 81-92.
- Chami, M. R., Barajas, M. A., Garg, A., & Fullenkamp, C. (2010). The global financial crisis and workers' remittances to Africa: What's the damage?. International Monetary Fund.
- Chami, Ralph, Connel Fullenkamp, and Samir Jahjah's (2003), "Are Immigrant Remittance Flows a Source of Capital for Development?", IMF Working Paper WP/03/189
- Cooray, A. (2009). Government expenditure, governance and economic growth. *Comparative Economic Studies*, 51(3), 401-418.
- De, S., Islamaj, E., Kose, M. A., & Reza Yousefi, S. (2019). Remittances over the business cycle: Theory and evidence. *Economic Notes: Review of Banking, Finance and Monetary Economics*, 48(3), e12143.
- Doucouliaagos, H., & Paldam, M. (2011). The ineffectiveness of development aid on growth: An update. *European journal of political economy*, 27(2), 399-404.
- Eggoh, J., Bangake, C., & Semedo, G. (2019). Do remittances spur economic growth? Evidence from developing countries. *The Journal of International Trade & Economic Development*, 28(4), 391-418.
- Elayah, M. (2016). Lack of foreign aid effectiveness in developing countries between a hammer and an anvil. *Contemporary Arab Affairs*, 9(1), 82-99.
- Fayissa, B., & Nsiah, C. (2010). The impact of remittances on economic growth and development in Africa. *American Economist*, 55, 92-103

- Frank, R., & Hummer, R. A. (2002). The other side of the paradox: The risk of low birth weight among infants of migrant and nonmigrant households within Mexico. *International Migration Review*, 36(3), 746-765.
- Fuentes, J. C. C., & Herrera, J. C. C. (2018). Emigrant remittances and the real exchange rate in Guatemala: an adjustment-costs story. *Foro de Investigadores de Bancos Centrales del Consejo Monetario Centroamericano*.
- Fullenkamp, C., Cosimano, M. T. F., Gapen, M. T., Chami, M. R., Montiel, M. P., & Barajas, M. A. (2008). *Macroeconomic consequences of remittances*. International Monetary Fund.
- GCIM (2005). Migration in the new world: new directions for action, Report of the global commission on international migration, Global Commission on International Migration, Geneva
- Gichuki, E. M., Mwaniki, G., & Ogolla, D. (2019). Interest rate capping by the central bank of Kenya on loans uptake. *International Academic Journal of Economics and Finance*, 3(5), 33-44.
- Giuliano, P., & Ruiz-Arranz, M. (2005). Remittances, Financial Development, and Growth: IMF Working Paper 05/234. International Monetary Fund, Washington.
- Giuliano, P., & Ruiz-Arranz, M. (2009). Remittances, financial development, and growth. *Journal of development economics*, 90(1), 144-152.
- Guetat, I., & Sridi, D. (2017). Institutional quality effect on remittances in MENA region. *Middle East Development Journal*, 9(1), 84-100
- Guha, P. (2013). *Measuring international remittances in India: Concepts and empirics* (No. id: 5487).
- Gupta, S., Pattillo, C. A., & Wagh, S. (2009). Effect of remittances on poverty and financial development in Sub-Saharan Africa. *World development*, 37(1), 104-115.
- Hanson, G. H., & Woodruff, C. (2003). *Emigration and educational attainment in Mexico*. Mimeo., University of California at San Diego.
- Hassan, G. M., & Holmes, M. J. (2013). Remittances and the real effective exchange rate. *Applied Economics*, 45(35), 4959-4970.
- Hassan, G. M., & Shakur, S. (2017). Nonlinear effects of remittances on per capita GDP growth in Bangladesh. *Economies*, 5(3), 25.
- Hildebrandt, N., & McKenzie, D. (2005). The Effect of Migration on Child Health in Mexico World Bank Policy Research Working Paper 3573 and Department of Economics.
- Kapur, D. (2005). Remittances: the new development mantra?. *Remittances: Development impact and future prospects*, 2(1), 331-360.
- Karagoz, k. (2009). Workers remittances and economic growth :evidence from Turkey. *Journal of Yasar University* , 4 (13), 1891-1908
- Karunaratne, H. D., & Dassanayake, I. (2018). Impact of foreign remittances on poverty reduction in Sri Lanka. *Hosei Economic Review*, 85(4), 1-52.
- Keho, Y. (2020). Impact of remittances on financial development: revisiting the evidence for ECOWAS countries. *Theoretical Economics Letters*, 10(01), 169
- Kono, D. Y., & Montinola, G. R. (2013). The uses and abuses of foreign aid: Development aid and military spending. *Political Research Quarterly*, 66(3), 615-629.
- Kumar, B. (2019). Remittances, Poverty and Welfare: Evidence from Cumilla, Bangladesh. *American Journal of Data Mining and Knowledge Discovery*, 4(1), 46-52.
- Lartey, E. K., Mandelman, F. S., & Acosta, P. A. (2012). Remittances, exchange rate regimes and the Dutch disease: A panel data analysis. *Review of International Economics*, 20(2), 377-395.
- Mankiw, N. G., Romer, D., & Weil, D. N. (1992). A contribution to the empirics of economic growth. *The quarterly journal of economics*, 107(2), 407-437.
- Meyer, D., & Shera, A. (2017). The impact of remittances on economic growth: An econometric model. *Economia*, 18(2), 147-155.
- Misati, R. N., Kamau, A., & Nassir, H. (2019). Do migrant remittances matter for financial development in Kenya?. *Financial Innovation*, 5(1), 1-25.
- Mondal, R. K., & Khanam, R. (2018). The impacts of international migrants' remittances on household consumption volatility in developing countries. *Economic Analysis and Policy*, 59, 171-187.

- Murshed, M., & Khanaum, M. M. (2014). Governance in Context with Aid: Role of the World Bank and Other International Organisations. *Governance*, 4(18).
- Phiri, M.W. (2017), "The impact of aid on the economic growth of developing countries (LDCs) in Sub-Saharan Africa.", *Gettysburg Economic Review*, Vol. 10 No. 4, pp. 26-48.
- Pickbourn, L. (2016). Remittances and household expenditures on education in Ghana's northern region: why gender matters. *Feminist Economics*, 22(3), 74-100.
- Ramcharan, H. (2020). Analyzing the impact of workers' remittances on household consumption in Latin American and Caribbean Countries. *Journal of Economics and Finance*, 44(1), 59-77.
- Rao, B., & Hassan, G. (2011). A panel data analysis of the growth effects of remittances . *Economic Modeling* , 28, 701-709
- Ratha, D. (2007). Leveraging remittances for development. *Policy Brief*, 3(11), 1-16.
- Ratha, D. (2013). The impact of remittances on economic growth and poverty reduction. *Policy Brief*, 8(1), 1-13.
- Salas, V. B. (2014). International remittances and human capital formation. *World development*, 59, 224-237
- Shirazi, N. S., Javed, S. A., & Ashraf, D. (2018). Remittances, Economic Growth and Poverty: A Case of African OIC Member Countries. *The Pakistan Development Review*, 57(2), 121-143.
- Siddique, A., Selvanathan, E. A., & Selvanathan, S. (2012). Remittances and economic growth: empirical evidence from Bangladesh, India and Sri Lanka. *Journal of development studies*, 48(8), 1045-1062.
- Stahl, C. W., & Arnold, F. (1986). Overseas workers' remittances in Asian development. *International migration review*, 20(4), 899-925.
- Thapa, S., & Acharya, S. (2017). Remittances and household expenditure in Nepal: Evidence from cross-section data. *Economies*, 5(2), 16.
- Unceta, K., Gutierrez, J., & Amiano, I. (2010). Financing development: ODA versus FDI and Remittances in the most vulnerable Countries. *Current Research*, 9, 165-186.
- Uzochukwu, A., & Chukwunonso, G. (2014). Impact of Migrant Remittances on Health and Education Outcomes in Sub-Saharan Africa. *Journal Of Humanities And Social Science*, 19(8), 33-44.
- Yang, D. (2008). International migration, remittances and household investment: Evidence from Philippine migrants' exchange rate shocks. *The Economic Journal*, 118(528), 591-630.
- Yiew, T. H., & Lau, E. (2018). Does foreign aid contribute to or impeded economic growth?. *Journal of International Studies Vol*, 11(3), 21-30