



Analysis of The Effect of Remittance on Economic Growth in Developing Countries East Asia and Pacific Region

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Article Information

Article of History:

Received February 2021

Approved September 2021

Published October 2021

A B S T R A C T

This study determine how remittances affect economic growth in the developing countries of East Asia and the Pacific region. The type of data in this study is secondary data with the form of panel data. This research was conducted in the period 2000-2019 in 11 developing countries in East Asia and the Pacific region. This study used Random Effect Model estimation to determine the influence of independent variables, namely GDP per capita with dependent variables, namely remittances, working-age population, FDI, and trade openness. The result shows that variable remittances and working-age populations positively and significantly impact economic growth in developing countries in East Asia and the Pacific region. The estimated results for FDI variables negatively and significantly affect developing countries economic growth in East Asia and the Pacific region. Estimates for trade openness variables have no significant effect on developing countries economic growth in East Asia and the Pacific region.

Keywords: Economic growth, Remittances, Population, FDI, Trade.

JEL Classification Code: B17, F43, F24

INTRODUCTION

Economic growth is one measure to achieve the development of a country. According to Todaro and Smith (2012), economic growth is an increase in the ability to complement the needs of goods and services in society. Economic growth is defined as a process, due to the influence of factors in economic growth. A country achieves economic growth if it experiences an increase in gross domestic product (GDP). If the GDP obtained by a country is high, the higher the indication of the success of economic development in that country. Economic growth can be influenced by many factors because it is very complex (Tahir, Khan, & Shah, 2015). One of the factors is domestic factors such as macroeconomic policies, human capital, good governance, and national savings for economic growth. However,

external factors such as international capital flows are equally important to increase economic growth especially for developing countries (Tahir, Khan, & Shah, 2015).

The flow of international capital flows is a source of funds that come from abroad, these funds flow from the country that owns the funds into the economy of another country. These capital flows can take the form of direct investment, portfolio investment, foreign trade, debt and remittances. Remittances are financial flows sent by workers abroad to families in their home countries (Koser, 2007). Remittances are becoming a new financial phenomenon and are one of the most important sources of finance and have an impact on the world economy, especially in developing countries, both in size and growth rate (Meyer and Shera, 2017).

Table 1
Flows of Remittances to Low and Middle-Income Countries (In US\$ Billion)

Country	2016	2017	2018	2019
Global	597	643	694	714
Low and Medium Income	446	487	531	554
East Asia and Pacific	128	134	143	147
Europe and Central Asia	46	55	61	65
Latin America and the Caribbean	73	81	89	96
Middle East and North Africa	51	57	58	59
South Asia	111	118	132	140
Sub-Saharan Africa	39	42	48	48

Source: Migration and Development Brief 32, The Global Knowledge Partnership on Migration and Development (2020)

Based on the data in table 1 above, it shows that the volume of global remittances in 2019 was 714 billion dollars, an increase of 11.7% compared to 2016. The volume in low and middle income countries in 2019 was 554 billion dollars or 77.6% of volume of global remittances. Meanwhile, countries in the East Asia and Pacific Region have the highest volume of remittances compared to other countries, with a volume of 147 billion dollars in 2019.

The benefits of sending workers' remittances to recipient countries are

numerous. As indicated, the flow of remittances plays an important role in driving economic growth. Compared to other external capital inflows (such as aid, FDI and foreign loans), remittances from workers are considered better for rapid economic growth because of their stable nature (Jawaid and Raza, 2012).

The flow of remittances can finance much-needed consumption expenditures and increase the demand for goods and services in a country's economy. Many industries benefit from this increase in

demand through the multiplier effect, which can increase economic growth (Stahl and Habib, 1986; Taylor and Dyer, 2009). Remittances are believed to be able to reduce poverty because usually poor people in developing countries migrate and will send their money back to their families in their home countries. By increasing household income, remittances can also lead to higher consumption which can have a multiplier effect on aggregate demand and output (Pradhan and Upadhyaya, 2008).

However, according to neoclassical migration theory, workers move from low-wage countries to relatively high-wage countries because of wage differences between countries (Kurekova, 2011; Sutradhar, 2020). Remittances provide a way to reduce poverty and economic development when immigrants send money to their home countries (Sutradhar, 2020). On the other hand, this type of overseas migration can damage the development process when the country of origin loses a highly educated and skilled workforce which is called a brain drain (Topxhiu and Krasniqi, 2017). Thus, loss of human capital can negatively affect economic growth as reflected in neoclassical growth theory.

Remittances may have an adverse effect in an economic context. This can hinder economic growth through the appreciation of the exchange rate thus making it less competitive in international trade. This can inversely affect the labor supply decisions of the beneficiary families. An increase in remittances can be considered as an increase in non-labor income (Ratna, 2013; Sutradhar, 2020).

The topic of remittance flows on economic growth is very interesting to study because the results are still being debated until now, in a quantitative survey of 538 estimates reported in 95 studies, it was found that about 40% showed a positive and statistically significant effect. And about 20% have a negative and statistically

significant effect, and about 40% are not significant (based on the conventional 5% significance level) (Cazachevici, et al., 2020).

Based on the empirical study conducted by Meyer and Shera (2017) in developing countries of the European region in the period 1999-2013, the results show that remittances have a positive impact on growth and that this impact increases at higher remittance rates compared to GDP. Xinying, et al (2019) investigated the effect of private remittances, FDI and exports on economic growth in West Africa in the period 1991 to 2017 using the panel unit root test, cointegration test, correlation matrix, completely modified ordinary least square, robust least square, and general linear model to examine the effect of private remittances, FDI and exports on economic growth. From these results it can be concluded that remittances and private exports have a positive and significant impact on economic growth in West Africa.

In contrast to the research conducted by Jongwanich and Kohpaiboon (2019) which examined the impact of remittances on economic growth, in developing countries in Asia and the Pacific in the 1993-2013 period, GMM estimates were used. The results show that remittances only have a negative and significant impact on economic growth if they reach 10 percent of GDP, or higher. However, if the ratio of remittances to GDP is below 10 percent, it can still make a negative contribution to growth, but the effect is not statistically significant. The study also found some degree of substitution between remittance delivery and financial developments. This means that remittances have the potential to help boost economic growth in countries with small financial sectors.

Rao and Hasan (2011) examined remittance delivery on economic growth

in 40 developing countries, the results show that the direct growth effect of remittance delivery is not significant. However, sending remittances may have a small indirect growth effect. El Hamma (2017) examines the relationship between remittances, quality of institutions and economic growth using panel data in 11 Southern Mediterranean countries during the period 1985-2014 using GMM estimates. The results show that remittances do not have a direct effect on economic growth.

Bloom and Williamson (1998) in Bloom et al., (2001) the percentage of the working age population has a greater impact on per capita output than the total population in East Asia. Bloom, et al (2001) if a large proportion of a country's population is of working age, additional productivity in this group can generate a "demographic advantage" so as to increase economic growth. Research conducted by Doku et al. (2017) in African countries in the period 2003-2012 fixed effect model. The study found that all things being equal, a 1 percent increase in Chinese FDI in Africa significantly increased Africa's GDP growth by 0.607 percent. Furthermore, the study found China's FDI elasticity of African GDP growth to be 0.007, which represents an inelastic situation.

The relationship between trade and growth can be direct or indirect. Trade provides access to technological advances thereby facilitating the transfer and spillover of technology, as well as access to competition to encourage innovation and R&D development, this can lead to investment and productivity growth. Similarly, trade is a means of investment and the acquisition of goods essential for development. Trade policy can encourage growth in the long term impact on the level of investment and capital accumulation (Romer, 1988; Roquez - Diaz and Escot, 2018).

Many countries are expanding their

industry due to the demand for output, to achieve the demand for output, therefore modern technology is needed for more production in the production process. Thus, international trade can have a significant positive impact on economic growth (Raghutla, 2020). Trade openness is measured as (value of exports + imports divided by gross domestic product) $\times 100\%$ (Nazlioglu and Wolde-Rufael, 2014; Raghutla, 2020).

Research conducted by Tahir and Azid (2015) in developing countries in the period 1990-2009 using the 2SLS method. The results show that trade openness has a positive and significant impact on economic growth in developing countries. The positive impact of the two proxies of openness (ratio of export-import to GDP and industrial output as ratio of GDP) on economic growth indicates that trade openness can increase economic growth. Industrial output as a GDP ratio used as an alternative measure of trade openness has shown good performance in empirical analysis and therefore can be used in further studies.

Lucas and Stark (1985) in Yoshino et al. (2020) suggest that altruism and self-interest are most likely determinants of international remittance inflows. This assumes that remittances are sent to families left in their home countries because of altruistic feelings on the part of immigrants. Migrants send money to their families taking into account their poverty and consumption shocks. In contrast to altruism, the self-interest of the migrants is also a factor in increasing the flow of remittances. They can send money to invest in their savings after they return to their home country.

Research conducted by Nsiah and Fayissa (2013) in African, Asian and American countries in the period 1985-2007 using the unit root panel method and panel data cointegration. The results show that remittances have a statistically

significant long-term relationship to economic growth in the three regions. However, the Asian region has a better influence than other regions. This is due to regional differences in transaction and remittance fees.

Research conducted by Azam (2015) in 4 Asian countries in the period 1976-2012 using panel data regression. The regression results explain that there is a positive and significant relationship between remittances of migrant workers and economic growth in the countries studied. The main conclusion that can be drawn from the results of this study is that migrant remittances are a source of economic growth. The inflow of migrant remittances can increase aggregate spending through investment and consumption needed for economic development.

In contrast to the research conducted by Tahir et al. (2019) in the South Asian Association for Regional Cooperation (SAARC) countries in the 2008-2015 period using panel data regression. The results of this study found a non-significant relationship between remittance inflows and economic growth. One of the reasons for the insignificant relationship of this study is that economic growth in the SAARC region may not depend on remittances and there are other factors that may play a more dominant role in the growth process.

Research conducted by Senbeta (2013) in 50 countries in the period 1970-2004 using panel data regression and GMM. The results of this study indicate that remittances of workers do not have a significant effect on the growth of TFP. Given the importance of TFP growth in explaining variations in growth across countries, the lack of a positive relationship between remittances and TFP growth raises doubts about the role of remittances as a major source of growth over the long term.

Based on the above background, the purpose of this study is to determine whether remittances have a positive and significant effect on increasing economic growth in developing countries. By using empirical methods in 11 developing countries in the East Asia and Pacific Region.

METHODOLOGY

In this research, the method used is quantitative method. The topic used in this research is the effect of remittances on economic growth in developing countries in the East Asia and Pacific region. The objects in this study were 11 selected developing or middle-income countries (China, the Philippines, Indonesia, Cambodia, Laos, Malaysia, Mongolia, Myanmar, Thailand, Tonga, and Vietnam) in the East Asia and Pacific Region. Where other developing countries in the East Asia and Pacific Region were not used in this study due to data limitations. The type of data in this study is secondary data in the form of panel data. Panel data consists of time series data for the period 2000-2019 and cross section data in 11 developing countries in the East Asia and Pacific Region. The data obtained in this study came from the World Development Index (WDI).

Analysis Model

The estimation model in this study adopted from research conducted by Azam (2015):

$$\ln Y_{it} = \alpha + \beta_1 \ln \text{Rem}_{1it} + \beta_2 \text{ControlVariable}_{2it} + e_{it} \dots \dots \dots (1)$$

$$\ln \text{GDPC}_{it} = \alpha + \beta_1 \ln \text{Rem}_{1it} + \beta_2 \text{Pop}_{2it} + \beta_3 \text{FDI}_{3it} + \beta_4 \text{Trade}_{4it} + e_{it} \dots \dots \dots (2)$$

Where LNY is the natural logarithm of GDP per capita, is a constant α , $\beta_1 \dots \beta_4$ is the regression coefficient, Ln-Rem is the natural logarithm of the number of remittances consist of personal

transfers and compensation of employees, Pop is the percentage of the population of working age population, FDI is the capital inflows are measured as part of gross domestic product, trade is the amount of trade exports minus imports goods and services measured as part of gross domestic product, and e is the error term.

DATA ANALYSIS TECHNIQUE

The analysis technique used in this research is to use panel data regression model (pooled data). Panel data is a combination of two types of data, namely time series data and cross section data. By combining time series and cross section data, the number of observations increases significantly without any treatment on the data. The data panel can also explain two kinds of information, namely information about cross data on differences between time series and subjects that reflect changes in time subjects. To estimate the panel data regression method, there are three models that can be used. Gujarati and Porter (2012: 239), mention the three approaches, among others:

The pooled least square (PLS) approach is the simplest technique in estimating panel data regression. This approach combines (pooled) all cross section and times series data, then estimates the model using the ordinary last square (OLS) method. The panel data model with the pooled least square (PLS) approach is as follows (Gujarati, 2012: 239):

$$Y_{it} = \beta_1 + \beta_2 X_{2it} + \beta_3 X_{3it} + \dots + \beta_n X_{nit} + u_{it} \dots \dots \dots (3)$$

The fixed effect (FEM) approach takes into account the possibility that the researcher will face the problem of committed variables, which may lead to changes in the intercept cross section

or time series. This model adds dummy variables to allow for this intercept difference. The panel data model with a fixed effect model (FEM) approach is as follows (Gujarati, 2012: 243).

$$Y_{it} = \alpha_1 + \alpha_2 D_2 + \dots + \alpha_n D_n + \beta_2 X_{2it} + \dots + \beta_n X_{nit} + u_{it} \dots \dots \dots (4)$$

The random effect (REM) approach is an estimation technique that takes into account the interrelated error variables, both between individuals and over time. The panel data model with the random effect model (REM) approach is as follows (Gujarati, 2012: 250).

$$Y_{it} = \beta_1 + \beta_2 X_{2it} + \dots + \beta_n X_{nit} + \epsilon_{it} + u_{it} \dots \dots \dots (5)$$

Next, there are two tests to determine which model is the best in panel data regression. The test is to determine whether an estimation model is better using the pooled least square (PLS) model, the fixed effect model, or the Random Effect model. The following are some tests in model selection:

The F-restricted test is a test to determine which model is better between the fixed effect model (FEM) and the PLS method by looking at the Residual Sum Square (RSS). F-restricted test can be done with the F statistic test. The statistical test is formulated as follows (Gujarati and Porter, 2012: 244):

$$F = \frac{(R_{ur}^2 - R_r^2)/(m)}{(1 - R_{ur}^2)/(n - k)}$$

- Where:
- R_{ur}^2 = pooled least square model
- R_r^2 = fixed effect model
- m = number of restricted variables
- n = number of samples
- k = number of independent variables

The null hypothesis in determining the pooled least square or fixed effect method is as follows:

- H_0 = Pooled last square (PLS) model
- H_1 = Model fixed effect method (FEM)

The null hypothesis in determining the PLS method or fixed effect FEM is that if the result value ($F_{count} > F_{table}$) is at a certain level of significance (α), it rejects the hypothesis which states that the PLS technique is chosen, thus accepting the statement using the FEM model and vice versa (Gujarati and Porter, 2012:244).

Hausman test to analyze whether the combined error term in the random effects model is related to the explanatory variable, namely whether the random effects model is the right model or not. The Hausman test will provide an assessment using Chi-Square statistics so that the decision to select a model can be determined correctly. Rejection of the Hausman test statistic means rejection of the fixed effect model (FEM) or dummy variable. So that the greater the value of the Hausman test statistic, the more it leads to the acceptance of the alleged

error component model.

Hausman test procedure is as follows:

1. The hypotheses used in the Hausman test are:

- H_0 = Random *Effect Model* (REM)
- H_1 = *Fixed Effect Model* (FEM)

2. Define test criteria:

If Chi Square (χ^2) count < Chi Square (χ^2) table or if the p-value Chi Square (χ^2) > then hypothesis H1 is rejected. Thus, the most appropriate estimation technique used is the random effect model and vice versa (Gujarati and Porter, 2012: 251).

RESULTS AND DISCUSSION

The selection of the panel data estimation method can be done through two stages of testing to determine the best model, namely the F-Restricted test and the Hausman test. The first test was carried out using the F-Restricted test which aims to determine which method of pooled least squares (PLS) panel data regression or fixed effect model (FEM) is better used in research. The hypothesis is if H_0 = using pooled least square (PLS), and if H_1 = wear fixed effect model (FEM) with a value of α of 5%.

Table 2
F-Restricted Test Results

F-Restricted test	2634.34
Prob	(0.000)

Source: Stata print-out rearranged (data processed)

Based on the test criteria when the probability of the F-Restricted test is < 5%, it is H_0 rejected. The results of calculations using STATA 13.0 in table 1.2 show the probability of the F test of 0.0000, then it is H_0 rejected because $0.0000 < 5\%$. In conclusion, the best model is the fixed effect model (FEM).

Hausman test

After the fixed effect model (FEM)

estimation method is selected, the next step is to perform the Hausman test which aims to choose between the panel data regression method, fixed effect model (FEM) or random effect model (REM) which is better used in research. The hypothesis is if H_0 = using a random effect model (REM), and if H_1 = wear fixed effect model (FEM) with a value of α of 5%.

Table 3
Hausman Uji Test Results

Hausman test	4.82
Prob	(0.305)

Source: Stata print-out rearranged (data processed)

Based on the test criteria when the Hausman test probability is $\chi^2 < 5\%$, it is H_0 rejected. The results of the Hausman test calculation using STATA 13.0 in table .2 show prob $>$ χ^2 of 0.305 meaning it is accepted because $0.305 > 5\%$. The

conclusion is that the best model in this study uses the estimation of the random effect model (REM).

The following are the results of the estimation of the random effect model (REM) using the STATA 13.0 analysis tool :

Table 4
Estimated Results of Random Effect Model

Variable	Regression Model	
	Coef.	P> z
Constant	1,530	(0.001)***
Remittance	0.145	(0.000)***
Population	0.048	(0.000)***
FDI	-0.004	(0.092)*
Trading	0.024	(0.168)

Source: Stata print-out rearranged (data processed)

Note: Numbers in parentheses indicate p-values. ***, ** and * indicate the significance level at 1%, 5% and 10%, respectively.

The estimation results of the random effect model (REM) in Table 4 above show that the variables of remittances, working age population and FDI have a significant effect on economic growth in developing countries in the East Asia and Pacific region. The trade openness variable does not significantly affect economic growth in developing countries in the East Asia and Pacific region.

The estimation results on the remittance variable show a probability value of 0.000 which means the significance is at the 1% level. Thus rejecting H_0 and accepting H_1 . While the coefficient value shown is 0.145 by showing a positive relationship to economic growth. So that every one percent increase in remittances will increase economic growth by 14.5%. In the results of this study, the effect between remittances and economic growth was found to be similar to the

research conducted by Meyer and Shera (2017) and Xinying, et al (2019). However, the results of this study contradict the research conducted by Jongwanich and Kohpaiboon (2019) and El Hamma (2017).

This is in accordance with the theory found by J. Maynard Keynes which explains that the output done by one person, at the same time will be directed at the income that will be received by others. But when that person spends his income, he will provide income for others. Therefore, this cycle will continue and will help support the economy of a country (Jahan et al., 2014).

Migrant transfers in the form of remittances can alleviate family financial problems by increasing the need for essential spending on food, health, and school fees for their children (Gupta et al., 2007). Labor remittances are one source of economic growth. It cannot be denied that

the entry of migrant remittances can increase aggregate expenditure through consumption and investment which is needed for the economic development of a country (Azam, 2015). The contribution of workers' remittances is very important in economic growth. Because its productive use can help a country's economy to maintain and increase economic growth by allocating this money into consumption and investment.

Martinez et al (2015) consider migrants from developing countries as a group of investors who connect the host country and the country of origin. Migrants are an important pool of potential entrepreneurs, and are well positioned to transmit funds and ideas to drive growth through entrepreneurship/business in developing countries. Remittances can help local entrepreneurs to bypass inefficient local credit markets and start productive activities. Bhatia, (2011) in Saadi, 2020 revealed that the estimated percentage of remittances used for business investment, such as funding existing small businesses and starting new ones in developing countries, is around 20 percent.

In addition, remittances can contribute to technology transfer by bringing home new skills, access to foreign markets, established processes in world markets, new business practices, entrepreneurial knowledge, and management ideas that can guide the use of their remittance flows to fund and grow new companies internationally. (Asian Development Bank , 2012; Vaaler, 2013).

The estimation results on the working age population variable show a probability value of 0.000 which means the significance is at the 1% level. Thus rejecting H_0 and accepting H_1 . While the coefficient value shown is 0.048 by showing a positive relationship to economic growth. So that every one percent increase

in the working age population will increase economic growth by 4.8%. Michael Kremer argues that world population growth is the main driver for advancing economic prosperity. If there are more people, then there are more scientists, inventors, and engineers to contribute to innovation and technological progress (Mankiw, 2012:230). Bloom and Williamson (1998) in Bloom et al., (2001) the percentage of the working age population has a greater impact on per capita output than the total population in East Asia. Bloom, et al (2001) if a large proportion of a country's population is of working age, additional productivity in this group can generate a "demographic advantage" so as to increase economic growth.

The estimation results on the FDI variable show a probability value of 0.092 which means the significance is at the 10% level. Thus rejecting H_0 and accepting H_1 . While the coefficient value shown is -0.004 by showing a negative relationship to economic growth. So that every one percent increase in FDI will reduce economic growth by 0.4%. This condition is in line with research conducted by Alvarado, et al. (2017) who examined the Latin American region showing that the effect of FDI and economic growth in lower-middle income countries has a negative and statistically significant relationship. This is because FDI is not an adequate mechanism to accelerate economic growth in developing countries in Latin America, except in high-income countries.

The estimation results on the trade openness variable show a probability value of 0.168 which means it is not significant at all levels. The results of this study are not in line with research conducted by Tahir and Azid (2015) which states that trade openness and economic growth have a positive and significant relationship. However, this condition is similar to the research conducted by Ulaşan (2015)

which uses dynamic panel data which concludes that trade openness has no significant relationship with economic growth, this shows that trade openness alone cannot encourage economic growth. Trejos and Barboza (2015) also provides strong empirical evidence that trade openness is not the main engine of the Asian Economic Growth "Miracle".

CONCLUSION

The inflow of remittances is growing rapidly to developing countries. At the same time, there is debate whether remittances can boost economic growth in the migrants' home countries. The main objective of this study is to determine the effect of remittances on economic growth in 11 developing countries in East Asia and the Pacific in the period 2000-2019 using random effect (REM) estimation. The regression results state that there is a positive and significant relationship between remittances and economic growth in the countries studied. The contribution of workers' remittances is very important in economic growth. This is because its productive use can help a country's economy to maintain and increase economic growth by allocating this money into consumption and investment. Overall, the effect of other control variables, namely, the working age population, shows a positive and significant effect on economic growth in the countries studied. The FDI variable has a negative and significant effect on economic growth in the countries studied. Meanwhile, the trade openness variable has no effect on economic growth in the countries studied.

From these findings, it is recommended that regarding future remittance transaction systems in developing countries in the East Asia and Pacific Region, improving the internet transfer system supported by bank branches could be one of the most desirable policy implications. In this case, a good and innovative banking system

must be built in developing countries. With the spread of remittance transfers that use the internet banking system as a formal and legal channel, the total remittance transfer fee can be lower, transactions can be easier, remittance transaction transparency can be increased, and financial markets are better, so as to accelerate economic growth in developing countries in Asia East and Pacific.

REFERENCE

- Alvarado, R., Iñiguez, M., & Ponce, P. (2017). Foreign direct investment and economic growth in Latin America. *Economic Analysis and Policy*, 56, 176-187.
- Azam, M. (2015). The role of migrant workers remittances in fostering economic growth. *International Journal of Social Economics*, 42(8), 690-705.
- Bloom, DE, Canning, D., & Sevilla, J. (2001). Economic growth and the demographic transition. NBER Working Paper No. 8685. *National Bureau of Economic Research*.
- Cazachevici, A., Havranek, T., & Horvath, R. (2020). Remittances and economic growth: A meta-analysis. *World Development*, 134, 105021.
- Doku, I., Akuma, J., & Owusu-Afriyie, J. (2017). Effect of Chinese foreign direct investment on economic growth in Africa. *Journal of Chinese Economic and Foreign Trade Studies*.
- El Hamma, I. (2017). Do political institutions improve the effect of remittances on economic growth? Evidence from South-Mediterranean countries. *Economics Bulletin*, 37 (3), 2133-2148.
- Greenlaw, SA, Shapiro, D., & Taylor, T. (2018). *Principles of Macroeconomics 2e* (OpenStax).
- Gujarati, DN, & Porter, DC (2012).

- Fundamentals of Econometrics*, Issue 5 . Jakarta: Four Salemba.
- Gupta, S., Pattillo, C., & Wagh, S. (2007). Making remittances work for Africa. *Finance and development*, 44(2) , 1-8.
- Jahan, S., Mahmud, AS, & Papageorgiou, C. (2014). What is Keynesian economics?. *International Monetary Fund*, 51 (3).
- Jawaid, ST, & Raza, SA (2012). Workers' remittances and economic growth in China and Korea: an empirical analysis. *Journal of Chinese Economic and Foreign Trade Studies*.
- Jongwanich, J., & Kohpaiboon, A. (2019). Workers' Remittances, Capital Inflows, and Economic Growth in Developing Asia and the Pacific. *Asian Economic Journal*, 33 (1), 39-65.
- Koser, K. (2007). *International migration, a very short introduction*. New York: Oxford University Press.
- Kurtishi-Kastrati, S. (2013). The effects of foreign direct investments for the host country's economy. *European Journal of Interdisciplinary Studies* , 5 (1), 26–38.
- Mankiw N, G. (2012). *Macroeconomics*, 8th Edition (8th ed.). *Worth Publisher*.
- Martinez, C., Cummings, M., & Vaaler, PM (2015). Economic informality and the venture funding impact of migrant remittances to developing countries. *Journal of Business Venturing*, 30(4), 526–545.
- Meyer, D., & Shera, A. (2017). The impact of remittances on economic growth: An econometric model. *Economia*, 18(2), 147-155.
- Nsiah, C., & Fayissa, B. (2013). Remittances and economic growth in Africa, Asia, and Latin American-Caribbean countries: a panel unit root and panel cointegration analysis. *Journal of Economics and Finance*, 37 (3), 424-441.
- Pradhan, G., Upadhyay, M., & Upadhyaya, K. (2008). Remittances and economic growth in developing countries. *The European Journal of Development Research*, 20(3), 497–506.
- Raghutla, C. (2020). The effect of trade openness on economic growth: Some empirical evidence from emerging market economies. *Journal of Public Affairs*, 20 (3), e2081.
- Rao, BB, & Hassan, GM (2011). A panel data analysis of the growth effects of remittances. *Economic modeling*, 28 (1-2), 701-709.
- Roquez - Diaz, A., & Escot, L. (2018). Relationship between trade openness and economic growth in Latin America: A causality analysis with heterogeneous panel data. *Review of development economics*, 22 (2), 658-684.
- Saadi, M. (2020). Remittance Inflows and Export Complexity: New Evidence from Developing and Emerging Countries. *The Journal of Development Studies*, 56 (12), 2266-2292.
- Senbeta, A. (2013). Remittances and the sources of growth. *Applied Economics Letters*, 20 (6), 572-580.
- Sutradhar, SR (2020). The impact of remittances on economic growth in Bangladesh, India, Pakistan and Sri Lanka. *International Journal of Economic Policy Studies*, 14 (1), 275-295.
- Tahir, M., Khan, I., & Shah, AM (2015). Foreign Remittances, FDI, Foreign Imports and Economic growth in Pakistan: A Time Series Analysis. *Arab Economics and Business Journal* , 82-89.
- Tahir, M., Estrada, MAR, & Afridi, MA (2019). Foreign inflows and economic growth: An empirical study of the

- SAARC region. *Economic Systems*, 43 (3-4), 100702.
- Taylor, JE, & Dyer, GA (2009). Migration and the sending economy: A disaggregated rural economy-wide analysis. *The Journal of Development Studies*, 45 (6), 966-989.
- Temiz, D., & Gokmen, A. (2014). FDI inflow as an international business operation by MNCs and economic growth: An empirical study on Turkey. *International Business Review*, 23, 145–154.
- The Global Knowledge Partnership on Migration and Development (2020, April). *Migration and Development Brief 33*, Phase II: COVID-19 Crisis Through a Migration Lens.
- Todaro, MP, & Smith, SC (2012). Economic development 11th edition. *Pearson*.
- Topxhiu, RM, & Krasniqi, FX (2017). The relevance of remittances in fostering economic growth in The West Balkan countries. *Economics*, 96 (2), 28–42.
- Trejos, S., & Barboza, G. (2015). Dynamic estimation of the relationship between trade openness and output growth in Asia. *Journal of Asian Economics*, 36, 110-125.
- Ulaan, B. (2015). Trade openness and economic growth: panel of evidence. *Applied Economics Letters*, 22(2), 163-167.
- Vaaler, PM (2013). Diaspora concentration and the venture investment impact of remittances. *Journal of International Management*, 19 (1), 26–46.
- Xinying, J., Oppong, S., & Vitenu-Sackey, PA (2019). The Impact of Personal Remittances, FDI and Exports on Economic Growth: Evidence from West Africa. *European Journal of Business and Management*, 11 (23), 24-32.
- Yoshino, N., Taghizadeh-Hesary, F., & Otsuka, M. (2020). Determinants of international remittance inflows in Asia-Pacific middle-income countries. *Economic Analysis and Policy*, 68, 29-43.