



HARNESSING THE FLOW: LEVERAGING REMITTANCES TO ATTRACT FDI TO ASIA AND AFRICA

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Abstract

This paper explores whether remittance contributes to Foreign Direct Investment (FDI). We use data collected by the World Bank for 89 countries on remittance. The sample included 66 developing and 23 developed countries from 2007 to 2021. We use a multi-linear regression model. We demonstrate that remittance is essential to FDI flow into a country. In particular, remittance has a more significant impact in attracting FDI flow into developing countries than developed countries. Additionally, remittance has a more substantial impact on attracting FDI inflow into African countries than Asian countries. The result supports our hypothesis that remittance affects FDI. The result has significant implications for policymakers and governments of these different regions.

Keywords

Remittance, Multi-Linear Regression Model, FDI Flow

1. Introduction

According to the World Bank, Foreign direct investment (FDI) is an investment in a business or corporation in another country to establish a lasting interest. Multinational companies often make a foreign direct investment, which can be made in various ways, such as acquiring controlling ownership of a foreign company, starting a new subsidiary in a foreign country, or entering into a joint venture with a foreign company. FDI can have several benefits for both the host and investor countries. For the host country, FDI can boost economic growth, create jobs, and increase tax revenue. For the investor country, FDI can provide access to new markets, lower costs, and risk diversification. FDI has also been shown to be a significant driver of global economic growth and development. For example, according to the United Nations Conference on Trade and Development (UNCTAD 2024), 2023 global FDI flows totaled \$1.37 trillion. The United States was the top recipient of FDI in 2023

Investing in multiple countries has contributed enormously to the rapid growth of many multinational corporations. FDI has grown significantly and has been a significant source of private capital and economic development in developed and developing countries since the early 1970s. Moreover, many countries have found ways to attract foreign investors. The factors that make a nation attractive to FDI have been studied extensively. Some of these factors are macroeconomic, such as GDP, Interest rate, and exchange rate (Islam & Beloucif 2023; Alam & Shah, 2013; Asamoah et al., 2016). Others are political institutions such as government regulations, stability, law, and others (Legese 2018; Biglaiser & Staats, 2010; Jensen, 2003; McLean et al., 2012; Sun, 2014).

While these factors are essential, empirical research has shown them to be key drivers of FDI. In this paper, we explore another factor: remittance. The International Monetary Fund (IMF) defines remittances as funds sent home by migrant workers to support their families and communities in their home countries. Remittance transactions occur through an intermediary such as Western Union or other money transfer agencies. The migrant in a particular country sends money to his family or someone in his home country through these intermediaries. Various studies have shown that remittance positively impacts the receiving country's economic development by increasing household income, which they spend on consumption, education, and healthcare and use to open small businesses or engage in entrepreneurial activities (Kousar et al., 2019; Eton & Nkamusiima, 2023; Ahmad et al., 2019). Money received through remittance is used to buy essential goods and services, finance education, pay for primary healthcare expenses, and use as capital for opening small businesses. All of these spending stimulates economic activities and contributes to the economic development of the receiving country.

In this paper, we use data collected by the World Bank for 89 countries on remittance. The sample included 25 African countries, 41 Asian countries, and 23 developed countries from 2007 to 2021. We demonstrate

that remittance is essential to FDI flow into a country. In particular, remittance has a more significant impact in attracting FDI flow into developing countries than developed countries. Additionally, remittance has a more substantial impact on attracting FDI inflow into African countries than Asian countries. The result has significant implications for policymakers and governments of these different regions.

We contribute to literature in two ways. First, we show that remittance attracts FDI into a country, and its impact differs depending on which continent. That is, remittance has a more significant effect in attracting FDI inflow into African countries than Asian countries. Second, we go beyond previous studies that examined political institutions, macroeconomic, and accounting variables. Instead, this paper shows that funds sent by migrant workers to their home country, remittance, can attract Foreign Direct Investment.

The paper is organized as follows: Section 2 outlines the literature review, Section 3 describes the research design, section 4 describes the sample selection, Section 5 reports the empirical results, and Section 6 discusses the policy implication and conclusion.

2. Literature review

Remittances and foreign direct investment (FDI) are two significant sources of external capital flows that play crucial roles in the economic development of recipient countries. Extensive research has explored the relationship between remittances and FDI, examining their individual and combined impacts on economic growth, poverty reduction, and other socioeconomic indicators. Some scholars argue that remittances and FDI are complementary sources of external finance, each playing a distinct role in economic development. Remittances are often seen as a more direct and immediate source of support for households and communities, while FDI has a longer-term impact on productivity and economic diversification.

Various researchers have shown that FDI significantly impacts economic growth in the short and long run and have identified several factors associated with higher FDI inflows, including market size, economic development, political stability, and trade openness (Burlea-Schiopoiu et al., 2023; Aust et al., 2020). Hoang et al. (2021) demonstrate that FDI can positively impact innovation through several channels, including technology transfer, knowledge spillovers, product quality improvement, and production processes. Studies have also shown that FDI can positively impact sustainable development through several channels, including job creation, economic growth, technology transfer, and environmental innovation (Ali et al., 2023; Loukil, 2016). FDI can help to transfer new technologies, create jobs, and boost economic growth in the digital economy. Khan et al. (2023) showed that FDI positively impacts employment in developing countries in the short and long run. The effect of FDI on employment is stronger in countries with more developed economies and better institutions. Majumder et al. (2020) find that FDI has played a very significant role in China's economic growth over the past few decades. FDI has helped to transfer new technologies, create new jobs, and boost economic growth in China.

A growing body of research explores the multifaceted impacts of remittances on developing countries. Naceur et al. (2020) demonstrate how remittances promote financial inclusion through expanded access, reduced costs, and enhanced literacy. Bajra, 2021 and Ratha, 2013 reveal remittances' potential to mitigate gender inequality via economic empowerment, increased bargaining power for women, and reduced dependence on men. Gupta et al. (2021) emphasizes remittances' crucial role in post-COVID-19 recovery by supporting household income, consumption, and investment. Agur et al. (2020) discuss how digital financial services facilitate remittance transfer, lowering costs and increasing accessibility. Nizam et al. (2024) shows remittances' ability to contribute to all Sustainable Development Goals (SDGs), particularly those focusing on poverty, health, education, and gender equality. Various other studies, such as (Ahmad et al. 2019; Saho et al. 2020), explore the link between remittances and social mobility, suggesting that remittances can promote upward mobility through increased access to education and healthcare, poverty reduction, and women's empowerment.

The relationship between remittances and foreign direct investment (FDI) in developing countries is a subject of increasing scholarly interest. Recent research highlights the intricate nature of the two. Studies such as Jushi et al. (2021) suggest a mutually reinforcing dynamic in most cases. Jushi et al. (2021) find that remittances and FDI are complementary in most cases. Song et al., 2021 and Abbas et al., 2017 demonstrate how remittances can attract FDI to developing countries by improving the macroeconomic environment, reducing investment costs, and providing access to new technologies. Several other studies have shown the potential for remittances to enhance the productivity of existing FDI by providing access to capital, enriching human capital, and stimulating broader economic growth, influencing the location of FDI in developing countries by making these countries more attractive to foreign investors (Bantimaroudi et al., 2023; Amponsah et al., 2020; Eggoh et al. 2019). The evidence on the interaction between remittances and FDI remains mixed, with studies providing varying results. More research is needed to fully understand the complex dynamics between these two sources of external finance. Thus, our focus in this paper is to examine how remittance affects FDI attraction into Asia and African countries.

3. Research Design

3.1. Hypothesis

While the focal point of most of the studies discussed above analyzes the effect of political and macroeconomic factors on Foreign Direct Investments, this study focuses on remittance. To examine the impact of remittance on Foreign Direct Investments, we investigate the following hypotheses.

Hypothesis 1: Remittance affects a country's ability to attract Foreign Direct Investments.

Hypothesis 2: Remittance differently impacts African and Asian countries' ability to attract Foreign Direct Investments.

3.2. Methodology

Drawing from various researchers that have investigated the impact of macroeconomic factors (Alam & Shah, 2013; Asamoah et al., 2016), political-institutional factors (Biglaiser & Staats, 2010; Jensen, 2003; McLean et al., 2012; Sun, 2014), and accounting factors (Nam & Sesay, 2020) on Foreign Direct Investment, we utilize some of the macroeconomic and political institutional factors as control variables to determine the effect of remittance on FDI. We use the following regression model:

$$FDI_t = \beta_0 + \beta_1 (GDP_{t-1}) + \beta_2 (GDPPerCapita_{t-1}) + \beta_3 (GDPGrowth_{t-1}) + \beta_4 (VOICE_{t-1}) + \beta_5 (STABILITY_{t-1}) + \beta_6 (GOVTSVS_{t-1}) + \beta_7 (GOVTREG_{t-1}) + \beta_8 (CORRUPT_{t-1}) + \beta_9 (\text{Key variable-Remittance}_{t-1}) + \epsilon_t$$

In this model, FDI is the logarithm of Foreign Direct Investment; GDP is the logarithm of the Gross Domestic Product of a country; GDPPerCapita is the country's GDP divided by its midyear population; GDP growth is the growth rate of GDP; VOICE is a measure of citizens participation in selecting their government as well as freedom of expression; STABILITY is a measure of the likelihood of political instability and politically-motivated violence; GOVTSVS is Government Services which is a measure of the quality of public and civil services; GOVTREG is Government Regulation which is the ability of a government to make and implement regulations that promote private sector development; CORRUPT is the extent to which power is exercised for private gain. These are all control variables similar to those in the previous literature.

The key variable is personal remittance from the World Bank database. See Table 1 for a more detailed description of the variables.

4. Data and sample selection

We use data collected by the World Bank from its various databases. The macroeconomic variables, such as GDP, are from the World Bank World Development Indicators (WDI) database. The political institution variables such as Voice, Corruption, Stability, Government Services, and Government regulation are from the World Bank Worldwide Governance indicator database. The key variables, remittance and FDI, are from the World Bank World Development indicators. The sample consists of 89 countries and includes 66 developing countries and 23 developed countries from 2007 to 2021. Within the developing countries are 25 African countries and 41 Asian countries.

This table describes the control and key variables used in the paper and the source of data for each variable. Source of data for the Macro-economic variables such as GDP, GDP Per Capita, and GDP growth rate are from the World Bank World Development Indicator (WDI) database. The source of data for the institutional variables such as Voice, Government Service, Government regulations, corruption, and stability is the World Bank World Governance Indicator (WGI). The variable remittance is from the World Bank World Development Indicator.

Variables	Measurement/definitions/Survey
Personal remittance	The International Monetary Fund (IMF) defines remittances as funds sent home by migrant workers to support their families and communities in their home countries. Remittance transactions occur through an intermediary such as Western Union or other money transfer agencies.
Gross Domestic Product (GDP)	GDP measures the monetary value of all the finished goods and services produced within a country in a specific period.
GDP Per Capita.	This is determined by the country's Gross Domestic Product divided by its midyear population.
GDP growth rate	The GDP growth rate determines the rate at which a country's economy grows. It is measured by comparing the country's GDP of the current year to the previous year's GDP.
Voice	This institutional variable measures "the perceptions of the extent to which a country's citizens can participate in selecting their government, as well as freedom of expression, freedom of association, and free media" (The World Bank). The degree of participation represents a key factor in attracting FDI. This variable is measured in units ranging from negative 2.5 (weak) to + 2.5 (strong)

Government services	This is an institutional variable that measures “the perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies” (The World Bank,). This variable is measured in units ranging from negative 2.5 (weak) to + 2.5 (strong)
Government Regulation	This is an institutional variable that measures “the perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development” (World Bank,). It also represents an investment climate factor that affects FDI. This variable is measured in units ranging from negative 2.5 (weak) to + 2.5 (strong)
Corruption	This is an institutional variable that measures the “perceptions of the extent to which power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests” (World Bank). It reflects corruption as perceived by businesses and entrepreneurs. This variable is measured in units ranging from negative 2.5 (weak) to + 2.5 (strong)
Stability	This is also an institutional variable. “Political Stability and Absence of Violence/Terrorism measures perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism”. (World Bank). The degree of a country’s stability represents an investment climate factor that affects FDI. This variable is measured in units ranging from negative 2.5 (weak) to + 2.5 (strong)

Table I: Description of the Variables and sources of data

5. Empirical results and analysis

5.1. Summary Statistics

Table II reports the summary statistics for all the variables used in this paper. There are 89 countries in our analysis, 66 of which are developing countries, and 23 are developed countries (see Appendix I for a list of all countries in our study). The total number of observations is 1244. Of these, 321 observations are from developed countries, and 923 are from developing countries.

This table provides summary statistics of all the variables used in this paper. Panel A consists of developing countries, while panel B consists of developed countries.

Panel A: Developing Countries

Key Variables	Mean	Standard Deviation	First quartile	Median	Third quartile
FDI	20.22	4.69	19.82	21	22.23
GDP	24.7	1.87	23.23	24.55	26
GDP Per Capita	2.27	4.69	0.49	2.87	4.76
GDP Growth rate	3.76	4.82	2.23	4.31	6.42
VOICE	-0.41	0.74	-1	-0.38	0.11
STABILITY	-0.47	0.85	-0.98	-0.46	0.1
GOVT Services	-0.28	0.64	-0.76	-0.34	0.13
GOVT Regulations	-0.25	0.64	-0.7	-0.31	0.12
CORRUPTION	-0.48	0.58	-0.92	-0.5	-0.15
Personal Remittance	5.27	7.13	0.63	2.45	7.45

N = 923

Panel B: Developed Countries

Key Variables	Mean	Standard Deviation	First quartile	Median	Third quartile
FDI	20.94	7.6	21.88	23.52	24.57
GDP	27.16	1.55	26.24	26.94	28.31
GDP Per Capita	0.47	3.25	-0.43	1.05	1.86
GDP Growth rate	1.24	3.45	0.25	1.73	2.79
VOICE	1.25	0.31	1.07	1.32	1.5
STABILITY	0.75	0.57	0.47	0.93	1.1
GOVT Services	1.48	0.44	1.27	1.59	1.78
GOVT Regulations	1.46	0.41	1.18	1.6	1.79
CORRUPTION	1.53	0.65	1.13	1.68	2.07
Personal Remittance	0.57	0.78	0.15	0.26	0.49

N = 321

Table II: Descriptive statistics of sample data for developing and developed countries

The mean of FDI is 20.22 for developing countries, and its standard deviation is 4.69. The mean of FDI is 20.94 for developed countries, and its standard deviation is 7.60. The mean of personal remittance for developing countries is 5.27, and its standard deviation is 7.13, while the mean of personal remittance for developed countries is 0.57, and its standard deviation is 0.78. These statistics show, as expected, that developing countries receive more personal remittance than developed countries.

This table provides summary statistics of all the variables used in this paper for African and Asia countries. Panel A comprises African countries, while panel B comprises Asian countries.

Panel A: Africa

Key Variables	Mean	Standard Deviation	First quartile	Median	Third quartile
FDI	19.07	4.99	19.20	20.29	21.13
GDP	23.88	1.44	23.08	23.79	24.90
GDP Per Capita	1.53	4.57	-0.12	1.97	3.64
GDP Growth rate	3.81	4.84	2.29	4.19	6.02
VOICE	-0.52	0.64	-1.04	-0.50	-0.14
STABILITY	-0.55	0.89	-1.17	-0.57	0.03
GOVT Services	-0.56	0.61	-1.00	-0.63	-0.35
GOVT Regulations	-0.55	0.60	-0.90	-0.59	-0.24
CORRUPTION	-0.53	0.59	-0.97	-0.54	-0.23
Personal Remittance	2.61	3.02	0.48	1.46	3.79

N = 349

Panel B: Asia

Key Variables	Mean	Standard Deviation	First quartile	Median	Third quartile
FDI	20.93	4.35	20.30	21.49	22.92
GDP	25.21	1.92	23.48	25.13	26.58
GDP Per Capita	2.72	4.71	1.01	3.45	5.27
GDP Growth rate	3.74	4.81	2.20	4.41	6.61
VOICE	-0.35	0.79	-0.96	-0.32	0.20
STABILITY	-0.41	0.82	-0.85	-0.38	0.14
GOVT Services	-0.11	0.59	-0.58	-0.11	0.20
GOVT Regulations	-0.07	0.60	-0.44	-0.13	0.31
CORRUPTION	-0.45	0.57	-0.89	-0.48	-0.10
Personal Remittance	6.89	8.33	0.82	3.49	9.84

N = 573

Table III: Descriptive statistics of sample data for Africa and Asia countries

Table III reports the summary statistics for all the variables used in this paper for African and Asia countries. Among the developing countries, there are 41 Asian countries and 25 African countries in our analysis. The total number of observations for Asian countries is 573, and 349 for African countries.

The mean of FDI is 20.93 for Asian countries, and its standard deviation is 4.35. The mean of FDI is 19.07 for African countries, and its standard deviation is 4.99. The mean of personal remittance for Asian countries is 6.89, and its standard deviation is 8.33, while the mean of personal remittance for African countries is 2.61, and its standard deviation is 3.02. This statistic shows that Asian countries receive more personal remittances than African countries.

5.2. Regression Analysis

Table IV reports the results of multi-linear regression models for developed and developing countries in the sample. The dependent variable, FDI, is the logarithm of Foreign Direct Investment. The regression model includes macroeconomic control variables (GDP, GDP per capita, GDP growth) and political institutions control variables (GOVTSVS, STABILITY, VOICE, GOVTREG, and CORRUPT). The sample consists of 89 countries, 23 developed and 66 developing countries. The FDI variable is from 2008 to 2021, and the others are from 2007 to 2020.

In Table four, we regress FDI on personal remittance and other control variables. The regression coefficient of personal remittance is significantly positive at 0.041 with a t-statistics of 1.75 for developing countries. This shows that when personal remittance increases, foreign direct investment increases. The effect is economically significant, too. For an increase of one standard deviation of personal remittance, foreign direct investment increases by 29.2%. The other control variables are generally consistent with previous results. For example, GDP is positively correlated with FDI. On the other hand, for developed countries, the regression coefficient of personal remittance is significantly negative at -1.157 with a t-statistic of -1.74.

This table shows the result of multi-linear regression for developed and developing countries. FDI is the logarithm of Foreign Direct Investment. Personal remittance is the Logarithm of Personal remittance. GDP is the logarithm of the Gross Domestic Product of a country; GDPPERCapita is the logarithm of the country's GDP divided by its midyear population; GDPGrowth is the growth rate of GDP; VOICE is a measure of citizens participation in selecting their government as well as freedom of expression; STABILITY is a measure of the likelihood of political instability and/or politically-motivated violence; GOVTSVS is a measure of the quality of public services and civil services; GOVTREG is the ability of a government to formulate and implement regulations that promote private sector development; CORRUPT is the extent to which power is exercised for private gain.

Dependent variable: FDI	Developing	Developed
Personal Remittance	0.041(1.75)**	-1.157(-1.74)**
GDP	0.634(6.19)***	1.072(3.17)***
GDP Per Capita	0.291(2.63)***	-2.093(-3.02)***
GDP Growth rate	-0.164(-1.52)	2.033(3.03)***
VOICE	-0.643(-2.16)**	-2.637(-1.20)
STABILITY	0.124(0.48)	1.538(1.46)
GOVT SVS	0.686(1.13)	0.832(0.32)
GOVT REG	0.598(1.09)	-0.790(-0.33)
CORRUPTION	0.199(0.35)	-2.558(-1.082)
Constant	4.517	-3.098
Observation	923	321
R ²	0.137	0.105

TABLE IV: FDI and Remittance for Developed and Developing Countries

We report the estimated coefficients from the regression model and the corresponding t-statistics in parentheses. **, *** Statistically significant at five percent one percent level respectively for a two tailed-test.

Table V reports the results of multi-linear regression models for Asia and African countries in the sample. The dependent variable, FDI, is the logarithm of Foreign Direct Investment. The regression model includes macroeconomic control variables (GDP, GDPPERCapita, GDPGrowth), and political institutions control variables (GOVTSVS, STABILITY, VOICE, GOVTREG, and CORRUPT). Within the 66 developing countries in the sample, there are 25 African countries and 41 Asian countries. The FDI variable is from 2008 to 2021, and the others are from 2007 to 2020.

This table shows the result of multi-linear regression for developed and developing countries. FDI is the logarithm of Foreign Direct Investment. Personal remittance is the Logarithm of Personal remittance. GDP is the logarithm of the Gross Domestic Product of a country; GDPPERCapita is the logarithm of the country's GDP divided by its midyear population; GDPGrowth is the growth rate of GDP; VOICE is a measure of citizens participation in selecting their government as well as freedom of expression; STABILITY is a measure of the likelihood of political instability and/or politically-motivated violence; GOVTSVS is a measure of the quality of public services and civil services; GOVTREG is the ability of a government to formulate and implement regulations that promote private sector development; CORRUPT is the extent to which power is exercised for private gain.

Dependent variable: FDI	Asia	Africa
Personal Remittance	0.061(2.32)**	0.189(1.92)**
GDP	0.873(6.92)***	0.117(0.54)
GDP Per Capita	0.110(0.85)	0.467(1.947)**
GDP Growth rate	-0.041(-0.32)	-0.25(-1.11)
VOICE	-0.734(-2.37)**	1.086(1.41)
STABILITY	0.990(3.42)***	-1.723(-3.25)***
GOVT SVS	0.570(0.75)	0.033(0.03)
GOVT REG	0.517(0.76)	0.439(0.43)
CORRUPTION	-0.079(-0.12)	1.145(.83)
Constant	-1.435	16.487
Observation	573	349
R ²	0.169	0.118

TABLE V: FDI and Remittance for Developed and Developing Countries

We report the estimated coefficients from the regression model and the corresponding z-z-statistics in parentheses. **, *** Statistically significant at five percent one percent level respectively for a two tailed-test

In Table V, we regress FDI on personal remittance and other control variables. The regression coefficient of personal remittance is significantly positive at 0.061 with a t-statistics of 2.32 for Asian countries. This shows that when personal remittance increases, foreign direct investment increases. The effect is economically significant, too. For an increase of one standard deviation of personal remittance, foreign direct investment increases by 50.8% for Asian countries. The other control variables are generally consistent with previous results. For example, GDP is positively correlated with FDI.

We regress FDI on personal remittance and other control variables for African countries. The regression coefficient of personal remittance is significantly positive at 0.189 with a t-statistics of 1.92 for African countries. This shows that when personal remittance increases, foreign direct investment increases. The effect is economically significant. For an increase of one standard deviation of personal remittance, foreign direct investment increases by 60.5% for African countries. The other control variables are generally consistent with previous results.

6. Conclusion and policy implications

In this paper, we study the impact of personal remittance on foreign direct investment from two perspectives. First, we examine the relationship between personal remittance and foreign direct investment in developed and developing countries. Second, we examine the relationship between personal remittance and foreign direct investment in African and Asian countries.

The results support our hypothesis that personal remittances are associated with FDI inflow into a country. The results reveal that FDI has a positive and significant relationship to personal remittance for developing countries. More significantly, the results show that remittance has a more substantial impact on attracting FDI inflow into African countries than Asian countries. The result has significant implications for policymakers and governments of these different regions. Policymakers should strive to create an environment that encourages personal remittance into their countries because remittances and FDI play significant roles in the economic development of recipient countries. They are both sources of external finance contributing to economic growth, poverty reduction, and improved livelihoods.

The result indicates that even though political institutions, macroeconomic, and accounting variables are key determinants of FDI, other factors, such as personal remittance, are also important in attracting foreign investors into a country.

References

- Abbas, F., Masood, A., & Sakhawat, A. (2017). What determine remittances to Pakistan? The role of macroeconomic, political and financial factors. *Journal of policy modeling*, 39(3), 519-531.
- Agur, I., Peria, S. M., & Rochon, C. (2020). Digital financial services and the pandemic: Opportunities and risks for emerging and developing economies. *International Monetary Fund Special Series on COVID-19, Transactions*, 1, 2-1.
- Ahmad, T. I., Shafiq, M. N., & Gillani, S. (2019). Foreign Remittances and Human Resource Development in Developing Countries. *IUB Journal of Social Sciences*, 1(1), 43-60.
- Alam, A., & Shah, S. Z. A. (2013). Determinants of foreign direct investment in OECD member countries. *Journal of Economic Studies*, 40(4), 515-527.
- Ali, U., Guo, Q., Nurgazina, Z., Sharif, A., Kartal, M. T., Depren, S. K., & Khan, A. (2023). Heterogeneous impact of industrialization, foreign direct investments, and technological innovation on carbon emissions intensity: Evidence from Kingdom of Saudi Arabia. *Applied Energy*, 336, 120804.
- Amponsah, W. A., Garcia-Fuentes, P. A., & Smalley, J. A. (2020). Remittances, market size, and foreign direct investment: a case of sub-Saharan Africa. *Journal of Economics and Finance*, 44, 238-257.
- Asamoah, M. E., Adjasi, C. K. D., & Alhassan, A. L. (2016). Macroeconomic uncertainty, foreign direct investment and institutional quality: Evidence from Sub-Saharan Africa. *Economic systems*, 40(4), 612-621.
- Aust, V., Morais, A. I., & Pinto, I. (2020). How does foreign direct investment contribute to Sustainable Development Goals? Evidence from African countries. *Journal of Cleaner Production*, 245, 118823.
- Bajra, U. Q. (2021). The interactive effects of remittances on economic growth and inequality in Western Balkan countries. *Journal of Business Economics and Management*, 22(3), 757-775.
- Bantimaroudi, P., Golitsis, P., & Mitreva, M. (2023). An empirical study of the relationship between Foreign Direct Investments, Remittances, Political Stability and Economic Growth in Greece. *Journal of Economics*, 8(1), 1-19.
- Biglaiser, G., & Staats, J. L. (2010). Do political institutions affect foreign direct investment? A survey of US corporations in Latin America. *Political Research Quarterly*, 63(3), 508-522.

- Burlea-Schiopoiu, A., Brostescu, S., & Popescu, L. (2023). The impact of foreign direct investment on the economic development of emerging countries of the European Union. *International Journal of Finance & Economics*, 28(2), 2148-2177.
- 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-
- Eton, M., & Nkamusiima, D. (2023). Access to finance and women entrepreneurship development in the Kigezi subregion, Uganda. *Journal of the International Council for Small Business*, 4(4), 317-329.
- Gupta, A., Zhu, H., Doan, M. K., Michuda, A., & Majumder, B. (2021). Economic impacts of the COVID-19 lockdown in a remittance-dependent region. *American Journal of Agricultural Economics*, 103(2), 466-485.
- HOANG, D. T., DO, A. D., & TRINH, M. V. (2021). Spillover effects of FDI on technology innovation of vietnamese enterprises. *The Journal of Asian Finance, Economics and Business*, 8(1), 655-663.
- Jensen, N. M. (2003). Democratic governance and multinational corporations: Political regimes and inflows of foreign direct investment. *International organization*, 57(03), 587-616.
- Islam, M. S., & Beloucif, A. (2023). Determinants of Foreign Direct Investment: A Systematic Review of the Empirical Studies. *Foreign Trade Review*, 00157325231158846.
- Jushi, E., Hysa, E., Cela, A., Panait, M., & Voica, M. C. (2021). Financing growth through remittances and foreign direct investment: Evidences from Balkan Countries. *Journal of Risk and Financial Management*, 14(3), 117.
- Khan, I., Xue, J., Zaman, S., & Mehmood, Z. (2023). Nexus between FDI, economic growth, industrialization, and employment opportunities: empirical evidence from Pakistan. *Journal of the Knowledge Economy*, 14(3), 3153-3175.
- Kousar, R., Rais, S. I., Mansoor, A., Zaman, K., Shah, S. T. H., & Ejaz, S. (2019). The impact of foreign remittances and financial development on poverty and income inequality in Pakistan: Evidence from ARDL-bounds testing approach. *The Journal of Asian Finance, Economics and Business*, 6(1), 71-81.
- Legese, H. (2018). Determinants of foreign direct investment in Ethiopia: Systematic review. *International Journal of Business and Economic Development*, 6(3).
- Loukil, K. (2016). Foreign direct investment and technological innovation in developing countries. *Oradea Journal of Business and Economics*, 1(2), 31-40.
- Majumder, S. C., & Rahman, M. H. (2020). Impact of foreign direct investment on economic growth of China after economic reform. *Journal of Entrepreneurship, Business and Economics*, 8(2), 120-153.
- McLean, R. D., Zhang, T., & Zhao, M. (2012). Why does the law matter? Investor protection and its effects on investment, finance, and growth. *The Journal of Finance*, 67(1), 313-350.
- Naceur, M. S. B., Chami, M. R., & Trabelsi, M. (2020). *Do remittances enhance financial inclusion in LMICs and in fragile states?*. International Monetary Fund.
- Nam, J., Sesay, J. B., Wynne, K., & Zhang, G. (2020). Financial efficiency and accounting quality: The impact of institutional micro-factors on FDI. *Journal of Policy Modeling*, 42(2), 451-465.
- Nizam, K., Jehandad, A. M., & Nisa, A. (2024). REMITTANCE INFLOWS AND POVERTY IN PAKISTAN: By Using ARDL Model. *International Journal of Contemporary Issues in Social Sciences.... ISSN (E) 2959-2461 (P) 2959-3808*, 3(1), 1089-1101.
- Ratha, D. (2013). The impact of remittances on economic growth and poverty reduction. *Policy Brief*, 8(1), 1-13.
- Sahoo, M., & Sethi, N. (2020). Does remittance inflow promote human development in sub-Saharan Africa? An empirical insight. *Global Economy Journal*, 20(04), 1-23.
- Song, Y., Paramati, S. R., Ummalla, M., Zakari, A., & Kummitha, H. R. (2021). The effect of remittances and FDI inflows on income distribution in developing economies. *Economic Analysis and Policy*, 72, 255-267.
- Sun, F. (2014). The Dual Political Effects of Foreign Direct Investment in Developing Countries. *The Journal of Developing Areas*, 48(1), 107-125.
- United Nations Conference on Trade and Development (UNCTAD), Jan 17, 2024.
<https://unctad.org/news/global-foreign-direct-investment-grew-3-2023-recession-fears-eased>

Appendix 1

List of countries in the sample

Developing Countries			Developed countries
Algeria	Armenia	Panama	Australia
Angola	Azerbaijan	Philippines	Belgium
Botswana	Bangladesh	Poland	Canada
Burkina Faso	Cambodia	Romania	Denmark
Cabo Verde	China	Russian Federation	Finland
Cameroon	Georgia	Saudi Arabia	France
Egypt, Arab Rep.	India	Serbia	Germany
Ethiopia	Indonesia	Slovak Republic	Greece
Kenya	Iraq	Slovenia	Hong Kong SAR, China
Madagascar	Jordan	Sri Lanka	Ireland
Malawi	Kazakhstan	Tajikistan	Israel
Mauritania	Korea, Rep.	Thailand	Italy
Mauritius	Kyrgyz Republic	Turkey	Japan
Morocco	Lebanon	Ukraine	Luxembourg
Mozambique	Lithuania	Uzbekistan	Malta
Namibia	Malaysia	Vietnam	Netherlands
Nigeria	Maldives		New Zealand
Seychelles	Mexico		Norway
Sierra Leone	Moldova		Portugal
Sudan	Mongolia		Spain
Tanzania	Montenegro		Sweden
Tunisia	Nepal		United Kingdom
Uganda	Nicaragua		United States
Zambia	North Macedonia		
Zimbabwe	Pakistan		