Do Remittances Affect Foreign Direct Investment? A Comprehensive Analysis of BRICS-T Nations

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Summary: This study investigates the impact of remittances and the International Property Rights Index on foreign direct investment (FDI) in BRICS-T countries during the period from 2007 to 2023. FDI is employed as the dependent variable, while the independent variables comprise remittances, trade openness, financial development, government consumption, and the International Property Rights Index. The long-term results indicate that remittances exert a positive influence on FDI over the long run. However, contrary to expectations, the International Property Rights Index demonstrates a negative long-term effect on FDI. Although sound governance and strong institutional frameworks are generally considered essential for attracting FDI and strengthening the relationship between FDI and remittances, this pattern does not appear to apply to BRICS-T countries. In the short run, by contrast, the International Property Rights Index has a positive effect on FDI, implying that high governance quality tends to attract FDI over shorter time horizons.

Keywords: Foreign direct investment, Remittance, International property rights index, BRICS-T
JEL: C33, F21, F24

Foreign Direct Investment (FDI) and remittances are two critical components of the global economy that significantly influence national development (IMF 2009). FDI refers to an investment made with the aim of acquiring a lasting interest in, or effective control over, an enterprise located in an economy other than that of the investor. FDI net inflows represent the value of inward direct investments made by non-resident investors in the reporting economy, including reinvested earnings and intra-company loans, net of capital repatriation and loan repayments. Conversely, FDI net outflows reflect the value of outward direct investments carried out by residents of the reporting economy in external economies. These also include reinvested earnings and intra-company loans, adjusted for capital repatriation receipts and loan repayments (UN 2024). It must be emphasized that FDI is not just about capital flows; it also includes technology transfer, know-how, and management skills. The integration of these

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elements is instrumental in the development of the host country (Oliveira, Portela, and Forte 2021). According to the United Nations Conference on Trade and Development (UNCTAD), global FDI flows will hover around 1.33 trillion US dollars by the end of 2023. While the share of BRICS-T nations in FDI flows was about 6% back in 2020, by 2023, it has surged to 21% (UNCTAD 2024). In total, BRICS-T countries cover about 30% of the total land in the world, and they are home to about 45% of the world's population. This really underlines how important BRICS-T countries are with respect to the global economy and FDI flows.

This study seeks to address the question of whether remittances influence FDI in BRICS-T countries. Given the increasing significance and growing volume of remittance inflows to these economies, the paper examines the impact of remittances on FDI in both the short and long term. Remittances affect household consumption in recipient countries by raising disposable income levels (Garcia-Fuentes et al. 2016). The volume of foreign remittances is largely influenced by the networks of migrants abroad, which may also facilitate other forms of international capital flows, particularly FDI (Shafqat et al. 2017). Empirical evidence suggests a positive relationship between remittances and FDI (Garcia-Fuentes and Kennedy 2011; Garcia-Fuentes et al. 2016; Shafqat et al. 2017; Amponsah and Garcia-Fuentes 2020). However, these findings are based on countries outside the BRICS-T context. Therefore, this study presents a novel analysis of remittances and related control variables specifically for BRICS-T countries. It hypothesizes a long-term positive relationship between remittances and FDI. Furthermore, the impact of the IPRI on FDI is also tested. A long-run negative relation between the index and FDI is found. However, in the short-run period, this relation turns out to be positive.

The following section discusses the relationship between remittances and FDI. Section 2 presents a review of the literature on the determinants of FDI. Section 3 outlines the data and methodology employed in the analysis. Empirical findings are reported in Section 4. Finally, Section 5 provides the conclusion of the study.

1. The Relation Between Remittances and FDIs

As indicated by the World Bank, remittance flows to low- and middle-income countries in 2023 registered an estimated $656 billion. This figure represents a substantial augmentation from the robust growth experienced during the period 2021-2022. In 2023, remittances overtook FDI and official development assistance. FDI has increasingly been featured as a key element in economic development strategies in developing countries, which are collectively grouped as BRICS-T. A good appreciation of the context of FDI in BRICS-T countries involves reflecting on the macroeconomic variables that drive these investment flows. Recent empirical research often underestimates the critical role that certain variables play in creating a foundation for host countries to attract foreign capital. Within the BRICS group, China stands out as the leading recipient of FDI inflows, significantly surpassing its counterparts, followed by Brazil, Russia, India, and South Africa. For example, between 2000 and 2020, China accounted for approximately 70% of total FDI inflows to BRICS countries, reflecting a robust and favourable economic environment for foreign investment. (Maryam and Mittal 2020).

In low-income countries, remittances—amounting to nearly 4% of Gross Domestic Product (GDP)—represent substantial financial inflows relative to GDP levels and play a crucial role in addressing gaps caused by insufficient financial resources (IMF 2024). In this context, examining the prevailing economic determinants in BRICS-T countries may help identify patterns in how remittances influence economic growth. The findings of this study suggest that remittance inflows to BRICS-T countries have a positive and statistically significant impact on the economic performance of host economies, both in general models and in country-specific analyses (Ashiru, Oladele, and Bosun-Fakunle 2023). This positive relation indicates that remittances act not only as a source of financial inflow but also as a stabilizing force that can improve local consumption and investment levels. A more intriguing aspect of remittances is that they function not solely as a financial subsidy, but also play a pivotal role in curbing inflation and reducing poverty levels, thereby inducing spillover effects that extend to the broader economic landscape (Noorzai 2024). Such synergy between remittances and FDI is also brought out by research that has looked into the determinants of FDI inflows in BRICS countries. The findings indicate that the investment climate in these countries has been enhanced by their pursuit of remittances. This pursuit has effectively transformed these countries into attractive destinations for foreign investors, who are seeking stable and growth-oriented environments in which to allocate their financial resources (Kishor and Singh 2015).

Effective governance and institutional factors drive the volume of FDI inflows into the BRICS-T countries, thereby affecting the FDI-remittances nexus. Policy incentives for foreign investors are of vital importance in setting up an environment suitable for FDI (Triarchi and Marangos 2024). The promotion of FDI by governments may be facilitated through various means. One such strategy entails the provision of financial incentives, the establishment of suitable infrastructural frameworks, and the streamlining of legal provisions to minimize bureaucratic impediments (Khatir and Güvenek 2021). At the strategic level, this does not only attract foreign investors (pull factor) but also allows such benefits to permeate the local economy hemispherically and, in this manner, increase remittance flows. Consequently, expatriates benefit from job opportunities and economic stability. Conversely, the presence of inadequate governance can act as a deterrent to investment. The presence of poor governance has the ability to repel investment. Corruption and political instability indices have been employed in numerous studies, and it has been posited that inadequate governance practices compel firms to demand high return rates as they contemplate risky markets. Consequently, conducting business operations becomes more arduous (Linhartova and Vavrova 2017). Hence, among the BRICS-T countries, the quality of institutions and governance structures is a key determinant of FDI inflows. Moreover, mediation analyses reveal that institutional quality promotes FDI attraction through enhancing trade openness and expediting industrial structure development, which eventually takes a toll on a better environment for remittances as economic activities expand and job creation rises (Chen and Jiang 2022). For the sake of conciseness, the prevailing influences of governance, institutional quality, and economic outcomes must be prioritized by BRICS-T countries' regimes and governing bodies, thereby ensuring effective FDI and remittance flows. It has been widely accepted that three external

factors of economic growth in developing countries are FDI, workers' remittances, and foreign aid for development (Bettin, Massidda, and Piras 2024). In this respect, the future trends of FDI and remittances in BRICS-T countries carry significant policy implications. In light of the evolving global economic landscape, which is predominantly driven by technological advancements and shifting trade relations, strategic frameworks employed by BRICS-T countries must be adapted to more effectively leverage the potential offered by FDI and remittances. The ongoing interaction of FDI, economic growth, and trade openness serves as a bellwether for these countries to front-burner the issue of concomitantly creating a favorable investment climate that may further improve their economic resilience (Malik and Sah 2024**)**. Moreover, it is imperative to prioritize the establishment of a political environment characterized by stability and effective governance. This initiative will serve to bolster investor confidence, thereby facilitating more robust remittance flows. In the context of mounting globalization-related challenges, the ability of nations to adapt and respond to these emerging patterns will exert a substantial influence on their economic trajectories in the ensuing years (Cutcu and Keser 2024).

2. Literature Review

There are quite a few studies that examine the determinants of FDI. The literature shows that there are studies that examine how remittances are affected by FDI (Zhang and Liu 2022) or the impact of remittances on economic growth and inflation (Petkovski, Kjosevski, and Simeonovski 2024; Tchekoumi and Nya 2023; Bucevska 2022; Driffield and Jones 2013; Fayissa and Nsiah 2010). Although these studies cover the relationship between FDI and remittance from this aspect, only a few studies have looked at the effects of remittances on FDI. One such study is that of Pablo A. Garcia-Fuentes and P. Lynn Kennedy (2011), which examines the impact of remittances on Foreign Direct Investment (FDI) in Latin America and the Caribbean (LAC). The study finds a positive effect of remittances on net FDI inflows. Another study conducted by Garcia-Fuentes, Pablo A., P. Lynn Kennedy, and Gustavo F. C. Ferreira (2016) attempt to identify how remittances affect U.S. FDI flows to LAC. They find that remittances indeed have a positive and significant impact on U.S. FDI flows. William A. Amponsah and Pablo A. Garcia-Fuentes (2020) utilize a dataset that included 85 developing countries to assess the impact of remittances via per capita GDP on the inflows of FDI to Africa's Sub-Saharan region and how this region performs in comparison to other developing countries. The directions for the positive effect of remittances on FDI are contingent upon the per capita GDP level of the host country. According to Muhammad Mobeen Shafqat et al. (2017), long-run relations confirm a significant and positive relationship between remittances and FDI, with causality tests revealing mutual, side-by-side effects between the two variables. In contrast, Hem C. Basnet and Kamal P. Upadhyaya (2014) conducted their estimations using data from a sample of 35 middle-income countries across Latin America, the Asia-Pacific region, and Africa. The estimated results do not show that remittances have a significant role in the explanation of the cross-country variation in FDI. Mercy Laita Palamuleni (2018) tests the long-run relation between the inflows of remittances and FDI for 47 developing countries over the period 1980-2014. The author finds reasonably robust evidence that suggests the causal relation to be

running in both directions. It is implied that remittance flows are both a cause as well as an effect of FDI. On average, she identifies a positive long-term relationship between remittances and FDI in developing nations, though the results vary by region and country. Remittances act as a deterrent to FDI inflows in Asian and Latin American-Caribbean countries. Out-migration of secondary and tertiary educated individuals reduces FDI inflows. While migration of these groups increases remittances, it may lower the likelihood of foreign firms investing in such regions. Furthermore, remittances and FDI are complementary in Latin American-Caribbean countries but substitutive in Asian countries. Unlike the existing literature, this paper provides a detailed analysis, supported by empirical evidence, to examine whether FDI attracts remittances in BRICS-T countries and identifies the underlying economic factors driving this dynamic.

Bibhu Prasad Sahoo, Dhananjay Ashri, and Ankita Gulati (2022) assess the influence of economic indicators (GDP, inflation, infrastructure, and trade openness), political stability in the host country, and human capital development on FDI in emerging economies, focusing on BRICS and MINT nations. Findings show that GDP is the primary driver of FDI in BRICS countries, with other economic, political, and human capital factors having only minor effects. Kunofiwa Tsaurai (2022) finds that trade openness, economic growth, and exchange rates positively and significantly impact FDI inflows into BRICS countries. In contrast, the study observes a significant negative effect of inflation, financial development, and human capital development on FDI. The findings suggest that human capital development reduces FDI in BRICS countries, contrasting with the existing literature (Freckleton, Wright, and Craigwell 2012; Dunning 1988), which argues that highly developed human capital enables local firms to efficiently adopt new foreign technologies.

While there are no studies specifically examining the relationship between the International Property Rights Index (IPRI) and FDI, related research has explored the link between Intellectual Property Rights (IPR) and FDI. The IPRI stands out as the only index exclusively focused on evaluating both intellectual and physical property rights. In its 2024 edition, the index covers 125 countries, assessing property rights frameworks that influence 98% of global GDP and 93% of the world's population. The average IPRI score in 2024 is 5.18, highlighting variations in protection levels with implications for economic performance and social equity. Countries with high IPRI scores are generally attractive to multinational corporations seeking secure investment options outside their home countries. However, poor IPR protection could keep away foreign investors due to the high risks of intellectual property theft and scanty legal recourse available. Therefore, the observed positive correlation suggests that enhancing intellectual property protection could potentially stimulate an increase in FDI, which, in turn, could contribute to economic growth and innovation in the host country. (Braga and Fink 1998; Nunnenkamp and Spatz 2004). Studies have shown that IPR protection in a country directly affects the quantity and nature of FDIs. For example, research states that U.S. direct investments are much higher in countries with proper IPR systems because such protection creates an attractive investment climate. Moreover, it has been found that the favorable economic environment and acceptance of FDI in host countries also heavily influence the decisions of multinational corporations (Khan and Samad 2010). Hitoshi Tanaka and Tatsuro Iwaisako (2014) also analyze the relation between

IPR protection and FDI. They also found a positive relationship between IPR protection and innovation, in addition to FDI. Pravin Jadhav and Vijaya Katti (2012) examine how institutional and political factors influence the attraction of FDI in the BRICS countries and compare the significance of these factors in drawing FDI. The study considers various institutional and political determinants, such as Macroeconomic Stability (Inflation Rate), Political Stability/No Violence, Government Effectiveness, Regulatory Quality, Control of Corruption, Voice and Accountability, and Rule of Law. The findings indicate that Government Effectiveness and Regulatory Quality have a positive relationship with FDI inflows in BRICS nations. In contrast, Political Stability, Voice and Accountability, and Control of Corruption negatively impact FDI inflows, suggesting that these factors are less significant in attracting FDI to these economies.

Overall, studies employing various methodologies have found no consensus regarding the impact of economic and institutional variables. This lack of agreement is attributed to differences in countries' development levels and the unique characteristics of the analyzed periods.

3. Data and Methodology

3.1. Data

This paper investigates the role of remittances and the international property rights index on foreign direct investment. This relation is analyzed for BRICS-T countries. The data period is between 2007 and 2023. Foreign direct investment (FDI) is used as a dependent variable. The independent variables used in the analyses are remittances (REM) and the international property rights index (SCORE). The control variables are trade openness (TRADE), financial development (FD), and government consumption (GOVCON). The score variable is taken from the International Property Rights Index website (Property Rights Alliance 2024). Other variables are obtained from the World Bank's World Development Indicators databank (World Bank 2024).

The definition of the dependent and independent variables is as follows:

Table 1 Variables in Research

Dependent Variable	**Definition**	**Source**
Foreign direct investment, net inflows % of GDP (FDI)	The net of new investments entering minus any disinvestments (% of GDP).	World Bank
Independent Variable	**Definition**	**Source**
Remittances, received % of GDP (REM)	Personal transfers cover all types of current transfers, either in cash or goods sent or received by resident households from non-resident households, meaning any regular transfers between individuals who live in different countries.	World Bank
Control Variables	**Definition**	**Source**
Trade openness % of GDP (TRADE)	The total value of goods and services exported and imported (% of GDP).	World Bank
Financial development % of GDP (FD)	Domestic credit to the private sector (% of GDP).	World Bank

Government consumption % of GDP (GOVCON)	General government final consumption expenditure encompasses all current spending by the government on goods and services, which includes employee compensation (% of GDP).	World Bank
International Property Rights Index (score)	The International Property Rights Index is the primary publication of the Property Rights Alliance. It assesses the key components of a robust property rights system, including the legal and political environment, physical property rights, and intellectual property rights.	Property Rights Alliance

3.2. Methodology

The short-term and long-term impacts of REM and SCORE variables are analyzed using Pooled Mean Group-Autoregressive Distributed Lag (PMG-ARDL) model developed by M. Hashem Pesaran, Yongcheol Shin, and Ron P. Smith (1999). In contemporary econometric research on the long-run and short-run relations and dynamics between various economic variables over time, the PMG-ARDL model has become indispensable. The most important feature of this model is that it does not require the researcher to pretest for unit roots, but rather it can estimate relations in situations where the data are of various orders of integration and potential short/long-run relations may exist. Suppose we have data over multiple time periods, represented by t=1, 2, …, T, and multiple groups, represented by i=1, 2, …, N. j is the number of lags. We want to estimate an Autoregressive Distributed Lag (ARDL) model where the dependent variable depends on its own past values up to p lags (autoregressive term), and the explanatory variables depend on their past values up to q lags (distributed lag terms) across each group. This structure is known as an ARDL (p, q, q, ..., q) model, with the same lag length q applied to each explanatory variable. According to Pesaran, Shin, and Smith (1999), the ARDL (p, q) model is described using the following equation:

$$y_{it} = \sum_{j=1}^{\mathrm{p}} \gamma_{ij}\, y_{i,t-j} + \sum_{j=0}^{q} \delta_{ij} x_{i,t-j} + \mu_{i+}\varepsilon_{it} \qquad (1)$$

Here, $x_{i,t}(kx1)$ is a vector containing k explanatory variables (or regressors) for group i, which are REM, TRADE, FD, GOVCON, and SCORE. y_{it} is the dependent variable, which is fdi. The term μ_i represents fixed effects, which account for unobserved factors specific to each group and time period that might influence the dependent variable. The coefficients γ_{ij} are scalar values, which apply to the lagged values of the dependent variable, indicating the effect of past values on the current outcome. $\delta_{ij}$is a vector of coefficients (of size k×1) that applies to the explanatory variables, capturing their influence on the dependent variable in each group. ε_{it} is the error term.

According to Pesaran, Shin, and Smith (1999), it is helpful to rewrite (1) using the following reparameterized form:

$$\Delta y_{it} = \Phi_i(y_{i,t-1}) + \beta_i' x_{it} + \sum_{j=1}^{p-1} \gamma_{ij}^{*} \Delta y_{i,t-j} + \sum_{j=0}^{q-1} \delta_{ij}^{*} \Delta x_{i,t-j} + \mu_{i+} + \varepsilon_{it} \qquad (2)$$

i=1,2,…,N and t=1,2,…,T, where $\Phi_i = -\left(1 - \sum_{j=1}^{p} \gamma_{ij}\right), \beta_i = \sum_{j=0}^{q} \delta_{ij},$

$$\gamma_{ij}^{*} = -\sum_{m=j+1}^{p} \gamma_{im,} \quad \text{j=1,2,..., p-1 and}$$
$$\delta_{ij}^{*} = -\sum_{m=j+1}^{q} \delta_{im,} \quad \text{j=1,2,…,q-1} \qquad (3)$$

4. Empirical Results

Table 2 shows the summary statistics of the variables used in this study. BRICS-T countries have an average FDI of 2.15%. According to UNCTAD (2024), global FDI flows are expected to remain at approximately $1.33 trillion by the end of 2023. So, the remarkable FDI percentage in the descriptive statistics is feasible. Moreover, remittances inflows to the BRICS-T countries are 0.74 percent of their GDP. A remarkable ratio in the FD variable is found with a mean value of 82.15%. IPRI score has an average of 5.33 for the sample countries. This index takes values between 0 and 10. Therefore, the BRICS-T countries have a mid-range IPRI score above the 2024 overall average score of 5.18, which is a score of 125 countries.

Table 2 Descriptive Statistics

Variable	N	mean	sd	p25	p50	p75
FDI	102	2.15	1.37	1.32	1.93	2.99
REM	102	0.74	1.15	0.17	0.24	0.38
TRADE	102	46.63	11.64	38.82	48.15	53.77
FD	96	82.15	41.60	50.99	63.13	122.10
GOVCON	101	16.13	3.17	14.02	17.07	18.82
SCORE	102	5.33	0.74	4.89	5.34	5.60

Source: Authors' calculations.

Table 3 shows the results of the Breusch-Pagan, Pesaran scaled LM, Bias-Corrected scaled LM and Pesaran CD cross sectional dependence test. Based on the results of the cross-sectional test, the null hypothesis stating that there is no horizontal cross-section dependence has been rejected. Therefore, it has been concluded that all series included in the analysis exhibit cross-sectional dependence.

Table 3 Cross-Sectional Dependence Test Results

	Breusch-Pagan LM	Pesaran scaled LM	Bias-corrected scaled LM	Pesaran CD
FDI	39.316	4.440	4.252	3.009
	(0.000)	(0.000)	(0.000)	(0.003)
REM	41.65	4.866	4.678	0.553
	(0.000)	(0.000)	(0.000)	(0.580)
TRADE	52.027	6.760	6.573	1.121
	(0.000)	(0.000)	(0.000)	(0.262)
FD	99.608	15.447	15.260	4.415
	(0.000)	(0.000)	(0.000)	(0.000)
GOVCON	55.836	7.456	7.268	6.328
	(0.000)	(0.000)	(0.000)	(0.000)

SCORE	87.230 (0.000)	13.187 (0.000)	12.999 (0.000)	8.071 (0.000)

Source: Authors' calculations.

Pesaran and Yamagata heterogeneity test statistics are presented in Table 4. The null hypothesis for this test posits that the slope coefficients are homogeneous. For both the delta and adjusted delta tests, the null hypothesis is rejected, indicating that the coefficients are heterogeneous. Pesaran, Shin, and Smith (1997, 1999) introduced two new methods for estimating dynamic panels with varying slope coefficients across cross-sections: the mean-group estimator (MG) and the pooled mean-group estimator (PMG). Normally, MG estimators are used when researchers have panel data and want to include some sort of individual unit heterogeneity into the model. MG estimator estimates N separate regressions for each individual unit; thus, it captures differentiated dynamics that may drive each individual unit's behavior, thereby providing a more individual-based understanding of the data. These separate coefficients from individual regressions are then put together to produce an overall estimate of how the group behaves collectively. This is highly relevant where individual estimators do not have much cross-correlation and provide some bias; thus, it balances the bias found from different individual estimators and eases the way to generalize from individual estimators to the group's behavior. More flexibility of the MG estimator allows for addressing different problems, including those that are complex and heterogeneous in terms of relations between variables, and hence makes it a generally applicable econometric analysis tool (Chudik and Pesaran 2019). In contrast to the Mean-Group estimator, the PMG approach provides an interim process that tries to balance the advantages of pooling with the need to cater to group or individual heterogeneity. The PMG approach is based on a belief that in any group dynamics, in the long run, the coefficients have to be the same, but in the short-run, these coefficients can differ, thereby accommodating a more nuanced understanding of both long-term and short-term dynamics within the data. Such a method is quite useful because it helps pool information among different groups whilst being useful. After all, it helps pool information among different groups while being sensitive enough to feel any diversified short-term fluctuation that may exist. By locking up all long-run coefficients to be equal, the PMG approach helps cut down the degree of inefficiency lost by estimating separate kinds of regressions. In addition, the PMG estimator is based on the means estimated error-correction coefficients, so it is helpful in examining evolving dynamic relations over time and interested researchers who want to learn how variables interrelate in a panel context. Hence, the PMG estimator emerges as a useful alternative, specifically when long-run relations are supposed to be uniform, although allowing for short-term divergences (Pesaran, Shin, and Smith 1999).

Table 4 Pesaran and Yamagata Heterogeneity Test Results

	Test	**Test statistics**	**P-Value**
Perasan& Yamagata	Δ	2.677	0.007
	Δadj	3.584	0.000

Source: Authors' calculations.

To identify the appropriate model for the analysis, a Hausman test was conducted comparing the PMG and MG approaches. The result of the Hausman test did not reject the null hypothesis, which had a p-value of 0.84. Since the null hypothesis suggests that the long-term coefficients are homogeneous, the PMG approach was selected for the analysis.

Table 5 presents the results of the ARDL-PMG model. The PMG estimator reveals a statistically significant and negative error correction coefficient (ECT), indicating the presence of a long-term relationship among the variables. The ECT typically falls between -2 and 0. In this case, the error correction coefficient is -0.911, suggesting that approximately 91% of any deviation in the model is corrected in the following period, guiding the system toward long-term equilibrium after a shock.

Table 5 ARDL-PMG Model Results

Dependent Variable (FDI)	
Long-Run Results	
REM	4.488 (1.819)***
TRADE	0.010 (0.013)
FD	0.057 (0.01)***
GOVCON	0.628 (0.130)***
SCORE	-0.978 (0.224)***
REM*SCORE	-0.188 (0.414)
Short-Run Results	
ECT	-0.911 (0.246)**
REM	-49.545 (41.683)
TRADE	0.018 (0.064)
FD	-0.014 (0.075)
GOVCON	-0.315 (0.240)
SCORE	0.946 (0.408)**
REM*SCORE	-0.523 (0.907)
Constant	-1.469 (2.218)

Notes: ***, **, and * represent a significance of 1%, 5%, and 10%, correspondingly.

Source: Authors' calculations.

In the first part of the table, long-run results are reported. According to the test results, as remittances flow to BRICS-T countries increase, the FDI inflows to these countries increase in the long-run. This result aligns with the hypothesis and is

consistent with the long-run findings of Garcia-Fuentes and Kennedy (2011), Garcia-Fuentes, Kennedy, and Ferreira (2016), Shafqat et al. (2017), Palamuleni (2018), and Amponsah and Garcia-Fuentes (2020), albeit for different groups of countries, regarding the impact of remittances on FDI. The findings of this research highlight an additional significant role of remittances in fostering economic development in developing countries. Moreover, a surprising negative relationship between the score variable and FDI is observed in the long run. The IPRI is unexpectedly found to negatively affect FDI. As is well established, effective governance and robust institutional frameworks are crucial for enhancing FDI inflows to BRICS-T countries and positively shaping the FDI-remittance relationship.

Policy incentives for foreign investors play an essential role in establishing a conducive FDI environment (Triarchi and Marangos 2024). However, this idea does not hold true for the BRICS-T countries. Dang and Nguyen (2021) find that, in developing countries, political stability—closely tied to property rights protection—has a negative relationship with FDI inflows. They recommend that developing countries implement adaptable policies tailored to each stage of the economic cycle to effectively attract FDI. In the short run, however, the SCORE variable positively influences FDI, indicating that high governance quality attracts FDI in the short term. When an interaction term is created by multiplying REM with SCORE, no significant result is found. This suggests that in countries with high Score values, remittances do not impact FDI, and the level of governance quality does not affect the relationship between remittances and FDI. Finally, increased financial development is associated with a higher ratio of FDI inflows.

Short-run results of the analysis are shown in the second part of Table 4. Only the score variable has a positive impact on FDI in the short run, according to ARDL-PMG results.

5. Conclusions

This study examines the impact of remittances on FDI inflows to BRICS-T countries. In the long run, remittances, financial development, government consumption, and the International Property Rights Index are found to significantly affect FDI. Consistent with expectations, a positive relationship between remittances and FDI is observed. These long-run findings align with those of Garcia-Fuentes and Kennedy (2011), Garcia-Fuentes, Kennedy, and Ferreira (2016), Shafqat et al. (2017), Palamuleni (2018), and Amponsah and Garcia-Fuentes (2020), albeit for different groups of countries, regarding the impact of remittances on FDI. The findings in this research underscore an additional significant way that remittances can contribute to economic development in developing countries. Surprisingly, the International Property Rights Index is found to negatively affect FDI. While effective governance and strong institutional frameworks are generally considered crucial for increasing FDI inflows to BRICS-T countries and positively shaping the FDI-remittance link, this notion does not hold true for BRICS-T countries. Policy incentives for foreign investors are vital in creating a favorable FDI environment, as noted by Triarchi and Marangos (2024). However, Dang and Nguyen (2021) observe that, in developing countries, political stability—associated with property rights protection—has a negative relationship with FDI inflows. They

recommend that developing countries adopt adaptable policies tailored to each stage of the economic cycle to effectively attract FDI. In the short run, the SCORE variable positively influences FDI, indicating that high governance quality attracts FDI in the short term. However, when an interaction term is created by multiplying REM with SCORE, no significant result is observed. This suggests that in countries with high governance quality (high score), remittances do not impact FDI.

In summary, the impact of remittances, government consumption, financial development, and international property rights index on FDIs represents a complex dynamic that significantly shapes the economic growth of BRICS-T countries. The long-run relationship between remittances and FDI in these countries serves as a critical factor influencing their economic trajectory. Remittances, as a key source of household income, enhance economic sustainability and reduce poverty, while FDI drives economic growth through technology transfer and capital inflows. The interaction between these two financial mechanisms fosters a conducive environment for economic expansion. Therefore, strategic policies should be developed to harness the synergies between remittances and FDI. By aligning these financial flows, BRICS-T countries can strengthen economic resilience and promote sustainable development within an increasingly interconnected global economy.

While FDI is influenced by various factors, this paper focuses specifically on the impact of remittances on FDI, which constitutes a limitation of the study. Another limitation is the analysis being restricted to data from BRICS-T countries, making the findings non-generalizable to all countries. Given the increasing share of BRICS-T countries in global FDI each year, this study should be revisited in the future using similar and/or different variables for both short- and long-term analyses. Such future research would allow for a comparison between the findings obtained and the results currently available.

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