JOURNAL OF ECONOMIC DEVELOPMENT
Volume 50, Number 2, June 2025

FINANCIAL INTEGRATION IN THE BRI CONTEXT: INSTITUTIONAL DEVELOPMENT AND DEBT EXPOSURE EFFECTS ON FDI

DIMITRIOS KARKANIS [a] AND MARIE-NOËLLE DUQUENNE [b]

[a] *University of Macedonia, Greece*
[b] *University of Thessaly, Greece*

The European Union and the BRIC countries systematically invest in the further development of economic relations with countries along the Belt and Road Initiative corridors. Upgrading these "arteries" of trade and financial flows comes along with geopolitical upheavals in the context of ensuring the countries' energy security, which came to the fore during the war in Ukraine. This study employs the PPML estimator in order to assess the factors lying behind outward FDI flows from i) the European Union countries and ii) the Russia-India-China group towards the BRI countries during the 2009-2019 period, focusing on the nexus between FDI, institutional quality and debt exposure. Robust empirical evidence confirms complementarity effects between bilateral trade and FDI when controlling for the EU as source economies. The findings indicate "remedial" effects in terms of institutional development, as political instability is compensated with higher government effectiveness, in order for countries to attract foreign investment.

Keywords: FDI, BRIC, Belt and Road Initiative, Institutional Development
JEL Classification: C23, F15, O43

1. INTRODUCTION

The optimal utilization of domestic natural resources in order to sustain economic growth, as well as to enhance energy and food security, has always been a strategic goal of all countries worldwide. Especially in the case of the world's major economies, this strategy becomes even more evident by channelling foreign investment towards less developed countries with abundant natural resources. Attracting FDI also constitutes a strategy for least developed countries (LDCs) or developing countries in order to upgrade outdated or substandard infrastructure, making foreign investment a widely

accepted strategy for enhancing economic cooperation between states. The BRI initiative is considered to be the largest infrastructure investment project in history (Williams et al., 2019), focusing to a large extent on the Eurasian "corridor" (Garlick, 2020), even if is not the only investment project along the Eurasian axis. The Global Gateway, set out by the EU, also focuses on major investments in energy and transport infrastructure, among others (European Commission, 2021). Even though the incentives for economic penetration in the Eurasian corridor countries may not differ much, however the strategies implemented, as well as the framework for cooperation and, ultimately, interdependence, may vary between different investing partners.

In recent years, developing and, in particular, transition economies have emerged both as FDI source and host countries (Bulatov, 2017). Some of the major destinations of FDI from BRIC countries during the pre-global financial crisis period (2002–2009) are tax heavens, as evidenced by the data on cumulative stock of outward investment approvals (Andreff, 2015). China's foreign policy is firmly oriented towards enhancing energy security to sustain economic growth, thus strengthening ties with Middle East and Central Asia countries (Iran, Saudi Arabia, Kazakhstan), which however are not necessarily accompanied by Chinese direct investment in local energy sectors (Garlick and Havlová, 2020). Parepa (2020) stresses China's strategic autonomy policies applied in the BRI context, in order to foster asymmetric partnerships and maximize its influence over the Central and Southeast Asia routes. Garlick (2020) refers to the incentives that may be lying behind the establishment of certain "corridors" under the BRI context, such as the China - Pakistan Economic Corridor (CPEC), aiming at maintaining a "geopolitical counterweight" to the neighbouring India.

Being primarily a domestic demand-driven economy, India has been through several institutional changes in order to gradually enter the global marketplace. By April 2022, the Indian government has signed thirteen free trade agreements and several memoranda of understanding (IBEF, 2022). Significant increase in outward foreign investment from India has been recorded since the mid-2000s. FDI is mainly directed towards Asian and, to a lesser extent, African countries, while by the end of the previous decade, there exists a clear convergence between Indian outward FDI in manufacturing and services sector (Reji, 2019). Indian outward FDI from high-tech industry is mainly directed to developed countries, while FDI in medium-tech industry is directed to developing ones.

Since Russia's transition to a market economy, the country's outward FDI flows exceed inward FDI flows (Kalotay, 2008). According to 2014 data, about 90% of outward FDI is directed to offshore entities in the Caribbean (Bank of Russia, 2015). The recent decline in Russian outward FDI stock from 2014 onwards can be largely justified by the sanctions imposed on Russian Federation by the Western countries, the relatively low prices mainly for hydrocarbons, the collapse of the ruble exchange rate and, lately, the pandemic crisis from 2020 onwards (Kuznetsov, 2021). The literature refers to the potential role of Russian SMEs – not being representing political entities or state-owned enterprises – in the restoration of diplomatic and economic relations between Russia and the EU after the "sanctions war", suggesting Kaliningrad as a pilot

zone for the EU-Russia cooperation (Liuhto, 2015). It becomes evident that the invasion in Ukraine in 2022 has further complicated dialogue efforts to resolve bilateral disputes, by prolonging the period of energy insecurity in the European Union, but also by complicating the management of food insecurity in some of the most populous least developed countries worldwide.

The paper is divided into five sections. Section 2 focuses on the literature related to some of the major determinants of FDI. Section 3 presents the formulation of the hypotheses and the methodological framework. Section 4 outlines the paper's main empirical findings and Section 5 summarizes the robustness checks. Finally, Section 6 concludes the research.

2. LITERATURE REVIEW

Foreign Direct Investment expresses the internationalization of production, being one of the three components of international economic interdependence, along with trade in goods, services and financial assets (Jansen and Stokman, 2004). The benefits of FDI in the recipient (host) countries can be extended to the introduction of new production processes, as well as to the upgrading the local workforce's skills (Alfaro et al., 2004). FDI is considered to facilitate knowledge and technological spillovers in host countries, while accelerating their integration into international trade (OECD, 2002; Alfaro et al., 2004). Moreover, the choice of FDI to represent international financial flows is evidenced by the fact that the share of FDI in GDP is more important for developing countries compared to the developed ones, at the same time being a comparatively less volatile index of financial integration (Albuquerque, 2003).

Bénassy-Quéré et al. (2005) evaluate the effect of institutional quality on FDI stock in developing countries, by employing the OECD database. Chenaf-Nicet and Rougier (2016) apply the gravity model methodology in order to examine the effect of macroeconomic volatility in the source countries on FDI flows from the Euro-Mediterranean countries towards the MENA region. Crescenzi et al. (2021) try to capture the impact of national and sub-national Investment Promotion Agencies on FDI inflows in Europe. The literature also refers to a complementary relationship between trade and investment (Brainard, 1997; Pantulu and Poon, 2003), considering the latter as an alternative channel for multinational companies to penetrate new consumer markets (Cadestin et al., 2018).

FDI is often directed to less developed or developing countries with an abundance of natural resources – such as several African or Eurasian countries – focusing mainly on energy resources (OECD, 2002). A major strategic goal of the EU and Chinese FDI towards the countries along the Eurasian axis is the acquisition of energy resources. Garlick and Havlová (2020) refer to the EU approach of strengthening bilateral relations with Saudi Arabia and Iran, in order to secure oil and gas reserves. From the Chinese

side, Zhao et al. (2020) suggest that China's outward FDI, which is oriented to the energy sector can enhance the country's energy security, the effect being more pronounced when foreign investment is more oriented towards developing countries, rather than the developed ones. In the case of India, Nepal et al. (2021) find a strong energy-output-FDI long-run nexus, considering energy-efficient techniques adopted through foreign investment essential for reducing carbon emissions. In the BRI context, Lu et al. (2021) suggest a unidirectional causal relationship from energy consumption towards foreign direct investment.

The level of corruption in host countries is often employed as a determinant of FDI inflows (see, for example, Wei, 2000), but its impact seems rather ambiguous. Part of the literature suggests that corruption substitutes the institutional inefficiency of host countries, in order to promote and accelerate foreign investment (the "grease the wheels" hypothesis), thus capturing a positive relationship between corruption and FDI (Barassi and Zhou, 2012; Subasat and Bellos, 2013). Zander (2021) reports on complex country-specific effects of corruption on FDI, by the use of relevant data from the World Governance Indicators database of the World Bank, highlighting a negative impact on foreign investment, on the occasion of the Panama papers revelation. Bénassy-Quéré et al. (2005) indicate the positive effect of government efficiency on FDI attraction, when studying the role of institutional quality on FDI, by making use of a set of 52 host countries.

The literature has already confirmed an enhancing effect of lower debt levels on the countries' economic growth path (Krugman, 1988; Reinhart et al., 2012). The fiscal implications imposed by the governments in order to service debt acts as a repulsive force to multinational enterprises (MNEs), which seek safer environments to invest (Reinhart, 2012). Tanna and Li (2018) suggest that the FDI-induced growth effect is dependent on the external debt constraint. They identify a threshold of external debt of 61-69%, as a GDP percentage, under which foreign direct investment enhances economic growth. As for the link between external debt accumulation and FDI in Sub-Saharan Africa, Azolibe (2022) reports on a negative relationship between external debt and FDI inflows, which turns to positive when external debt interacts with corporate tax, infrastructure, economic growth and military expenditure proxies.

3. MODEL

In our methodological approach, data on inward FDI stock (value) derive from the CDI Survey of the International Monetary Fund. The aim is to assess in each case the factors lying behind the "cumulative trace" of past FDI flows (stock) during the 2009-2019 period, whether they come from the EU-27 members or the Russia-India-China group, which is hereinafter referred as the RIC countries. The aggregate sample includes observations on FDI stock a) regardless of the FDI-source economy, b) the second sample is limited to the EU-27 members as source countries,

while c) the third is limited to FDI from the RIC group towards the BRI countries. Four research hypotheses are formulated here, in order to examine if they are valid for RIC and EU countries as FDI source economies.

Hypothesis 1. Bilateral trade between host and source economies is complementary to foreign investment.

Hypothesis 2. The BRI countries' financial integration process comes along with an FDI-energy supply tradeoff between host and source economies.

Hypothesis 3. Institutional quality in host economies exerts a positive effect on FDI.

Hypothesis 4. The BRI countries' debt exposure discourages FDI.

The sample of host countries refers to the majority of the countries included in the seven BRI corridors, namely i) Bangladesh - China - India - Myanmar, ii) China - Central West Asia, iii) China - Indochina Peninsula, iv) China - Mongolia - Russian Federation, v) China - Pakistan, vi) New Eurasian Land Bridge and the vii) 21st-C Maritime Silk Road corridor. The full sample of host countries is provided in Appendix A. The period under study refers to the years between 2009 and 2019, which is further delimited to the most recent period between 2013 and 2019, due to the limited availability of data derived from the Heritage Foundation.

The PPML estimator is considered appropriate in order to examine the determinants of FDI according to the relevant literature (Sosa Andrés et al., 2013; Cieślik and Ghodsi, 2021), even if the share of zero FDI observations is large (Yotov et al., 2016), but also to account for heteroscedasticity in the error term (Santos Silva and Tenreyro, 2006). Especially in the cases of zero FDI values, we employ the $\ln(\alpha + FDI)$ form of the dependent variable, which allows its logarithmic form by setting $a = 1$ (Bénassy-Quéré et al., 2005). The PPML estimator is considered appropriate to estimate theory-consistent general equilibrium effects of trade policies (Larch and Yotov, 2016).

Exporter-time and importer-time fixed effects aim to control for any unobservable multilateral resistances, while pair fixed effects are introduced in order to account for endogeneity of trade policy variables (Anderson and van Wincoop, 2003; Baier and Bergstrand, 2007; Yotov et al., 2016). The inclusion of observations related to inward FDI stock from EU-27 members towards host countries belonging to the BRI corridors that are also EU-27 members (e.g. Czechia, Poland) was deemed necessary in order to further control for multilateral resistance effects. We take into account eventual deterrent effects of intra-EU past capital investment flows on FDI towards the rest of the BRI countries, which account for the majority of the host countries in the sample.

Some of the most common time-invariant covariates are introduced in the model (Equation 1), in order to proxy for the bilateral trade cost term. The variable $dist_{hs}$ refers to the natural logarithm of bilateral distance between FDI host country (h) and FDI source country (s), while $contig_{hs}$ acts as a dummy variable to capture the common border effect. Data for both variables derive from the CEPII database (Mayer and Zignago, 2011, Table 1). Apart from the geographic determinants, time-variant

proxies reflecting the business environment in BRI countries are included in the equation, such as the Business Freedom Index ($bsfree_{ht}$) and the corporate tax rate ($corptax_{ht}$), in order to further control for foreign investment costs. Estimations for both indexes derive from the Heritage Foundation database.

$$bilateral\ trade\ costs\ = f(dist_{hs}, contig_{hs}, bsfree_{ht}, corptax_{ht}). \quad (1)$$

Both economic "masses" for FDI-host and source economies, y_{ht} and y_{st}, respectively, are expressed here in US dollars at current prices (UNCTAD). Coefficients referring to the sum of the countries' economic sizes (Equation 2) are calculated when taking into account for country-time and country-pair fixed effects, as for example in Cieślik and Ghodsi (2021).

$$economic\ size\ = f(y_{ht}, y_{st}, (y_{ht} + y_{st})). \quad (2)$$

The following set of variables is employed to capture any complementarity effects between foreign investment and trade flows (Equation 3), imp_{hst} standing for FDI-host country's imports (value) from FDI-source country, while $flexp_{hst}$ referring to the FDI-host country's fuel exports (value) to FDI-source country. Especially for the latter variable, the aim is, in addition, to assess the economic-energy dependency interplay between FDI partners. The trade openness variable $tradop_{ht}$ is a common proxy in order to capture trade integration effects, and, finally, the wto_{hst} dummy controls for the impact of partners' bilateral WTO membership on FDI.

$$trade\ integration\ = f(imp_{hst}, wto_{hst}, tradop_{ht}, flexp_{hst}). \quad (3)$$

The set of the six World Governance Indicators (WGI) is also introduced here (Equation 4) in order to control for host countries' institutional quality effects on foreign investment. The World Bank's measurements assess the level of freedom of the Press and free expression of citizens (Voice and Accountability, vac_{ht}), political stability and absence of violence (pst_{ht}), government effectiveness (gef_{ht}), the level of regulatory quality (req_{ht}), rule of law (law_{ht}) and corruption levels (cor_{ht}). Typically, their corresponding scores range between -2.5 and 2.5.

$$institutional\ quality\ = f(vac_{ht}, pst_{ht}, gef_{ht}, req_{ht}, law_{ht}, cor_{ht}). \quad (4)$$

Finally, we introduce several host-specific variables reflecting the levels of the BRI countries' exposure to public ($pdebt_{ht}$) and, especially, external debt ($exdebt_{ht}$). Relevant data on the share of host countries' public debt-to-GDP ratio are available from the Heritage Foundation database (Equation 5), while data on external debt stocks (% of GNI) derive from the World Bank (World Development Indicators). The whole set of data sources is further explained in Table 1.

$$debt\ exposure\ =\ f(pdebt_{ht}, exdebt_{ht}). \quad (5)$$

Table 1. Variable Definitions and Data Sources

Variable	Definition	Source	Mean	Std. Dev.	Min	Max
FDI_{in}^{stock}	(log) Inward FDI stock by host & source country	IMF CDIS	217.7	2526.2	0	183275.9
$dist_{hs}$	(log) Bilateral distance	CEPII	7114.6	4456.9	47.8	19644.6
$contig_{hs}$	Common border	CEPII	0	0.2	0	1
y_{ht}	(log) GDP (h), billions of constant (2015) US dollars	UNCTAD	212.9	396.8	1.3	2891.6
y_{st}	(log) GDP (s), billions of constant (2015) US dollars	UNCTAD	298.7	1027.9	0.03	14342.9
imp_{hst}	(log) (h) imports from (s), millions of current US dollars	UNCTAD	343.8	2147.3	0	81867.7
wto_{hst}	Dummy variable (0,1) for both WTO members	WTO	0.7	0.5	0	1
$tradop_{ht}$	Sum of exports and imports (% of GDP)	UNCTAD	91.3	40.6	27.4	211.2
$flexp_{hst}$	(log) (h) fuel exports to (s), millions of current US dollars	UNCTAD	100.3	1107.8	0	73233.5
vac_{ht}	Voice & Accountability (h)	WGI	-0.4	0.9	-2.2	1.6
pst_{ht}	Political Stability (h)	WGI	-0.3	0.9	-2.8	1.6
gef_{ht}	Governm. Effectiveness (h)	WGI	0.0	0.7	-1.8	1.9
cor_{ht}	Control of Corruption (h)	WGI	-0.3	0.8	-1.7	2.4
req_{ht}	Regulatory quality (h)	WGI	0.0	0.8	-2.2	2.1
law_{ht}	Rule of Law (h)	WGI	-0.2	0.7	-1.8	2.0
$bsfree_{ht}$	Business Freedom Index (h)	Heritage F.	67.2	11.9	20.0	99.9
$corptax_{ht}$	Corporate tax rate (h)	Heritage F.	19.2	9.3	0.0	45.0
$pdebt_{ht}$	Public debt (% of GDP) (h)	Heritage F.	45.4	25.3	1.6	139.7
$exdebt_{ht}$	External debt stocks (% of GNI) (h)	World Bank	6.4	3.6	-1.7	15.6

Note: Authors' elaboration.

The methodological choice of the log-log form is a common practice in econometric models that examine the link between FDI and other factors (Bénassy-Quéré et al., 2005; Arif-Ur-Rahman and Inaba, 2020; Nepal et al., 2021). The generalized form of the equation to be estimated is as follows:

$$FDI_{in}^{stock} = \beta_0 + \beta_1 dist_{hs} + \beta_2 contig_{hs} + \beta_3 y_{ht} + \beta_4 y_{st} + \beta_5 imp_{hst} + \beta_6 wto_{hst} + \beta_7 tradop_{ht} + \beta_8 flexp_{hst} + \beta_9 vac_{ht} + \beta_{10} pst_{ht} + \beta_{11} gef_{ht} + \beta_{12} req_{ht} + \beta_{13} law_{ht} + \beta_{14} cor_{ht} + \beta_{15} bsfree_{ht} + \beta_{16} corptax_{ht} + \beta_{17} pdebt_{ht} + \beta_{18} exdebt_{ht} + \mu_{hs} + \mu_{ht} + \mu_{st} + \xi_{hst} \quad (6)$$

Controlling for multilateral resistance implies the estimation of FDI host-time and FDI source-time fixed effects (Head and Mayer, 2014; Yotov et al., 2016). Pair fixed effects are also taken into account in the models, as they are considered to carry systematic information about trade costs (Egger and Nigai, 2015). In Equation 6, we also included country-pair (μ_{hs}) and country-time (μ_{ht} and μ_{st}) fixed effects, while ξ_{hst} being the robust error term. Summary statistics with regard to our dependent and explanatory variables are reported in Table 1.

The methodological inclusion of Russian Federation, India, and China as the second group of FDI-source countries can be justified by the fact that all three belong to the developing economies' group, based on the UN classification. They are also geographically located – mainly or entirely – in the Asian part of the BRI corridors and, finally, they belong to the BRICS group. At the same time, including these economies in a single sample facilitates obtaining statistically significant results, which would be less feasible if we would examine their outward FDI orientation separately.

4. EMPIRICAL RESULTS

Our findings confirm the first hypothesis, namely the complementarity relationship between FDI and bilateral trade in the context of the BRI countries as FDI-host economies (Tables 2-7), but this is not always confirmed for the RICs as FDI-source partners (Tables 3 and 4, 6 and 7). In this case, the coefficients remain positive, even though insignificant in most models. And while foreign investment is mainly directed to the most open BRI economies (aggregate model), robust estimations on the trade openness coefficients (Table 4) show that this is not the case for EU or RIC foreign investment to the BRI. With regard to the hypothesis of an FDI-energy supply tradeoff, the results are largely statistically insignificant for the $flexp_{hst}$ coefficients. It could be argued that, at least for the entire period (2009-2019), this tradeoff does not exist for EU source partners, to the extent that EU foreign investment seems to be mainly oriented towards non-fuel exporter BRI countries.

As for the WTO effect, it seems that the context of economic interdependence is gradually formed regardless of whether FDI recipients are WTO members or merely WTO observers. The geopolitical importance of the BRI corridors is what attracts the investment interest of major economies such as the EU and RIC countries, without being

so important whether source countries are already WTO members. It should be noted that, apart from the Russian Federation's WTO accession in 2012, all other FDI-source countries under study are already WTO members prior to 2009. It could be inferred that the Russian Federation's late entry certainly biases our estimates on the impact of FDI-host countries' WTO accession on FDI, at least for the 2009-19 period (Tables 2-4).

Table 2. PPML Models on Amount of FDI (stock): 2009-2019

Dep. variable: FDI_{in}^{stock}	Aggregate	EU	RIC
Bilateral distance	-0.383*** (37.78)	-0.181*** (9.62)	-0.737*** (10.92)
Common border	-0.248*** (11.15)	-0.171*** (6.08)	0.198*** (3.23)
(log) Host country's GDP	0.190*** (24.13)	0.214*** (16.15)	0.185*** (5.07)
(log) Source country's GDP	0.183*** (32.02)	0.111*** (9.78)	0.312*** (6.41)
(log) Host country's imports (b)	0.164*** (41.64)	0.152*** (13.67)	0.082*** (2.91)
Both WTO members	0.066*** (3.26)	-0.124*** (3.43)	0.084 (1.38)
Trade openness (h)	0.001*** (2.95)	0.001** (1.93)	-0.000 (0.42)
(log) Host country's fuel exports (b)	0.020*** (9.90)	0.009*** (3.21)	0.003 (0.56)
Voice & Accountability (h)	0.516*** (35.16)	0.646*** (29.88)	0.387*** (7.40)
Political Stability (h)	0.042*** (3.43)	0.063*** (3.94)	0.213*** (5.36)
Governm. effectiveness (h)	0.151*** (4.60)	0.320*** (7.85)	-0.012 (0.11)
Regulatory quality (h)	0.862*** (29.20)	0.665*** (17.42)	1.010*** (9.04)
Rule of Law (h)	-0.882*** (23.15)	-1.041 (21.58)	-1.102*** (8.67)
Control of Corruption (h)	-0.606*** (17.38)	-0.431*** (10.35)	-0.370*** (3.58)
External debt stocks (h)	-0.038*** (12.79)	-0.047*** (12.35)	-0.031*** (3.54)
Constant	-3.142*** (30.62)	-3.318*** (22.35)	-0.999** (2.08)
Observations	90127	12612	1722
Adjusted R-squared	0.476	0.558	0.429
AIC	171389.4	44003.2	7262.319
BIC	171540	44122.28	7349.539
Hausman test	0.000***	0.000***	0.000***
Fixed effects	No	No	No

Notes: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.
Source: Authors' calculations. (h) stands for host countries, (b) stands for bilateral trade.

Table 3. PPML Models on Amount of FDI (stock): Bilateral & Year FE, 2009-19

Dep. variable: FDI_{in}^{stock}	Aggregate	EU	RIC
(log) Host country's GDP	0.113*** (2.99)	0.195*** (3.66)	-0.057 (0.48)
(log) Source country's GDP	0.154*** (3.52)	0.377*** (4.52)	0.292** (2.25)
(log) Host country's imports (b)	0.012*** (2.76)	0.024** (2.05)	0.003 (0.40)
Both WTO members	-0.074** (2.40)	-0.062 (1.59)	-0.040 (0.48)
Trade openness (h)	0.003*** (4.89)	0.001 (1.36)	0.003 (1.34)
(log) Host country's fuel exports (b)	0.003 (1.56)	-0.004 (1.51)	0.012 (1.00)
Voice & Accountability (h)	0.109*** (2.50)	0.035 (0.54)	0.208 (1.27)
Political Stability (h)	0.223*** (10.58)	0.151*** (6.50)	0.290*** (3.10)
Governm. effectiveness (h)	-0.107** (2.23)	-0.112** (1.97)	-0.452** (2.24)
Regulatory quality (h)	0.490*** (7.59)	0.306*** (4.34)	0.815*** (3.19)
Rule of Law (h)	-0.226*** (4.62)	-0.088 (1.46)	-0.457** (1.96)
Control of Corruption (h)	-0.070* (1.79)	-0.012 (0.25)	-0.344** (2.25)
External debt stocks (h)	0.200*** (6.86)	0.204*** (5.39)	0.152 (1.24)
Constant	-5.495*** (6.65)	-4.939*** (4.62)	-4.527* (1.73)
Observations	20492	6529	1189
Adjusted R-squared	0.883	0.912	0.809
AIC	59778.56	21683.35	4071.048
BIC	59960.9	21839.39	4187.908
Hausman test	0.000***	0.000***	0.000***
Year FE	Yes	Yes	Yes
Bilateral FE	Yes	Yes	Yes

Notes: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.
Source: Authors' calculations. (h) stands for host countries, (b) stands for bilateral trade.

Table 4. PPML Models on Amount of FDI: Country-time & Country-pair FE, 2009-19

Dep. variable: FDI_{in}^{stock}	Aggregate	EU	RIC
Bilateral distance	1.309*** (16.50)	-0.391*** (3.65)	-1.088*** (15.20)
Common border		0.349*** (2.78)	1.071*** (12.74)
(log) Host country's GDP	0.113*** (2.99)	0.190** (2.41)	0.636*** (8.61)
(log) Source country's GDP	0.154*** (3.52)	0.804*** (19.64)	-0.292*** (2.76)
(log) Host country's imports (b)	0.012*** (2.76)	0.005 (0.95)	0.021 (1.16)
Both WTO members	-0.074** (2.40)	1.561*** (9.76)	-0.084 (0.56)
Trade openness (h)	0.003*** (4.89)	-0.013*** (5.81)	-0.004*** (2.62)
(log) Host country's fuel exports (b)	0.003 (1.56)	-0.003** (1.93)	0.008 (0.89)
Voice & Accountability (h)	0.109*** (2.50)	-0.284 (1.19)	-0.621*** (11.97)
Political Stability (h)	0.223*** (10.58)	0.426*** (2.62)	0.523*** (7.50)
Governm. effectiveness (h)	-0.107** (2.23)	-0.247 (0.41)	2.301*** (10.60)
Regulatory quality (h)	0.490*** (7.59)	1.720*** (8.69)	0.442*** (3.96)
Rule of Law (h)	-0.226*** (4.62)	0.664 (0.68)	-2.511*** (7.67)
Control of Corruption (h)	-0.070* (1.79)	-1.327*** (2.80)	-0.039 (0.25)
External debt stocks (h)	0.200*** (6.86)	-0.013 (0.24)	0.141*** (7.74)
Constant	-16.33*** (18.80)	-5.482*** (4.48)	5.794*** (4.15)
Observations	20492	6220	1071
Adjusted R-squared	0.883	0.953	0.924
AIC	59778.56	21553.29	3602.621
BIC	59960.9	25762.99	4055.469
Hausman test	0.000***	0.000***	0.000***
Year FE	Yes	Yes	Yes
Bilateral FE	Yes	Yes	Yes

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.
Source: Authors' calculations. (h) stands for host countries, (b) stands for bilateral trade.

Table 5. PPML Models on Amount of FDI Reported by Host Country: 2013-19

Dep. variable: FDI_{in}^{stock}	Aggregate	EU	RIC
(log) Host country's imports (b)	0.279*** (95.32)	0.271*** (50.38)	0.245*** (15.71)
Voice & Accountability (h)	0.717*** (50.81)	0.722*** (35.64)	0.518*** (10.81)
Political Stability (h)	0.054*** (3.33)	0.018 (0.89)	0.201*** (3.63)
Governm. effectiveness (h)	0.209*** (6.06)	0.128*** (2.73)	-0.203* (1.87)
Control of Corruption (h)	-0.887*** (30.57)	-0.763*** (20.50)	-0.534*** (5.66)
Business Freedom Index (h)	0.021*** (20.47)	0.018*** (12.99)	0.017*** (4.46)
Corporate tax rate (h)	0.005*** (4.37)	0.006*** (3.40)	0.010*** (2.91)
Public debt (h)	-0.005*** (13.76)	-0.004*** (8.70)	-0.005*** (3.91)
Constant	-4.131*** (45.12)	-3.561*** (24.86)	-3.503*** (8.33)
AIC	125690.1	30856.01	4885.6
BIC	125770.7	30919.32	4930.096
Observations	57549	8386	1037
Adjusted R-squared	0.445	0.546	0.330

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.
Source: Authors' calculations. (h) stands for host countries, (b) stands for bilateral trade.

The fourth hypothesis is also confirmed in the BRI context. Higher public debt exposure threatens macroeconomic and, subsequently, political stability in FDI recipient countries with a clear strategic orientation to attract foreign investment. The lower the FDI-source countries' public debt, as a percentage of national GDP, the higher the inward FDI intensity, and this is confirmed by the corresponding negative coefficients presented in Tables 5-7. BRI countries' high debt exposure acts indeed as a deterrent to attracting foreign investment from both the EU and RIC countries, based on the assumption of the beneficial role of macroeconomic stability in FDI attraction (OECD, 2002). The need to attract foreign investment becomes more imperative when FDI-host countries remain exposed to high external debt. Robust coefficient signs become positive in all three models (aggregate, EU, and RIC models), suggesting that the higher the external debt of the FDI-host countries, all others remain constant, the more pronounced the FDI from EU and RIC to the BRI countries (Tables 3-4).

Table 6. PPML Models on Amount of FDI: Country-time & Country-pair FE, 2013-19

Dep. variable: FDI_{in}^{stock}	Aggregate	EU	RIC
(log) Host country's imports (b)	0.009** (2.45)	0.054*** (3.27)	0.018 (0.22)
Voice & Accountability (h)	-2.254*** (12.97)	0.728*** (3.44)	-1.670*** (14.91)
Political Stability (h)	0.817*** (6.25)	-0.447*** (3.10)	-0.218* (1.75)
Governm. effectiveness (h)	4.040*** (17.85)	0.500*** (3.60)	4.882*** (18.72)
Control of Corruption (h)	0.225 (0.68)	-0.644*** (3.66)	-1.563*** (10.03)
Business Freedom Index (h)	-0.187*** (16.84)	0.031*** (7.88)	-0.104*** (31.77)
Corporate tax rate (h)	0.114*** (10.32)	0.023*** (3.71)	0.022*** (3.51)
Public debt (h)	-0.005*** (4.38)	-0.022*** (18.53)	-0.030*** (10.07)
Constant	7.531*** (8.91)	-1.245*** (2.94)	4.649*** (6.01)
Observations	12345	4172	672
Adjusted R-squared	0.949	0.962	0.950
AIC	37830.55	14381.56	2328.034
BIC	44531.72	16884.34	2666.303
Hausman test	0.000***	0.000***	0.000***
Host-time FE	Yes	Yes	Yes
Source-time FE	Yes	Yes	Yes
Country-pair FE	Yes	Yes	Yes

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively. Source: Authors' calculations. (h) stands for host countries, (b) stands for bilateral trade.

The introduction of proxies associated with trade costs (distance, common border) and trade integration seems to be associated with the reversal of signs – if we compare the results between Tables 6 and 7 – in the coefficients on political stability and government effectiveness. This is true for both EU and RIC source partners. The greater the distance between the host and source country, *ceteris paribus*, the more decisive becomes the consolidation of economic interdependence with greater foreign investment flows from source to host countries. It could be argued that the remote host countries' low performance, in terms of government effectiveness, is offset by a greater need to enhance political stability, so as to attract international capital flows.

Table 7. PPML Models on Amount of FDI: Country-time & Country-pair FE, 2013-19

Dep. variable: FDI_{in}^{stock}	Aggregate	EU	RIC
Bilateral distance	0.643** (6.57)	-0.158** (2.33)	2.781*** (2.90)
Common border	4.067*** (14.82)	0.524*** (4.47)	5.327*** (3.98)
Log of (y_{ht} + y_{st})	0.076 (0.77)	0.178 (1.54)	-0.962 (1.48)
(log) Host country's imports (b)	0.010** (2.25)	0.046*** (2.81)	0.021 (0.26)
Both WTO members	0.094 (0.84)	0.369 (1.37)	0.055 (0.08)
Trade openness (h)	0.048*** (16.40)	0.006* (1.62)	0.038*** (2.65)
(log) Host country's fuel exports (b)	-0.000 (0.22)	-0.001 (0.81)	-0.005 (0.60)
Voice & Accountability (h)	1.261*** (5.13)	0.660*** (5.74)	-1.655*** (4.82)
Political Stability (h)	-0.246** (1.99)	0.324 (1.15)	1.080*** (18.90)
Governm. effectiveness (h)	-2.191*** (5.84)	-1.267*** (3.68)	-4.975*** (6.58)
Regulatory quality (h)	-0.431* (1.73)	0.916*** (4.96)	-1.461*** (6.81)
Rule of Law (h)	3.556*** (10.77)	0.703* (1.87)	4.673*** (4.00)
Control of Corruption (h)	0.130 (0.70)	-0.892** (2.01)	-0.394 (0.99)
Business Freedom Index (h)	-0.088*** (14.73)	0.009*** (2.96)	0.108*** (3.66)
Corporate tax rate (h)	0.010 (0.65)	0.027*** (3.17)	0.103*** (3.68)
Public debt (h)	0.003* (1.90)	-0.009*** (2.71)	-0.029*** (4.63)
Constant	-7.997*** (5.16)	-2.845* (1.73)	4.932*** (4.30)
Observations	11659	4047	672
Adjusted R-squared	0.950	0.965	0.950
AIC	35575.39	13998.51	2331.585
BIC	42026.11	16438.83	2678.875
Hausman test	0.000***	0.000***	0.005***
Host-time FE	Yes	Yes	Yes
Source-time FE	Yes	Yes	Yes
Country-pair FE	Yes	Yes	Yes

Note: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively. Source: Authors' calculations. (h) stands for host countries, (b) stands for bilateral trade.

The voice and accountability index (vac_{ht}) captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as

freedom of expression, freedom of association, and a free media (World Bank, 2022). The coefficients take mixed signs during the 2009-2019 period (Tables 2-4), however safer conclusions can be drawn during the most recent time interval (Tables 5-7). The robust results in Tables 6 and 7 reveal the most significant difference in the orientation pattern of EU and RIC foreign investment towards the BRI countries: the higher the voice and accountability scores in the FDI-host countries, *ceteris paribus*, the greater the intensity of FDI from the EU and, at the same time, the lower the intensity of FDI from RIC countries. This can be at least partially justified if taking into account that a significant share of EU foreign investment is also directed to EU member states with relatively higher vac_{ht} scores which belong, at the same time, to the BRI corridors.

FDI orientation towards host destinations with relatively lower corporate tax rates could be expected as an appropriate strategy of MNEs, in order to increase profitability, and this is confirmed for both EU and RIC countries. Higher business freedom indexes are generally considered critical for attracting FDI. However, the mixed signs (Tables 6 and 7) in the case of RIC countries may suggest that the above assumption may not be always valid, as long as MNEs can more effectively cope with the prevailing corporate tax rates in host countries, as opposed to the generally small-size domestic companies. In the EU case, higher business freedom scores in FDI recipients prove to be significant for the European MNEs' penetration. Given the reversal of signs, between Tables 6 and 7, for political stability, government effectiveness, and business freedom coefficients in the RIC-FDI model, it could be inferred that the national governments' strategies to attract FDI – that is, higher government effectiveness scores – can become crucial in times of political instability or in cases of less business-friendly environments.

5. ROBUSTNESS CHECKS

In the BRI context, FDI acts rather as a complementary to bilateral imports, in order to accelerate BRI economies' financial integration, without a similar complementarity relationship being confirmed when controlling for the host countries' trade openness (Tables 4 and 8). Once more, no sign of a tradeoff between energy supply and foreign investment is detected. As a final component of trade integration, bilateral WTO membership does not exert a clear effect on FDI intensity, which may be justified that a non-negligible share of BRI countries are not WTO members or merely WTO observers.

The negative link between public debt levels and FDI attraction, shown in Tables 5-7, is also confirmed in Table 9. *Ceteris paribus*, FDI attracting performance is associated with lower public debt exposure, a finding that advocates that unsustainable debt can put the countries' macroeconomic stability at risk (IMF, 2022). Robust results suggest a tradeoff between foreign capital investment and external debt, showing that foreign investment is generally directed towards BRI countries with higher external debt exposure, a finding which is confirmed once again for the Russia-India-China FDI source countries. No firm conclusions can be finally drawn about the EU partners.

Table 8. PPML Models for FDI from the EU: Trade Integration Effects, 2013-19

Trade integration	EU		RIC	
	Coeff.	P > | z |	Coeff.	P > | z |
(log) Host country's imports (b)	0.047 (2.87)	0.004	0.024 (0.29)	0.770
WTO membership	-1.75 (18.77)	0.000	-0.149 (0.51)	0.612
Trade openness	0.002 (1.49)	0.137	-0.006 (5.04)	0.000
(log) Host country's fuel exports (b)	-0.001 (0.81)	0.417	-0.004 (0.55)	0.586
Constant	-4.981 (20.64)	0.000	2.416 (2.16)	0.031
Observations	4047		672	
Adjusted R-squared	0.965		0.950	
AIC	14004.84		2329.987	
BIC	16464.07		2672.767	
Hausman test	0.000***		0.005***	

Note: Authors' calculations, (b) stands for bilateral trade.

Table 9. PPML Models for FDI from the EU: Debt Exposure Effects, 2013-19

Trade integration	EU		RIC	
	Coeff.	P > | z |	Coeff.	P > | z |
Public debt	-0.016 (3.24)	0.001	-0.006 (2.85)	0.004
External debt stocks	0.071 (1.20)	0.232	0.270 (22.59)	0.000
Constant	0.552 (1.14)	0.253	0.773 (5.07)	0.000
Observations	4047		672	
Adjusted R-squared	0.965		0.950	
AIC	14000.58		2326.045	
BIC	16440.9		2659.804	
Hausman test	0.000***		0.000***	

Note: Authors' calculations.

The regressions covering the decade between 2009 and 2019 (Tables 2-4) highlighted the crucial role of political stability in attracting foreign investment during the financial crisis period. With regard to the same time interval, the "greasing the wheels" hypothesis seems to be also confirmed, highlighting the impact of higher corruption levels in facilitating investment flows. High levels of corruption in FDI host

countries may act, to some extent, as a "Trojan horse" in order to facilitate investment penetration processes, to the extent that the developing countries' path to institutional development turns out to be time-consuming. During the most recent period (2013-2019), we reported on a "remedial" effect between lower political stability scores with higher government effectiveness scores, and vice versa (Tables 6-7). It could be argued that regressions in Table 10 suggest different patterns of FDI orientation, depending on whether source countries are the EU or RIC countries: With regard to EU FDI, higher political stability levels compensate higher corruption levels, while as regards the RIC foreign investment, lower political stability levels compensate with lower corruption levels.

Table 10. PPML Models for FDI from the EU: Institutional Quality Effects, 2013-19

Trade integration	EU		RIC	
	Coeff.	P > | z |	Coeff.	P > | z |
Voice & Accountability (h)	0.273 (3.25)	0.001	-1.358 (22.51)	0.000
Political Stability (h)	0.224 (1.53)	0.126	-0.447 (7.77)	0.000
Governm. effectiveness (h)	-0.807 (2.06)	0.039	-1.834 (14.86)	0.000
Regulatory quality (h)	0.932 (4.06)	0.000	-0.416 (6.06)	0.000
Rule of Law (h)	1.681 (2.12)	0.034	3.569 (33.09)	0.000
Control of Corruption (h)	-2.464 (3.05)	0.002	0.961 (18.14)	0.000
Constant	1.515 (13.29)	0.000	0.241 (4.08)	0.000
Observations	4047		672	
Adjusted R-squared	0.965		0.950	
AIC	13996.58		2326.045	
BIC	16424.29		2659.804	
Hausman test	0.000***		0.02**	

Note: Authors' calculations.

The BRI countries' higher voice and accountability scores matter more in attracting FDI from the European Union than from the RIC group, as confirmed in all three pairs of regressions by the differentiated coefficient signs (Tables 6, 7, and 10) during the latest period. Foreign investment from the RIC countries is clearly oriented towards recipient countries with relatively poor performance on indicators related to citizens' participation in elections, freedom of expression and association, free media, among others.

6. CONCLUSION

Three of the four hypotheses have been at least partially confirmed in the present study. Complementarity effects between bilateral trade and FDI were identified when controlling for the EU FDI-source countries, but the results with regard to the RIC countries are consistently insignificant. No FDI-energy supply tradeoffs were detected during the period under study. As regards our third hypothesis, the findings indicated "compensating" effects in terms of institutional development during the recent period (2013-2019), as lower/higher political stability scores are compensated with higher/lower government effectiveness scores, respectively, in order for BRI countries to attract foreign investment. As for the entire period (2009-2019), it appears that political stability becomes crucial for FDI attraction in times of global financial instability. Finally, the fourth hypothesis is also partially confirmed. High public debt exposure acts indeed as a deterrent to attracting international capital flows, but this is not the case when it comes to the BRI countries' external debt.

The methodological choice of grouping three FDI-source countries such as the Russian Federation, India and China, certainly does not mean to suggest the existence of a single pole at the eastern end of the Eurasian axis. The distinction between EU and Russia-India-China groups is done exclusively by geographical and income criteria, the latter as defined by the UN classification. There exist obvious differences between the aforementioned developing countries, both in terms of their production model and demographic structure, but also in terms of institutional, socio-political and historical context. For example, voice and accountability scores for the Russian Federation change from -0.90 to -1.12, for India from 0.46 to 0.27, and for China from -1.70 to -1.60 between 2009 and 2019 (World Bank, 2022). The study does not underestimate the gradual formation of a multipolar global economic system under way, which is expected to alter the balance of economic power at the international level and is certainly accelerating in the current wartime situation.

The current energy crisis, as a result of the war in Ukraine, has highlighted in the most emphatic way the current energy efficiency issues, as well as the geostrategic importance of natural gas pipelines, especially along the Eurasian axis, given that the natural gas is considered a key transitional fuel towards the transformation of the global energy sector. The prospects of the EU strategy for the gradual decoupling from Russian natural gas can eventually imply a resurgence of coal demand for power generation. This becomes a setback towards the achievement of the environmental goals set by the Paris agreement, unless more modern and ecologically friendly techniques are applied. In any case, we consider that financial integration and energy interdependence issues will become increasingly intertwined, even though this is not confirmed in the present study. Economic interdependence between countries, despite any "thrombotic" incidents in flows of energy resources – borrowing the Greek medical term of "hampering the flows" – during wartime, can be the only way in a world where absolute resource self-sufficiency of states seems rather an ideal situation. International economic

cooperation is one way forward, giving rise to mutual understanding and cooperation between the states.

APPENDIX

Table A1. The sample of FDI host countries by BRI corridor

Country name	Corridor name	Country name	Corridor name
Bangladesh	Bangladesh-China-India-Myanmar	Belarus	China-Mongolia-Russian Federation
Bhutan		Estonia	
India		Latvia	
Myanmar		Lithuania	
Nepal		Mongolia	
Sri Lanka		Russian Federation	
Albania	China-Central West Asia	Pakistan	China-Pakistan
Armenia		Bahrain	
Azerbaijan		Kuwait	
Bosnia and Herzegovina		Oman	
Bulgaria		Qatar	
Croatia		Saudi Arabia	
Georgia		United Arab Emirates	
Islamic Republic of Iran		Yemen	
Iraq		Czech Republic	New Eurasian Land Bridge
Israel		Hungary	
Jordan		Slovak Republic	
Kyrgyzstan		Slovenia	
Lebanon		Poland	
North Macedonia		Kazakhstan	
Romania		Ukraine	
Syrian Arab Republic		Egypt	21st-C Maritime Silk Road
Tajikistan		Ethiopia	
Turkey		Indonesia	
Turkmenistan		Kenya	
Uzbekistan		Maldives	
Brunei Darussalam	China-Indochina Peninsula	Morocco	
Cambodia		New Zealand	
Lao PDR		Panama	
Malaysia		South Africa	
Philippines			
Singapore			
Thailand			
Viet Nam			

REFERENCES

Albuquerque, R. (2003), "The Composition of International Capital Flows: Risk Sharing Through Foreign Direct Investment," *Journal of International Economics*, 61, 353-383.

Alfaro, L., C. Areendam, K.O. Sebnem and S. Sayek (2004), "FDI and Economic Growth: The Role of Local Financial Markets," *Journal of International Economics,* 64, 89-112.

Anderson, J.E. and E. van Wincoop (2003), "Gravity with Gravitas: a Solution to the Border Puzzle," *American Economic Review*, 93(1), 170-192.

Andreff, W. (2015), "Outward Foreign Direct Investment from BRIC Countries: Comparing Strategies of Brazilian, Russian, Indian and Chinese Multinational Companies," *European Journal of Comparative Economics*, 12(2), 79-131.

Arif-Ur-Rahman, M. and K. Inaba (2020), "Financial Integration and Total Factor Productivity: in Consideration of Different Capital Controls and Foreign Direct Investment," *Journal of Economic Structures,* 9(25).

Azolibe, C.B. (2022), "External Debt Accumulation and Foreign Direct Investment Inflows in Sub-Saharan Africa: Analysing the Interaction Effects of Selected Macroeconomic Factors," *Review of Black Political Economy*, 49(3), 327-352.

Baier, S.L. and J.H. Bergstrand (2007), "Do Free Trade Agreements Actually Increase Members' International Trade?" *Journal of International Economics*, 71(1), 72-95.

Bank of Russia (2015), *Russian Federation: Outward Foreign Direct Investment Position by Geographical Allocation in 2009-2014*, Data retrieved in www.cbr.ru/eng/search/?text=outward+FDI.

Barassi, M. and Y. Zhou (2012), "The Effect of Corruption on FDI: A Parametric and Non-Parametric Analysis," *European Journal of Political Economy,* 28(3), 302-312.

Bénassy-Quéré, A., M. Coupet and T. Mayer (2005), "Institutional Determinants of Foreign Direct Investment," CEPII Working Paper No. 5.

Brainard, L.S. (1997), "An Empirical Assessment of the Proximity Concentration Tradeoff Between Multinational Sales and Trade," *American Economic Review*, 87(4), 520-544.

Bulatov, A. (2017), "Offshore Orientation of Russian Federation FDI," *Transnational Corporations*, 24(2), 71-89.

Cadestin, C., K. De Backer, I. Desnoyers-James, S. Miroudot, M. Ye and D. Rigo (2018), "Multinational Enterprises and Global Value Chains: New Insights on the Trade-Investment Nexus," OECD Science, Technology and Industry Working Paper No. 5.

Chenaf-Nicet, D. and E. Rougier (2016), "The Effect of Macroeconomic Instability on FDI Flows: A Gravity Estimation of the Impact of Regional Integration in the Case of Euro-Mediterranean Agreements," *International Economics,* 145, 66-91.

Cieślik, A. and M. Ghodsi (2021), "Economic Sentiment Indicators and Foreign Direct Investment: Empirical Evidence from European Union Countries," *International*

Economics, 168, 56-75.
Crescenzi, R., M. Di Cataldo and M. Giua (2021), "FDI Inflows in Europe: Does Investment Promotion Work?" *Journal of International Economics,* 132, 1-29.
Egger, P. and S. Nigai (2015), "Structural Gravity with Dummies Only: Constrained ANOVA-Type Estimation of Gravity Models," *Journal of International Economics*, 97(1), 86-99.
European Commission (2021), "Joint Communication to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank – The Global Gateway," retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021JC0030&from=EN.
Garlick, J. (2020), "The Regional Impacts of China's Belt and Road Initiative," *Journal of Current Chinese Affairs,* 49(1), 3-13.
Garlick, J. and R. Havlová (2020), "The Dragon Dithers: Assessing the Cautious Implementation of China's Belt and Road Initiative in Iran," *Eurasian Geography and Economics,* 66, 1-27.
Head, K. and T. Mayer (2014), "Gravity Equations: Workhorse, Toolkit, and Cookbook," in *Handbook of International Economics*, Elsevier, 4, 131-195.
IBEF (2022), "Indian Investment Abroad - Overseas Direct Investment by Indian Companies," Indian Brand Equity Foundation Report, retrieved from www.ibef.org/economy/indian-investments-abroad.
IMF (2022), "Making Debt Work for Development and Macroeconomic Stability," IMF Report, retrieved from www.imf.org/en/Publications/Policy-Papers/Issues/2022/04/26/Making-Debt-Work-For-Development-and-Macroeconomic-Stability-517258.
Jansen, W.J. and C.J. Stokman (2004), "Foreign Direct Investment and International Business Cycle Comovement," European Central Bank Working Paper No.401.
Kalotay, K. (2008), "Outward Foreign Direct Investment from Russia in a Global Context," *Journal of East-West Business*, 11(3-4), 9-22.
Krugman, P. (1988), "Financing vs. Forgiving a Debt Overhang," *Journal of Development Economics*, 29(3), 253-268.
Kuznetsov, A.V. (2021), "Direct Investment from Russia Abroad: Changes Since 2018," *Herald of the Russian Academy of Sciences*, 91(6), 700-707.
Larch, M. and Y.V. Yotov (2016), "General Equilibrium Trade Policy Analysis with Structural Gravity," CESifo Working Paper, 6020, Center for Economic Studies and ifo Institute (CESifo), Munich.
Liuhto, K. (2015), "Motivations of Russian Firms to Invest Abroad: How Do Sanctions Affect Russia's Outward Foreign Direct Investment?" *Baltic Region*, 4, 4-19.
Lu, J., M. Imran, A. Haseeb, S. Saud, M. Wu, F. Siddiqui and M. J. Khan (2021), "Nexus Between Financial Development, FDI, Globalization, Energy Consumption and Environment: Evidence from BRI Countries," *Frontiers in Energy Research*, 9.
Mayer, T. and S. Zignago (2011), "Notes on CEPII's Distances Measures: the GeoDist Database," CEPII Working Paper No.25.

Nepal, R., N. Paija, B. Tyagi and C. Harvie (2021), "Energy Security, Economic Growth and Environmental Sustainability in India: Does FDI and Trade Openness Play a Role?" *Journal of Environmental Management,* 281, 1-12.

OECD (2002), "Foreign Direct Investment. Maximising Benefits, Minimising Costs," Committee on International Investment and Multinational Enterprises Report, retrieved from www.oecd-ilibrary.org/finance-and-investment/foreign-direct-investment-for-development_9789264199286-en.

Pantulu, J. and J.P.H. Poon (2003), "Foreign Direct Investment and International Trade: Evidence from the US and Japan," *Journal of Economic Geography,* 3, 241-259.

Parepa, L.A. (2020), "The Belt and Road Initiative as Continuity in Chinese Foreign Policy," *Journal of Contemporary East Asia Studies,* 9(2), 175-201.

Reinhart, C.M. (2012), "The Return of Financial Repression," *Financial Stability Review*, 16, 37-48.

Reinhart, C.M., V.R. Reinhart and K.S. Rogoff (2012), "Public Debt Overhangs: Advanced-Economy Episodes Since 1800," *Journal of Economic Perspectives*, 26(3), 69-86.

Reji, J.K. (2019), "Outward FDI from India: Review of Policy and Emerging Trends," Institute for Studies in Industrial Development (ISID) Working Paper, 214.

Santos Silva, J.M.C. and S. Tenreyro (2006), "The Log of Gravity," *Review of Economics and Statistics,* 88(4), 641-658.

Sosa Andrés, M., P. Nunnenkamp and M. Busse (2013), "What Drives FDI from Non-Traditional Sources? A Comparative Analysis of the Determinants of Bilateral FDI Flows," *Economics: The Open-Access, Open-Assessment E-journal,* 7.

Subasat T. and S.K. Bellos (2013), "Corruption and Foreign Direct Investment in Latin America: A Panel Gravity Model Approach," *Journal of Management and Sustainability,* 3(4), 151-156.

Tanna, S. and C. Li (2018), "The Role of External Debt in the Foreign Direct Investment-Growth Relationship," *International Journal of Finance and Economics*, 23, 393-412.

Wei, S.J. (2000), "How Taxing Is Corruption on International Investors?" *Review of Economics and Statistics,* 82(1), 1-11.

Williams, J., C. Robinson and S. Bouzarovski (2019), "China's Belt and Road Initiative and the Emerging Geographies of Global Urbanisation," *Geographical Journal,* 186, 128-140.

World Bank (2022), "World Governance Indicators – Documentation," Definition retrieved from info.worldbank.org/governance/wgi/Home/Documents.

Yotov, Y.V., R. Piermartini, J.A. Monteiro and M. Larch (2016), "An Advanced Guide to Trade Policy Analysis: The Structural Gravity Model," UN-WTO Report, retrieved from https://www.wto.org/english/res_e/booksp_e/advancedwtounctad 2016_e.pdf.

Zander T. (2021), "Does Corruption Matter for FDI Flows in the OECD? A Gravity Analysis," *International Economics and Economic Policy,* 18, 347-377.

Zhao, Y., X. Shi and F. Song (2020), "Has Chinese Outward Foreign Direct Investment in Energy Enhanced China's Energy Security?" *Energy Policy,* 146.

Mailing Address: Dimitrios Karkanis, University of Macedonia, Department of Balkan, Slavic and Oriental Studies, 156 Egnatia Street, GR-54636 Thessaloniki, Greece, E-mail: dkarkanis@uom.edu.gr

Received December 2, 2023, Accepted June 19, 2025.