FDI propensity and geo-cultural interaction in former Yugoslavia: pairwise analysis of origin and destination countries

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Abstract
This research examines FDI location choice across the successor states of Yugoslavia roughly 25 years after dissolution. Based upon 12,245 pairwise observations from 2005 to 2016, the paper employs logit models to estimate empirically the impact of geographic distance, cultural similarity, and geo-cultural interaction on FDI propensity. The contributions are twofold. First, while geographic distance and culture similarity are typically modeled as independent FDI determinants, their interaction is also examined here. Second, the paper contributes to the sparse scholarship on FDI in this complex European region, using binary-choice models to highlight its linkages to the global economy. The findings suggest that—in addition to mainstream economic, regulatory, and political factors—a tradeoff exists between distance and culture in attracting FDI. Host governments seeking FDI that promotes economic growth might increase the likelihood of FDI by targeting geographically-proximate partners that are culturally similar. The role of geographic distance in reducing FDI propensity gives way to other enabling variables beyond the distance of 1800 km.

Keywords  Foreign direct investment · Geographic distance · Culture · Former Yugoslavia

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1 Introduction

This research examines the role of geo-cultural interaction on foreign direct investment (FDI) propensity in the seven successor states of Yugoslavia,\(^1\)\(^2\) with two objectives. First, the study helps rectify a lack of scholarship on FDI to the successor states of Yugoslavia, which has received far less attention than other post-socialist regions of Europe (Bevan & Estrin, 2004; Brada et al., 2006; Demekas et al., 2007; Estrin & Uvalic, 2014; Pavlinek, 2017). Second, the complex history of this European region has led to strong economic, political, and cultural differences between the successor states of Yugoslavia. These differences, along with a wide range of initial conditions following dissolution, have contributed to varying propensities by multinational enterprises (MNEs) to invest across the states of former Yugoslavia. In this examination of FDI propensity, special attention is paid to the impact of and interaction between the variables of geographic distance and cultural similarity.

In an increasingly globalized environment, FDI is the primary mode of operation by MNEs (Dicken, 2015). As a crucial form on international money transfer, FDI has led to a large and sometimes critical body of scholarship that varies greatly by context. FDI’s relationship with economic growth continues to be disputed by scholars. FDI is widely regarded as a potential engine for economic growth, particularly in Europe’s post-socialist transition countries, which include the successor states of Yugoslavia (Hunya, 2000a, 2008; Dicken, 2015; Estrin, 2017). UNCTAD (2017) data indicate that global FDI growth over the long term has been strong, despite periodic and localized decreases in FDI as observed following international conflicts, the 2008 Global Financial Crisis (GFC), and the COVID-19 pandemic (Sharma, 2021; UNCTAD, 2021). Excluding such disruptions, most of the states under investigation in this paper have experienced steady FDI growth since independence (WIIW, 2018). Doh’s (2019) extensive review concludes that most academic studies support the view that FDI leads to economic growth, although it may worsen income inequality. While government policy seeks investment that promotes positive effects on local economies, Curwin and Mahutga (2014) find evidence that some FDI can reduce both short-and long-term economic growth. Curwin and Mahutga’s (2014) view is supported by a sizable critical literature on FDI. Ford et al. (2008) note that the nature of FDI impact can depend upon the national origins of MNEs. Because the present research is concerned with the location decisions

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\(^1\) These include Bosnia-Herzegovina, Croatia, Kosovo, Montenegro, North Macedonia, Serbia, and Slovenia, having declared independence at different stages since 1991. These geographic entities are referred to as successor states of Yugoslavia, formally the Socialist Federal Republic of Yugoslavia (SFRY).

\(^2\) For the purpose of this analysis, the authors treat Kosovo as a geographic territory without prejudice to status, in line with United Nations Security Council Resolution 1244/1999 and the International Court of Justice opinion. For more information, please see https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/20190529-kosovo-report.pdf
of MNEs, further discussion of the complex consequences of FDI lies beyond the scope of this paper.

The approach taken here is an augmented logit gravity model focusing primarily on the role of geographic distance and cultural similarities between country pairs. These two relational variables—along with their interaction—are examined empirically with reference to FDI origin and destination. Other mainstream variables that have been found to be important elsewhere provide the backdrop for the examination of geo-cultural interaction. The paper is organized as follows: first, a general overview of initial conditions is provided, followed by a brief review of relevant literature. Next, the hypotheses are set forth, followed by an explanation of the data and methods employed. The discussion of results then leads to suggestions for policy and further inquiry, followed by conclusions.

2 Context and overview of FDI in Yugoslavia’s successor states

The Socialist Federal Republic of Yugoslavia (hereafter “Yugoslavia”) was formed after World War I and remained effectively intact until the 1990s. Despite Yugoslavia’s relatively compact geographic area, the federation had seven frontiers, six republics, five nationalities, four languages, three religions, two alphabets, and one boss, Josip Broz Tito. Tito’s death in 1980 led to the end of his 35-year dictatorship and the federation itself. Starting in 1991, Yugoslavia broke into seven successor entities during a series of conflicts, largely along ethnic and cultural boundaries.

The political and economic transformation of Central and Eastern Europe (CEE) has motivated considerable scholarship, albeit concerned with the former Soviet bloc more than the successor states of Yugoslavia. Although former Yugoslavia’s relative openness to the global economy distinguished it from the USSR and its satellites, the newly independent states faced issues that include: (1) political transformation from authoritarianism to varying degrees of democracy, and (2) privatization, or the conversion of state-controlled entities into private ownership (Bojnec, 1999). Privatized facilities are often attractive opportunities for foreign firms, and governments throughout the region have actively courted MNEs from abroad to make such facilities more efficient (Alfaro et al., 2010). In recognition of the potential for FDI to drive transformation and economic growth, governments have made concessions to entice MNEs to invest, establishing investment promotion agencies to support FDI.

Several of the new states continue to experience tensions with one another while others have begun to reintegrate, mainly through EU accession. Notably, certain Western Balkan states share important cultural and economic linkages with neighbors such as Germany, Italy, Turkey, and Russia (Cvijić & Sanfey, 2010). Scholars use the term “shatter belt” to describe the profound geopolitical and cultural fragmentation of these states, surrounded by influential neighbors (Gosar, 2000). Due to this fragmentation as well as disparate initial economic conditions upon independence, the potential for FDI varies geographically across former Yugoslavia.

Kóczan (2018) highlights the human and material destruction caused by Yugoslavia’s wars of dissolution as the region’s major disadvantage in efforts to converge with the rest of Europe. These conflicts continue to require physical reconstruction.
as well as new legal, political, and economic institutions. Moreover, the governments of these countries have pursued different paths of reintegration into the global economy in light of dramatically different initial conditions (Bojnec, 1999) and capacities to privatize inefficient facilities.

As a backdrop for this study, Fig. 1 summarizes annual FDI inflows to the states of former Yugoslavia since 2004, the earliest year for which full data are available for each of the seven entities. FDI inflows to Serbia (“RS” in Fig. 1) and other states fluctuate dramatically by year, largely attributable to a small number of intermittent major investments and a consistently large number of small investments. Also notable is that smaller inflows of FDI are evident since 2008, as the GFC ushered in a period of global capital scarcity. In addition, as observed by Hunya and Schwarzhappel (2018), a recent trend of divestiture throughout the region is evident (note, for example, Slovenia [SI] in 2009 and 2013). Figure 1 shows that three newly independent states have emerged as leaders in attracting FDI: Serbia (RS), Croatia (HR), and Slovenia (SI). Bosnia-Herzegovina (BA), North Macedonia (MK), Montenegro (ME), and Kosovo (XK) lag far behind, each with less than ten percent of the former federation’s cumulative total (WIIW, 2018).

To understand the investment location decision, Dunning (1980) contends that the ownership (or origin-specific) advantages of MNEs should also be examined. Table 1 delineates the top-five FDI origin countries for each destination, with 18 unique countries among 35 leading origin countries. Notably, Austria ranks among the top five origins for six of the seven destinations. The historical role of the Austro-Hungarian Empire is emphasized by several authors contributing to Deichmann’s (2021) descriptive volume analyzing FDI across Yugoslavia’s successor states. MNEs from Germany, Italy, the Netherlands, and Luxembourg are also very active throughout the region. Despite more than seven decades of political integration within Yugoslavia, only Croatia, Serbia, and Slovenia are leading FDI
Table 1  Top five cumulative FDI origin countries across the study area (EUR millions through 2016)

| Bosnia & Herzegovina | Croatia         | Montenegro   | North Macedonia | Serbia        | Slovenia       | Kosovo         |
|----------------------|-----------------|--------------|-----------------|---------------|----------------|----------------|
| Austria (1270)       | Austria (5047)  | Italy (602)  | Austria (568)   | Austria (3449)| Austria (3197) | Turkey (411)   |
| Croatia (1098)       | Netherlands (4658)| Russia (497) | U.K (519)       | Netherlands (2943)| Luxembourg (1441)| Germany (319) |
| Serbia (1051)        | Italy (2603)    | Cyprus (326) | Greece (463)    | Luxembourg (1821)| Switzerland (1381)| Switzerland (217)|
| Slovenia (478)       | Hungary (2397)  | U.A.E (319)  | Netherlands (423)| Germany (1690)| Italy (1146)   | Austria (186)  |
| Russia (417)         | Luxembourg (2246)| Serbia (243) | Slovenia (375)  | Norway (1317)  | Germany (1108) | Albania (162)  |

Data source: WIIW (2018)
destinations in other successor states. Observations by Bitzenis (2004) about the importance of European integration renders it unsurprising that the only major non-European origin is the United Arab Emirates (UAE), while Russia and Turkey straddle Europe and Asia. Table 1 is consistent with the gravity model’s premise that geographic proximity helps explain the locations chosen by MNEs (Kleinert & Toubal, 2010; Zander, 2021).

Beyond the various economic characteristics of top origin countries shown in Table 1, it is plausible that their cultural characteristics are part of the location choice. O’hUallacháin and Reid (1992) find considerable evidence that cultural similarities facilitate business transactions. For risk-averse MNEs, shared culture as marked by language or religion can signal ease of communication as well as similar business practices. Furthermore, although each of the seven countries has its own primary language, German, Russian, and English are all important secondary languages in portions of the region, resulting in a complex linguistic mosaic that has important implications for MNEs seeking investment opportunities.

3 Scholarly research on FDI in Europe’s transition states

Paul and Feliciano-Cestero (2021) provide an extensive general overview of key research on FDI, highlighting five decades of scholarship covering many aspects of international business. Because the literature is broad, only a few relevant contributions are mentioned here, and some are rightfully critical of FDI. Far from promoting a naïve view of FDI’s impacts, Dunning (1994), Hunya (2000a) and Estrin (2017) are among the voices arguing that FDI’s potential to drive economic growth is particularly important for post-socialist economies. Importantly, FDI in the post-Soviet era of the early 1990s was negligible in most Eastern European states. This changed in the mid-1990s when governments began to introduce various liberalizing reforms to attracted foreign capital.

Dunning (2008) observes that technological advances and sweeping changes in the global economic scenario have no less influenced the country-specific opportunities and challenges affecting the pull of FDI, and none so much as those within the transition economies of Central and Eastern Europe.

Dunning’s (1980) pioneering work provides an organizing basis for mainstream theories that explain the origins, structure, and location of FDI. This framework is fundamental in the present research design because it considers characteristics of both the origin and destination countries. In Dunning’s “O-L-I” framework, “O” represents ownership advantages, or origin-country assets giving MNEs in the origin country a comparative advantage over enterprises from other countries. “L”

3 Notably, Croatia is a leading origin of FDI for Bosnia-Herzegovina; Serbia is a leading origin for Bosnia-Herzegovina and Montenegro; and Slovenia is a leading origin for Bosnia-Herzegovina and North Macedonia.
denotes location advantages that characterize the investment destination, which may include transport costs, labor costs, or other variables. Finally, “I” relates to internalization advantages reflecting transaction cost tradeoffs between wholly-owned subsidiaries and other trade mechanisms such as exports, licensing, or joint ventures. These tradeoffs can be linked to origin and destination factor endowments and trade costs, as articulated by Markusen (2002). Dunning (2009) laments that location-specific factors are too-often neglected in international business scholarship.

Dunning’s (1980) paradigm motivates an important empirical literature, and Blonigen (2005) and Koepke (2019) provide thorough reviews of this scholarship. Most of the empirical research focuses either the features of origin countries that enable their MNEs to invest abroad or the location-specific features of a destination country that attract foreign firms, but few studies examine both. For example, origin-specific enabling factors can include market size, exchange rates, and exports (e.g., Grosse and Trevino, 2005), while destination-specific advantages might include openness to trade (Janicki & Wunnava, 2004), population size (Botrić & Škuflić, 2006), and labor costs (Estrin & Uvalic, 2014). Following Bandelj (2002), robust approaches should include relational features that either link or separate the origin and destination countries, thereby facilitating or inhibiting FDI. Examples of relational features include geographic distance (Bitzenis, 2004, 2016), cultural similarities (Bitzenis, 2004; Jaklić & Svetličić, 2016), and relative corruption (Zander, 2021).

Table 2 provides a representative, but non-exhaustive, list of covariates used by scholars to explain FDI location in European transition states. Most findings are consistent with the gravity model, suggesting that distance is a barrier to FDI. Distance can be measured geographically (Frankel, Stein and Wei, 1997; Bitzenis, 2006, 2016) or culturally (O’hUallacháin and Reid, 1992). Bitzenis (2016) confirms the importance of cultural proximity for driving FDI resource allocation decisions for MNEs. In addition to geographic distance and culture, the model includes several other mainstream variables that impact FDI and its location choice. Determinants such as economic strength and capital fluidity are measured by GDP growth rates. Countries with relatively high growth rates can offer potentially lucrative expansion opportunities to MNEs (Janicki & Wunnava, 2004; Borrmann et al. 2005). Similarly viewed in a positive light by MNEs, formal economic integration such as EU membership signals openness, or at least the absence of policy barriers to FDI (Hunya, 2000b; Bandelj, 2010; Bitzenis, 2016; Janicki & Wunnava, 2004; Kekic, 2005). Additional location-specific advantages of destination countries include population/market size (Botrić & Škuflić, 2006), low labor costs (Janicki & Wunnava, 2004; Estrin & Uvalic, 2014), low corporate tax rates (Estrin & Uvalic, 2014), and national wealth measured as GDP per capita (Botrić & Škuflić, 2006). In a more recent study of FDI per capita across six Balkan countries, Kurtović et al. (2020) use a partial adjustment model with time series data through 2017. Their study reveals GDP per capita, GDP growth rate, services agglomeration, and government spending to be significant determinants.

Additional relational measures facilitating FDI include similarity in corruption levels (Habib & Zurawicki, 2002; Bitzenis, 2006; Bojnc and Fertő, 2018; Cieślik, 2020; Zander, 2021). Pairs of countries might be highly transparent (low corruption
## Table 2  Key FDI determinants in Central and Eastern Europe and related contexts

| Independent variable                  | Author(s), Date                                                                 | Valence (±) | RATIONALE OR KEY FINDINGS                                                                 |
|--------------------------------------|--------------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------|
| Geographic Distance                  | Bitzenis (2004), Bitzenis (2016), Cieślik (2020)                              | (−)         | Important barrier only for certain firms, depending on origin characteristics               |
| Cultural Similarities                | Bandelj (2002), Bitzenis (2004), Deichmann (2012), Jaklić and Svetličić (2016), Bojnec and Fertő (2018) | (+)         | Culture as important consideration; culture often overlooked in quantitative work         |
| Population Size                      | Botrić and Škuflić (2006)                                                    | (+)         | Larger population means larger markets                                                   |
| GDP Growth                           | Janicki and Wunnava (2004); Borrmann et al. (2005), Kurtović et al. (2020)    | (+)         | Economic growth implies inexpensive capital, robust markets                               |
| Agglomeration                        | Kurtović et al. (2020)                                                       | (+)         | Urbanization and services availability                                                    |
| Labor Costs                          | Janicki and Wunnava (2004), Estrin and Uvalic (2014)                           | (−)         | Labor costs represent a large portion of production costs. (+) Labor costs can be positive to the extent they signal higher skill levels |
| Migration                            | Bandelj (2002)                                                                | (+)         | Expatriates often reinvest in their origin lands                                         |
| Economic Integration                 | Kekic (2005), Bandelj (2010), Bitzenis (2016)                                 | (+)         | Removal of barriers to business facilitate FDI especially in the EU and associate members |
| Initial Conditions                   | Bojnec (1999)                                                                | (−)         | Privatized facilities offer FDI opportunities                                            |
| Trade liberalization                 | Hunya (2002), Janicki and Wunnava (2004)                                      | (−)         | Openness to trade welcomes FDI                                                          |
| Government Incentives, Special Economic Zones | Osmani and Ahmeti (2017), Mamucevska and Nikolovska (2018) | (+)         | Incentives can be successful for attracting MNEs, sometimes at the expense of local firms |
| Political Risk                       | Bitzenis (2004), Kekic (2005)                                                | (−)         | High risk countries as well as their unstable neighbors discourage FDI                    |
| Corruption                           | Habib and Zurawicki (2002), Bitzenis (2006), Bojnec and Fertő (2018), Zander (2021) | (−)         | Firms seek familiar levels of transparency,                                              |
|                                      |                                                                               | (+)         | Bitzenis observes firms from corrupt countries seek opportunities in other corrupt countries |
levels, like in Denmark and Canada) or highly corrupt (Russia and Bulgaria). In each case, an MNE’s familiarity with business practices at a destination can make FDI more likely to occur (Bitzenis, 2006; Bojnec and Fertö, 2018). Another important post-transition study by Bandelj (2002) confirms the role of migration flows and cultural connections in enabling FDI in the Balkans. Although sufficient migration data could not be included in the present analysis, Bandelj’s commendable use of other relational variables (vis-à-vis country characteristics) is followed here. Arguably, traits carried by migrants can indirectly be captured through relational cultural similarity scores. In sum, the present methodology takes existing scholarship into consideration while focusing primarily on the effects of geographical distance, cultural proximity, and the interaction between these two intuitively-essential determinants.

4 Hypotheses and methods

Hypotheses In recognition of the unique shatter belt context of former Yugoslavia, the main geographic and cultural hypotheses are relational in nature. Hypothesis 1 has been tested in other studies (Bitzenis, 2004, 2016; Bojnec and Fertö, 2017) and predicts that FDI is less likely to occur from distant countries. Similarly, Hypothesis 2 predicts that cultural similarities facilitate FDI through similar language and business practices on the basis of findings from other datasets (O’hUallacháin and Reid, 1992; Taras et al., 2009; Bitzenis, 2016; Bojnec and Fertö, 2018). As the issue of main interest, Hypotheses 3 is intended to capture the potential impact that the interaction between geographic distance and cultural similarity has on FDI propensity into the seven successor states of Yugoslavia as predicted below.

Hypothesis 1: (Geographic Distance). FDI propensity from an origin country declines as the geographic distance between origin and destination countries increases, holding other variables constant.

Hypothesis 2: (Cultural Similarities). FDI propensity from an origin country increases with cultural similarity between origin and destination countries, holding other variables constant.

Hypothesis 3: (Geo-Cultural Interaction). Geo-cultural interaction impacts FDI propensity from an origin country, holding other variables constant.

(i) For a given value of the culture index, increasing geographic distance between origin and destination decreases FDI propensity.

(ii) For a given geographic distance, decreasing cultural similarity between origin and destination countries decreases FDI propensity.
4.1 Data

Data from the Vienna Institute of International Economic Studies\(^4\) (WIIW, 2018) are used to construct the binary dependent variable of FDI from origin country \(i\) into destination country \(j\) in year \(t\) as follows:

\[
FDI_{ijt} = \begin{cases} 
1, & \text{if } FDI \text{ inflow} > 0 \\
0, & \text{if } FDI \text{ inflow} \leq 0 
\end{cases}
\]

The dataset includes 12,245 cells representing 153 origin countries, seven destination states, and the years spanning from 2005 to 2016.\(^5\) The years and countries included in the models represent the most complete data available at the time of writing. In the interest of running robust models, years leading up to 2005 and those following 2016 could not be included because too many observations are missing for the independent and/or dependent variables, and these empty cells would detract from the robustness of the findings.

No consensus exists among scholars on how best to measure FDI, largely because their research objectives vary. The use of a binary dependent variable is less common in the literature than the values of annual FDI flows or cumulative volume. However, the binary variable is preferred in this study because it emphasizes the decision to invest (or not) in a given destination during a given year rather than the ability (or lack thereof) of MNEs to invest a larger amount of capital. Use of this discrete-choice gravity model approach for understanding FDI decisions is exemplified by Deichmann and Karidis (2005), Belkhodja et al. (2017), and Teo (2021), and it is also demonstrated in Burger et al.’s (2009) application to international trade.

Table 3 lists the independent variables included in the model specifications with their sources and ranges. The primary independent variables are time-invariant geographic distance, cultural similarity, and the interactions between these two variables. The other variables include GDP per capita, GNI growth, economic openness, corporate tax rate, corruption, with alternating measures of GDP and OECD membership in latter specifications. The gravity model posits that distance negatively impacts FDI propensity, as stated in Hypothesis 1. This study expands the relational notion of distance to include not only geographic distance, but also culture (Hypothesis 1). Sensitivity to these variables is particularly compelling given the geographical compactness and cultural heterogeneity of the region of study. Furthermore, decision makers are unlikely to consider geographic distance and cultural similarity in isolation. For this reason, Hypothesis 3 tests the notion that MNEs may be willing

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\(^4\) WIIW provides the most dependable, robust, and current FDI data on the region, and they have been widely used in other studies (Hunya and Schwarzhappel, 2018; Deichmann, 2021). Moreover, WIIW acquires FDI data primarily from countries’ central banks or the equivalent governmental reporting body.

\(^5\) The model is a binary response variable: origin countries either invest or do not invest. If countries that have no firms investing are omitted, a sampling bias would be introduced because such a model would include only counties from which firms invest. If that were the case, there would be no variation in the dependent variable to estimate the independent variables’ impact on the FDI location decision. We include origin countries for not only for robustness; it also permits estimation to occur.
| Name                      | Description                                                                 | Source                                      | Min/Max        |
|---------------------------|-----------------------------------------------------------------------------|---------------------------------------------|----------------|
| ln(Distance)              | Natural logarithm of geographic distance between origin and destination pairs (km) | www.distancecalculator.net                  | 0/9.79116      |
| Culture Similarity Index  | Index (scale 0–7.0) based on linguistic and religious similarity             | Authors’ calculations, see the Quantifying Culture section of this paper | 0.0/7.0        |
| ln(GDP per capita)        | Natural logarithm of gross domestic product per capita origin country (current USD) | World Bank (2019)                          | 5.01/11.69     |
| GNI Growth                | Annual percentage GNI growth in destination country (current USD)            | World Bank (2019)                          | -36.79/43.94   |
| Economic Openness         | Trade as % of GDP in destination country (current USD)                        | World Bank (2019)                          | 59.5/146.15    |
| Corporate Tax Rate        | Corporate tax rate in destination country (%)                                | World Bank (2019)                          | -0.2/58.9      |
| Relative Corruption Per- |ception Index (RCPI) $\frac{CPI_{host,t}}{CPI_{home,t}}$ (score ratio)       | https://www.transparency.org/en/            | 0.002/713.57    |
| ln(GDP)                   | Natural logarithm of gross domestic product origin country (GDP in current USD) | World Bank (2019)                          | 21.54/24.98    |
| OECD                      | Dummy variable OECD membership (1 = member, 0 = non-member)                   | www.oecd.org (2019)                        | 0/1
to operate at greater distances where culturally similarities signal ease of doing business, or vice versa.

The model specifications in this research could productively include additional mainstream variables, but they are omitted here both in the interest of parsimony (reducing collinearity) and due to data constraints. Unused variables include exchange rates, labor costs, and migration measures, among others. Exchange rates are problematic in this region because several of the successor states lack independent currencies over the period under investigation. Moreover, Kosovo and Montenegro use the euro and Bosnia’s convertible mark (KM) remains pegged to the euro.\(^6\) Janicki and Wunnava (2004) and Estrin and Uvalic (2014) confirm that labor costs significantly impact FDI flows to CEE states. However, usable annual labor and wage data remain unavailable for the precise time period and countries in question, and as a result are proxied by the admittedly less-precise GDP per capita measure.

4.1.1 Measuring distance

Following Frankel et al. (1997), we estimate the approximate population centroid of each FDI origin and destination country,\(^7\) a particularly important exercise in geographically vast countries. The geographic distance between country pairs is calculated using distancecalculator.net between these cities. The values in kilometers are transformed into logarithms in order to capture the likely nonlinear relationship between distance and FDI propensity.

4.1.2 Quantifying culture

As facilitators of business transactions, cultural similarities are a central explanation of FDI location choice (O’hUallacháin and Reid, 1992; Taras et al., 2009; Bitzenis, 2016). Taras et al. (2009) review the large literature that deals with quantifying culture as it pertains to international business. In the context of Europe, Murphy et al. (2014) argue that language, alphabet, and religion are essential cultural landscapes, which in turn influence ways of life, including business practices (Ferraro & Briody, 2017). To capture the degree of cultural similarity, the index mentioned in Table 3 quantifies culture using seven categories of linguistic and religious commonalities. For each destination-origin pair, the seven cultural categories are each assigned a score of “0,” “0.5,” or “1,” where a score of “1” indicates a similar cultural category, a score “0.5” denotes a mixed indicator of culturally similar categories, and “0” indicates no cultural similarity. The result is a score from 0 to 7, where 0 indicates “less similar,” and 7 indicates “most similar”. Table 4 illustrates the construction of

\(^6\) The Bosnian convertible mark (KM) is a holdover from the obsolete German Deutschmark and at the time of writing remains pegged to the euro at a 2-to-1 conversion rate.

\(^7\) The authors estimate population centroids on a case-by-case basis. A list is available upon request. In cases of centrally-located primate cities, the population centroid is the largest and/or capital city (Paris, Zagreb, Moscow, Tokyo). However, in some geographically large countries such as China and the United States with widely spread populations and no single dominant city, distances are measured from more centralized non-capital cities, in these cases St. Louis and Shanghai, respectively.
the culture similarity index for four country pairs used in this analysis, with explanations provided in the footnotes.  

As a composite measurement of three fundamental categories of culture (language, alphabet, and religion), the index sample in Table 4 demonstrates a useful relational proxy for the relative ease of doing business in another country.

To facilitate visualization of the interaction between cultural similarity and geographic distance, a simple scatter plot is provided in Fig. 2. The x-axis represents the log-scaled geographic distance between all FDI origins and the seven destinations, suggesting that FDI propensity can be expected to decline for culturally similar country pairs as geographic distance increases. However, after a certain point, distance is effectively overcome and FDI propensity increases again. Indeed, a cursory glance at the dataset reveals that firms from countries such as the USA, Canada, and Australia, all with moderate cultural similarities to the Balkans, have a considerable propensity to invest, despite the friction of distance. Our empirical tests will determine whether this ability to overcome the friction of geographic distance is also attributable to other mainstream variables.

Table 4 Examples of pairwise culture index calculations

| Pair     | Linguistic Family | Linguistic Group | Same 1st Language | Same 2nd Language | Same Alphabet | Same Religion | Same Sect | Total |
|----------|-------------------|------------------|-------------------|-------------------|--------------|---------------|-----------|-------|
| AL-XK    | 1                 | 1                | 1                 | 1                 | 1            | 1             | 1         | 7     |
| HR-AT    | 1                 | 0                | 0                 | 1                 | 1            | 1             | 1         | 5     |
| RS-US    | 1                 | 0                | 0                 | 1                 | 0            | 1             | 0.5       | 3.5   |
| BA-CN    | 0                 | 0                | 0                 | 0                 | 0            | 0             | 0         | 0     |

Source: Authors’ Calculations. Country codes from ISO (2021)

AL Albania, XK Kosovo, HR Croatia, AT Austria, RS Serbia, US USA, BA Bosnia & Herzegovina, CN China
4.2 Method: estimation of an adapted gravity model

Tinbergen (1962) introduced the gravity model to explain international trade patterns. The gravity model posits that the likelihood of interaction between two entities large masses is higher vis-à-vis relatively smaller masses, and less likely as distance increases. While Blonigen and Piger (2014) praise the simplicity of the gravity model, they argue that other important determinants of FDI are absent from its simplest specification and call for appropriate adaptations. In the present gravity model, GNI per capita is a proxy for national mass. As an illustration, one might expect the likelihood of Austrian firms to invest in the country’s immediate neighbor Bosnia & Herzegovina (BA) to be greater than Russian propensity to invest there because Russia is located much farther away and has a much lower GNI per capita. Although Austrian MNEs indeed invest more, when other factors such as cultural similarity are considered, it becomes understandable that Russian MNEs actually invest more in BA than geographically proximate and culturally less-similar MNEs from Germany and France (Table 1).

To empirically test Hypotheses 1–3, the marginal effects of the logit model are estimated.

The model is:
where $DIST_{ij}$ is the natural logarithm of the geographic distance (km) between the $ij$th country pair, $CULT_{ij}$ is the cultural similarity index value between the $ij$th country pair, and $\tau_t$ are year dummy variables. The matrix $X_{ijt}$ includes the natural logarithm of origin country $i$’s gross domestic product in year $t$, the natural logarithm of origin country $i$’s gross domestic product per capita in year $t$, the natural logarithm of origin country $i$’s gross national income growth in year $t$, origin country $i$’s openness measured as the dollar value of trade in year $t$, origin country $i$’s corporate tax rate in year $t$, the relative corruption perception index between destination $j$ and origin $i$, and a dummy variable for OECD membership ($1 = $member, $0 = $non-member), and $\tau_t$ are year fixed effects.

5 Empirical results

Table 5 presents the marginal effects evaluated at the means\textsuperscript{10} of six models used to test Hypotheses 1, 2, 3(i), and 3(ii). Each of the six models is estimated using cluster-robust standard errors around the cultural similarity index. Estimation of Models 1–4 use 12,245 observations. However, data limitations for other independent variables constrain the number of observations to 10,648 in estimating Models 5 and 6. Each of the six models performed well with relatively high pseudo $R^2$’s.

Model 1 illustrates that geographic distance alone is a negative and statistically significant determinant of FDI propensity. Similarly, Model 2 shows that dummy variables for cultural similarity are statistically important determinants of FDI propensity. Cultural dissimilarity (low values of the cultural similarity index) negatively impacts the propensity of FDI. However, destination and origin countries with greater similarities are associated with positive and higher probabilities of FDI. Estimates associated with the dummy variables for the cultural similarity index almost monotonically increase the more culturally similar are two countries. Model 3 combines the variables from Models 1 and 2. These results provide initial evidence to support Hypotheses 1 and 2.

Given the region’s geographic compactness and cultural diversity, depending upon their origin, MNEs may weight these two considerations differently. For example, although culturally similar, it is plausible that British and Canadian firms view former Yugoslavia in a different way due to their vastly different distances to it. To capture this likelihood, Model 4 incorporates the interaction of geographic distance and cultural similarity. Models 5 and 6 add various control variables that impact the propensity of FDI and year fixed effects.

Interpreting the individual estimates with interaction terms is challenging because these estimates depend on where the margin effect is evaluated. For this reason,

\textsuperscript{10}See Greene (2018) chapters 23 and 24.
Table 5 Marginal probability of FDI evaluated at the mean for all other variables in each model (robust-clustered standard errors in parentheses)

| Independent Variable | Model 1       | Model 2       | Model 3       | Model 4       | Model 5       | Model 6       |
|----------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| ln(Distance)         | –0.1716***    | –0.1049***    | –0.0112       | –0.0112       | 0.0180**      |               |
| Culture 0 (least similar) | –0.0663***    | –0.0666***    | 0.8545***     | 0.8061***     | 0.9983***     |               |
| Culture 0.5          | –0.1439***    | –0.1379***    | 0.9635***     | 0.4503        | 0.9850***     |               |
| Culture 1.5          | 0.1404***     | 0.0575***     | 0.9723***     | 0.8692***     | 0.9980***     |               |
| Culture 2.0          | 0.3139***     | 0.1145***     | 0.9369***     | 0.9390***     | 0.9737***     |               |
| Culture 2.5          | 0.0698***     | 0.0289***     | 0.9662***     | 0.9619***     | 0.9868***     |               |
| Culture 3.0          | 0.4950***     | 0.1631***     | 0.8689***     | 0.0562        | 0.8918***     |               |
| Culture 3.5          | 0.4557***     | 0.1889***     | 0.8424***     | 0.4165        | 0.9637***     |               |
| Culture 4.0          | 0.4979***     | 0.2267***     | 0.8688***     | 0.6908***     | 0.9550***     |               |
| Culture 4.5          | 0.4894***     | 0.0177        | 0.5904        | 0.8851***     | 0.9516***     |               |
| Culture 5.0          | 0.6700***     | 0.1322***     | 0.5689        | 0.2620        | 0.8848***     |               |
| Culture 5.5          | 0.4145***     | –0.0489**     | 0.8211***     | 0.8230***     | 0.9659***     |               |
| Culture 6.0          | 0.7883***     | 0.4897***     | –0.1080***    | –0.0874***    | –0.0573***    |               |
| Culture 6.5 (most similar) | 0.7103***     | 0.0295        | 0.6269***     | 0.8051***     | 0.9128***     |               |
| DistCult 0.5         | –0.0649**     | –0.0468**     | –0.0895***    |               |               |               |
| DistCult 1.0         | –0.1087***    | –0.0345*      | –0.0749***    |               |               |               |
| DistCult 1.5         | –0.1625***    | –0.0939***    | –0.1188***    |               |               |               |
| DistCult 2.0         | –0.0998***    | –0.0468**     | –0.0759***    |               |               |               |
| DistCult 2.5         | –0.0985***    | –0.0702***    | –0.1014***    |               |               |               |
| DistCult 3.0         | –0.1382       | –0.0863***    | –0.1088***    |               |               |               |
| DistCult 3.5         | –0.0429       | 0.0121        | –0.0276***    |               |               |               |
| DistCult 4.0         | –0.0344       | –0.0076       | –0.0561***    |               |               |               |
| DistCult 4.5         | –0.0396       | –0.0195       | –0.0652***    |               |               |               |
| DistCult 5.0         | –0.0135       | –0.0490***    | –0.0667***    |               |               |               |
| DistCult 5.5         | 0.0013        | 0.0111        | –0.0148**     |               |               |               |
| DistCult 6.0         | –0.0465       | –0.0399       | –0.0445***    |               |               |               |
| DistCult 6.5         | 0.2962        | 0.1540***     | 0.0787***     |               |               |               |
| OECD Member          |               |               |               |               |               | 0.0934***     |
| ln(GDP per cap)      |               |               |               |               |               | 0.0478***     |
| ln(GDP)              |               |               |               |               |               | 0.031***      |
| GNI growth           |               |               |               |               |               | –0.001**      |
| Economic Openness    |               |               |               |               |               | –0.001**      |
| RCPI                 |               |               |               |               |               | –0.0004***    |
| Corporate Tax Rate   |               |               |               |               |               | –0.002**      |
| Year                 |               |               |               |               | Yes           | Yes           |
| N                   | 12,425        | 12,425        | 12,425        | 12,425        | 10,648        | 10,648        |
| Pseudo $R^2$         | 0.2635        | 0.2500        | 0.3506        | 0.3677        | 0.4625        | 0.4908        |

*p ≤ 0.10, **p < 0.05, ***p < .01
| Null Hypothesis                                      | Model 2             | Model 3             | Model 4             | Model 5             | Model 6             |
|------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Main Culture Effects all zero                        | $\chi^2 = 2,208.49$ $p = 0.000$ | $\chi^2 = 899.13$ $p = 0.000$ | –                   | –                   | –                   |
| Culture and Culture $\times$ Distance all zero       | $\chi^2 = 1,106.26$ $p = 0.000$ | $\chi^2 = 4.80 \times 10^8$ $p = 0.000$ | $\chi^2 = 9.10 \times 10^{10}$ $p = 0.000$ | $\chi^2 = 1.117.22$ $p = 0.000$ | $\chi^2 = 2.00 \times 10^9$ $p = 0.000$ $\chi^2 = 43,732.79$ $p = 0.000$ |
| Distance and Culture $\times$ Distance zero          | $\chi^2 = 1,117.22$ $p = 0.000$ | $\chi^2 = 2.00 \times 10^9$ $p = 0.000$ | $\chi^2 = 43,732.79$ $p = 0.000$ | $\chi^2 = 43,732.79$ $p = 0.000$ | $\chi^2 = 43,732.79$ $p = 0.000$ |
Table 6 presents the various joint hypotheses tests to explore Hypotheses 1–3. The results indicate that in Models 4, 5, and 6, joint hypotheses that culture and geo-culture interaction are jointly zero are firmly rejected ($\chi^2 = 1106.26$, $\chi^2 = 4.8 \times 10^8$, and $\chi^2 = 9.1 \times 10^{10}$, respectively). Similarly, a test of the joint significance of the distance and geo-culture interactions in Models 4, 5, and 6 reveals that these variables are important determinants of FDI propensity across former Yugoslavia ($\chi^2 = 1117.22$, $\chi^2 = 2.00 \times 10^9$, and $\chi^2 = 43,732.79$, respectively). In short, the results reveal strong support for Hypotheses 1–3.

In Models 4, 5, and 6, it can be difficult to recognize the effects of geographic distance and cultural similarity given the multiple marginal probability estimates and interaction effects. A useful approach to resolve this issue and clarify the results is to show the predicted probability for the entire range of values of the $X_{ijt}$ variables of interest holding all other variables constant at their mean. This is generally referred to as the “main effect” of the variable. Figures 3 and 4 show the main effects for the two variables of primary interest, distance and culture, based on the estimates of Model 6.

Figure 3 demonstrates the main effect of distance alone on FDI propensity in former Yugoslavia: as predicted and in line with the gravity model, the probability of FDI declines as distance increases. For example, Italian MNEs are highly active in neighboring Croatia, Slovenia, and Montenegro as shown earlier in Table 1. Yet another example is Cyprus, a leading origin of FDI in nearby Montenegro, although it should be acknowledged that Cyprus may be over-represented in the dataset as a popular “roundtripping” location and tax haven for firms originating in third countries such as Russia (UNCTAD, 2018).

The impact of cultural similarity on FDI propensity is demonstrated in Fig. 4. Recall that cultural similarity is measured on a scale of 0–7, ranging from “very
low” to “very high” similarity between country pairs. Figure 4 shows that the likelihood of FDI taking place between two countries increases when they resemble one another culturally. An example of culturally similar countries in our dataset with high FDI propensity include Austria in relation to Croatia, Bosnia & Herzegovina, Serbia, and Slovenia. These linkages were galvanized under the Austro-Hungarian Empire (Deichmann, 2021). Similarly, Turkey and Albania are culturally more similar to Kosovo, attributable to their Ottoman legacy, which yielded Muslim customs as well as linguistic connections. These pairs approach the score of 1.0 in Fig. 4, or nearly-certain FDI. In contrast, the probability of FDI from less-similar Asian countries such Japan and South Korea is weaker, although these two origins possess advantages in other mainstream variables such as national income and openness.

Figure 5 illustrates the effect of the geo-cultural interaction on FDI propensity. In general, the attraction of cultural similarity alone drops off as geographic distance increases. In other words, recalling the examples of Asian MNEs, at greater distances cultural similarity is less important for FDI. Awareness of this relationship has potential policy implications for the governments of Yugoslavia’s successor states as they seek FDI partners. This observation could help national investment agencies responsible for promoting FDI identify potentially viable origin countries from which thus far little FDI has taken place. For example, more MNEs could be targeted in culturally less-similar but economically influential Asian economies of China, Japan, and South Korea.
Figure 5 also provides a streamlined visual representation of the impact of interaction between geographic distance and cultural similarity. Note that the illustration features the impact on FDI propensity of only six levels of cultural similarity, indicated with different colors. Culture similarity index values 4.5 and 5 are omitted because the parameter estimates of both the main effect and the interaction effect are insignificant for those levels. These six index scores are re-codified according to levels of cultural similarity, showing less likelihood of FDI with increased geographic distance between country pairs, as predicted based upon past research (Bitzenis, 2004, 2016). However, they also show that at comparable geographic distances, the more culturally-similar two countries are, the greater the likelihood of FDI taking place. Notably, the lines tend to converge as distance increases. This confirms that cultural similarity does not seem to matter as much for firms from countries at great distances such as East Asia. Also evident in Fig. 5, the magnitude of the distance where this occurs depends on the extent of cultural similarity. The “low” cultural index equals the “very low” cultural index at approximately 7.25 (1400 km). Similarly, the “somewhat high” cultural index converges to the other cultural index series at approximately 8.5 (4900 km) and all other cultural indexes converge to the other index series at about 9.3 (11,000 km).

While confirming the role of geographic distance and cultural similarity, the vigorous performance of other mainstream variables should not be overlooked. In the extended Models 5 and 6, the “wealth” variables of OECD membership and GDP per capita are both shown to have a positive role on FDI propensity at the 0.001 confidence level. Moreover, GDP has a positive and significant influence on FDI.

Fig. 5 Predicted interaction of geographic distance, cultural proximity, and likelihood of FDI. Sources: WIIW (2018), distancecalculator.net, authors’ calculations
propensity in the extended models, confirming findings by Bojnec and Fertő (2017) based upon OECD countries. However, the dynamic GNI growth variable is slightly negative and significant in Model 5 (−0.001) and Model 6 (−0.0002), probably reflecting interference by more-dominant variables in these models. This outcome is in opposition to findings by Korović et al. (2020) based upon a similar set of countries and should be revisited. In addition, the negative and significant valence of the economic openness variable conflicts with findings on economic globalization by Bojnec and Fertő (2018). As these authors obtain their findings from OECD-22 countries, the unexpected result here can be reconciled given differences in observed countries and definition of variables. Similarly, the relative corruption perceptions index is also negative and significant, reflecting a greater likelihood for FDI to occur from countries that are more transparent (e.g., EU states) in the less transparent countries under investigation. This is also likely attributable to the effect of other variables in the models.

While the findings are robust across several model specifications, some unavoidable data-related limitations should be acknowledged. First, the FDI data in this research might, in fact, include foreign indirect investment. The World Bank (2019) estimates that up to 30 percent of FDI inflows might have been channeled through and registered in a third country such as the Netherlands, Panama, or the British Virgin Islands, which would cause these states to be over-represented in the models (Aykut et al., 2017). Second, some data are missing because following Yugoslavia’s dissolution, the new states became independent at various times, and in some cases during our period of analysis. Montenegro was formed in 2006, and Kosovo declared independence in 2008, although its status remains disputed at the time of writing. Third, Transparency International altered its corruption perceptions index (CPI) range in 2011 from 0–10 to the new range of 0–100. Using the destination-to-origin country CPI ratios (RCPI) is a candid attempt to adapt this relational measure to account for the rescaling. Finally, the efficacy of using countries as units of analysis should be interpreted with care because countries are far from homogeneous internally and borders are porous. Indeed, based upon an analysis of German FDI in CEE, Borrmann et al. (2005) find that European markets are not restricted by national administrative boundaries, and therefore in this context features of neighboring countries can also impact the decision to engage in FDI. These realities, plus the inherent question of cross-observation consistency when using quantitative data reported by different governments, are important to bear in mind while interpreting the results of this study as well as similar ones.

6 Suggestions for policy and further research

These findings yield several implications for the governments of former Yugoslavia and their investment promotion agencies. First, firms from countries with geographic proximity to and cultural similarity with the states under investigation that are not currently leading origins could productively be approached by Balkan investment agencies. For example, the Serbia Investment and Export Promotion Agency (“SIEPA”) might focus upon potential Russian clients; or Invest North Macedonia
might court U.A.E. and Turkish clients. Second, given the evident decline in the role of cultural proximity with increasing distance for non-European investors, should agencies target firms from North America or East Asia? These findings point to more potential for FDI from China, Japan, and South Korea, geographically distant but culturally less-similar states whose MNEs possess other enabling advantages. Moreover, Ford et al. (2008) suggest the economic impact of FDI varies according to an MNE’s origin country, arguing that Japanese firms in particular have a tendency for positive spillovers. Third, it is plausible that major infrastructure projects like EU-funded motorway and airport projects as well as China’s Belt and Road Initiative will effectively reduce the friction of geographic distance to the Balkans for MNEs from many origins. These developments might enable firms that are otherwise unlikely investors to enter markets in Southeastern Europe. Finally, this study offers a discrete location choice framework for replication with new data in other contexts as well as robust results for further interpretation by policymakers and scholars.

This paper points to further questions and research opportunities as well. First, while exchange rates fluctuated wildly over the time span of this study, an absence of currency independence and data accuracy prevented the inclusion of exchange rates in the empirical models per previous work on FDI in the U.S. context by Grosse and Trevino (1996). These models analyze the role of a relative corruption index, but a related question is the role of political risk in the origin country as an FDI push factor. According to Bitzenis (2004), political risk at an MNE’s home country might induce it to seek out safer environments abroad. As revealed in the past by Carstensen & Toubal (2003), it is plausible that localized risks and perceptions thereof might still impact FDI propensity in this context where war led to severe localized human and material destruction. Third, given the forced and voluntary migrations that took place concomitant with Yugoslavia’s dissolution, a more complete understanding of FDI in the region might be gleaned by revisiting Bandelj’s (2002) case study approach. Arguably, however, such factors are partially captured in the present study through the cultural similarity index and the year dummy variables. In addition, although beyond the scope of this paper, it would be a valuable research exercise to narrow down FDI propensity according to industrial sector, per Dunning’s (1980) framework, in order to estimate the differential relevance of these variables on MNEs primarily seeking markets, resources, efficiency, and other host country advantages.

It is worth emphasizing that the FDI picture is changing rapidly, both regionally within Southeastern Europe and globally, even prior to the COVID-19 pandemic. The dynamic nature of FDI in the Balkans is being impacted by several emerging trends. First, the global phenomenon of divestiture has been noted earlier (OECD, 2017; Arte & Larimo, 2019), and will likely be intensified by COVID-19 (Sharma, 2021, UNCTAD, 2021). Second, given the demonstrated importance of economic integration for FDI (Bandelj, 2010; Bitzenis, 2016; Kekic, 2005), disruptions in Balkan countries’ EU accession progress will be detrimental to FDI inflows from other European origin countries. Third, although China remains only a minor player in this region at the time of writing, its future role could be monumental (Richet, 2019). China’s global Belt and Road Initiative features a major Balkan corridor passing
through many of these countries, and its 16+1 diplomatic outreach toward CEE imply that its leaders seek a “backdoor” to European markets for Chinese MNEs. Similarly, while EU and US firms have been reluctant to invest in Southeastern Europe over recent years, interest in the region by MNEs from other sources such as the UAE, Turkey, and Russia continues to increase (Deichmann, 2021). These newly assertive countries (and China in particular) are neither geographically proximate to Southeastern Europe nor culturally similar to most of the region’s countries, but their firms have great potential to generate sought-after FDI projects. Such unanticipated events and emerging trends support the need to revisit and expand scholarly research on the dynamics of FDI into the Balkan region.

7 Conclusion

This paper yields three findings on FDI location choice in the successor states of Yugoslavia. First, FDI propensity declines as geographic distance between the origin (FDI supplier) and destination (FDI recipient) states increases. Second, FDI propensity is significantly higher when the origin and destination are culturally similar. Based upon expanded evidence from our more-recent dataset, these two findings are consistent with previous research on FDI in the region (Bandelj, 2002; Bitzenis, 2004, 2016; Jaklić & Svetličić, 2016; Bojnec and Fertö, 2018). Third, the models incorporate a clear tradeoff between geographic distance and cultural similarity by interacting the two variables. In general, the interaction terms mitigate the individual impacts of geographic distance and cultural similarity: as geographic distance grows to a certain point (roughly 1800 km), origin and destination states must be more culturally similar to maintain the same likelihood of FDI taking place. In their efforts to attract FDI, destination governments and their investment agencies can increase investment propensity by looking beyond European partners to more distant MNEs from East Asia in particular, where the cultural similarity appears to be eclipsed by other enabling factors.

The “geo-cultural interaction” variable is of particular importance. The models demonstrate that FDI propensity declines as geographic distance between destination and origin country increases. However, this tendency is moderated by cultural similarity between the origin and destination country. FDI propensity for culturally dissimilar (the “low” or “very low” culturally similar) country pairs within 100 km declines from 48 and 22 percent, respectively. In contrast, culturally similar (index above “somewhat high”) countries and those geographically located within 100 km of the destination show an FDI propensity of at least 75 percent.

The main contribution of this paper is the addition of geo-cultural interaction to the mainstream list of FDI determinants, which provide the backdrop for the study. Based upon a dataset of 12,245 pairwise observations of 153 origins of MNEs and seven culturally diverse new Southeastern European entities, the results confirm the role of geographic distance (Bandelj, 2002; Bitzenis, 2016; Cieślik, 2020) and culture (O’Hùallacháin and Reid, 1992; Bandelj, 2002; Bitzenis, 2004; Taras et al., 2009; Jaklić & Svetličić, 2016; Bojnec and Fertö, 2018), and presents new findings about their significant interaction. In addition, the research extends and updates
findings on other mainstream determinants of FDI using logit models with new data to focus on the location decision rather than the volume of FDI.

Based upon the augmented gravity models and binary dependent variable of FDI propensity, the importance of geo-cultural variables is upheld when seven additional conventional determinants are introduced. Moreover, the role of distance and culture is confirmed in most of the six model specifications. Results from our interaction variable suggests that geographic proximity is an important enabler of FDI propensity to a certain point (within Europe), beyond which it begins to wane (Africa and beyond) until cultural similarities again become more apparent. In other words, at greater distances, cultural similarity appears to overcome the friction of geographic distance and enable FDI. The models and illustrations point to the potential to increase FDI propensity from MNEs based in more distant but culturally less similar countries such as China, Japan, and South Korea, all of which benefit from other enabling characteristics related to their national wealth and economic globalization. This observation confirms other evidence from OECD countries (Bojnec and Fertő, 2018) and the Western Balkans (Kurtović et al., 2020) on the role of market strength, market growth, economic openness, taxation, transparency, and national wealth as FDI determinants. Importantly, this study uses an appropriate but less-common logit model methodology to focus on the investment decision rather than the magnitude of investment, based upon a very large data set. In sum, the evidence supports the importance of geography, culture, and other FDI determinants in explaining FDI propensity in Southeastern Europe, highlighting the distinct investment climates and different relational linkages of these seven destination countries with external actors in the global economy.

In consultation with and on behalf of all authors, the corresponding author confirms that no conflict of interest is associated with the present research.

Author contributions All authors contributed to the study conception and design. Material preparation, data collection and analysis were performed by JD and PS. SG joined the team for stages of model specification, analysis, and final manuscript preparation. All authors read and discussed reviewer comments and contributed to previous versions of the manuscript. All authors approved the final manuscript.

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Declarations

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