Oleg Gurshev
https://orcid.org/0000-0003-4532-7819
Department of Macroeconomics and International Trade Theory
Faculty of Economic Sciences
University of Warsaw, Poland
o.gurshev@uw.edu.pl

Foreign direct investment and international trade across the former Soviet economies: What do we know after 30 years of research?

Accepted by Editor Ewa Ziemba | Received: May 3, 2023 | Revised: July 16, 2023; September 17, 2023 | Accepted: September 19, 2023 | Published: October 6, 2023.

© 2023 Author(s). This article is licensed under the Creative Commons Attribution-NonCommercial 4.0 license (https://creativecommons.org/licenses/by-nc/4.0/)

Abstract

Aim/purpose – This paper surveys three decades of empirical literature on foreign direct investment (FDI) and international trade across the former Soviet economic space. In this survey, we outline the current state of research, discuss data limitations, and identify topics for further studies.

Design/methodology/approach – The methodology used in this study is a systematic literature review. Multiple databases were searched, including Google Scholar, IDEAS (RePEc), JSTOR, Web of Science, and others. In total, 59 papers published between 1990 and 2023 were analyzed.

Findings – Our findings are severalfold. First, we highlight severe data collection problems related to foreign equity and trade outside the Baltics, Ukraine, Russia, and some Central Asian Republics (CARs). As a result, we point out the limited availability of studies that use contemporary data and cover important economic events, such as the European accession of the Baltics, the formation of new preferential trade agreements, and economic re-integration centered around Russia, and Ukraine’s political stability.

Research implications/limitations – This study should assist researchers in identifying prospective research directions in post-communist economic research. The main limitations of this survey are i) the total number of papers surveyed (59), ii) the focus on empirical studies, and iii) the specific geographical area considered.
Originality/value/contribution – Despite the critical role of FDI and trade in transitional economies, plenty of relevant topics have remained undiscovered (e.g., the relationship between outward FDI and profit shifting). To the best of our knowledge, no systematic survey has been done on these two areas of research.

Keywords: Foreign direct investment, international trade.
JEL Classification: F13, F15, F23, P33.

1. Introduction

Under the central planning system, cross-border investments and foreign trade could only be conducted under the authority of the Communist Party. The Soviet Union leadership had conducted various experiments related to mixed economy and controlled liberalization of external economic activity, such as foreign concessions, joint projects with capitalist firms, and special economic zones (Guriev, 2019; Miller, 2016; Smith, 2019). With the Fall of the Iron Curtain and the subsequent process of perestroika, the former Soviet republics, to various degrees, have pursued reforms aimed at the privatization of commerce, including trade and investments. Due to policy considerations, the newly created states have undertaken significant steps in reforming the way domestic statistical data are collected and published. As a result, the economic literature has seen a large number of empirical studies devoted to the analysis of foreign direct investment (FDI) and trade patterns based on national data from these economies.

The goal of this paper is to survey the two areas of empirical research: i) FDI resulting from the activity of multinational firms (MNEs), and ii) international trade in the context of the post-communist economies. The former area is crucial because the former Soviet republics have been capital-deprived in comparison to their neighbors in Western Europe and across the Atlantic. As a result, plenty of the available research on this topic today has been focused on incoming capital from MNEs. Nevertheless, our survey also comments on studies investigating outward capital movements originating from Estonia, as this particular economy has seen a rapid increase in outgoing FDI activity early on. Next, this paper examines cross-border trade and economic integration. As of the time of writing, the former Soviet economic space has been experiencing a significant restoration of trade and economic links centered around the Eurasian Economic Union (EAEU) and subsequently, Russia. As a result, we conduct a literature study with a focus on these two topics and summarize the current state of research, highlight gaps in knowledge, and propose avenues for further studies.
Although this review contains descriptive studies, our primary goal is to showcase empirical methods and types of data used by the existing research. As a result, we briefly mention some of the related topics and references that this review does not cover. First, we do not discuss issues related to the Commonwealth of Independent States (CIS); for that see Sakwa and Webber (1999), Gleason (2001), and Kubicek (2009). Second, we do not focus on the process of economic transition and the role of institutions. On this topic, cf. Meyer (2001), Meyer and Peng (2005), Caves (2007), and Cuervo-Cazurra (2008). Third, we do not consider empirical cross-country studies that feature post-Soviet economies as part of their dataset; for that, we refer the reader to studies of Alexeev and Conrad (2009), Asiedu and Lien (2010), Busse and Hefeker (2005), Cieślik and Goczek (2018), Head et al. (2010). Fourth, although we mention a few studies related to spillovers resulting from inward FDI, our primary focus is on the determinants of market entry and MNEs’ subsequent decisions to locate themselves somewhere within the post-Soviet economic space. On this subject, cf. Azman-Saini et al. (2010), Crespo and Fontoura (2007), Havranek and Irsova (2011), Wooester and Diebel (2010), Yudaeva et al. (2003), and many others. Finally, our review does not encompass descriptive studies connected to the topic of Eurasian integration, such as Czerewacz-Filipowicz (2019), Kheyfets (2019), or Libman and Vinokurov (2011).

Another preliminary point is on the selection of countries we focus on. Because the majority of well-known empirical studies published in English that discuss topics related to foreign equity and international trade in the context of post-communist economy use Russian data, this economy is profoundly featured in the paper. To complete our survey, we bring the three lesser-known strands of the literature that use data from the Baltic states (Estonia, Latvia, and Lithuania), Ukraine, and Central Asia. Further, because of the lack of data and established research in the context of the Caucasus region (Armenia, Azerbaijan, Georgia), it is absent from this review. Similarly, due to the existing data availability constraints (and lack of research) connected to the activity of foreign firms across Central Asia, this region is only considered in the trade section of this review.

Our findings are severalfold. First, while studies related to the market entry of foreign firms into the Baltics contain comprehensive analyses of a given economy, the studies do not feature nor investigate the spatial (or regional) dimensions of FDI allocation. Further, we find an absence of studies that examine the case of Lithuania or consider the ex-post impact of EU membership across the three Baltic economies. We also highlight the absence of research related to the potential profit shifting of multinational firms via the FDI channel in the
Baltic context. Second, because of Russia’s extreme geography and natural endowments, the existing literature has been predominantly focused on the regional dimension of incoming foreign investments. As a result, there appears to be a lack of applied research that pays attention to issues related to macroeconomic determinants of inward FDI (e.g., integration treaties or sanctions), outward investment activity of Russian-based MNEs, and further investigation of round-tripping investment activity related to destinations such as Cyprus, the British Virgin Islands (BVI), and others. Third, the study of FDI distribution across Ukraine has been rather rich as there are plenty of extensive firm-level studies. However, the last decade did not see any research connected to the more recent context such as economic integration with the European Union (EU) or domestic political and security issues. Fourth, while the literature on the EAEU offers a rather comprehensive and systematic quantitative analysis of trade and economic cooperation (both ex-ante and ex-post), we find the existing studies that contain an empirical examination of regional trade treaties to be rather thin. Finally, we note the persistence of data collection problems connected to Central Asia and the general absence of applied economic studies in the area that focus on potential integration with major trading partners such as Russia or China.

The remained of the paper is organized as follows. Section 2 provides an overview of the literature and discusses the survey approach. Section 3 discusses studies related to the topic of FDI and the activity of MNEs. Section 4 considers research on trade and economic integration across the EAEU and Central Asia. Section 5 discusses potential avenues of research. Section 6 concludes.

2. Methodology and overview of the literature

In this survey, we adopt a systematic literature review approach (Levy & Ellis, 2006; Webster & Watson, 2002). In particular, we manually search for empirical articles published in English (including working papers and conference proceedings) between 1990 and 2023 (Q1) but mention descriptive studies and monographs if they are important for context. In total, our search yields works in the field of international economics. To search for the relevant literature, the following search keywords have been run on Google Scholar, IDEAS (RePEc), JSTOR, Web of Science, and others:2

1 Search was conducted in February of 2023.
2 Refers to WIIW, ETLA, World Bank Policy Research, and NBER paper databases.
1. Foreign direct investment [country name].
2. Determinants of foreign direct investment [country name].
3. Multinational firms [country name].
4. Eurasian Economic Union, trade, gravity.
5. Free trade agreements [country name].
6. Economic integration [country name].

We screened the papers by title and keywords first. If the title or topic was considered to be relevant, we read the abstract and decided whether the study was pertinent. Tables 1 and 2 summarize our search results. As can be seen, the majority of featured empirical studies are built using modern econometrics. However, when it comes to FDI, plenty of descriptive studies and investor surveys are also available.

**Table 1. Literature search results, topic, and country breakdown**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Foreign direct investment</td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>14</td>
</tr>
<tr>
<td>Latvia</td>
<td>2</td>
</tr>
<tr>
<td>Lithuania</td>
<td>0</td>
</tr>
<tr>
<td>Russia</td>
<td>13</td>
</tr>
<tr>
<td>Ukraine</td>
<td>6</td>
</tr>
<tr>
<td>Combineda)</td>
<td>5</td>
</tr>
<tr>
<td>2. Trade and economic integration</td>
<td></td>
</tr>
<tr>
<td>Central Asia</td>
<td>7</td>
</tr>
<tr>
<td>Eurasian Economic Union</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
</tr>
</tbody>
</table>

a) Study includes either of the already mentioned five economies.

Source: Author’s own estimation.

**Table 2. Literature search results, methodology**

<table>
<thead>
<tr>
<th>Topic and method used</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Foreign direct investment</td>
<td></td>
</tr>
<tr>
<td>Investor survey</td>
<td>5</td>
</tr>
<tr>
<td>Econometrics</td>
<td>29</td>
</tr>
<tr>
<td>Descriptive report</td>
<td>4</td>
</tr>
<tr>
<td>Monograph (chapter)</td>
<td>1</td>
</tr>
<tr>
<td>Case study</td>
<td>1</td>
</tr>
<tr>
<td>2. Trade and economic integration</td>
<td></td>
</tr>
<tr>
<td>Theory</td>
<td>1</td>
</tr>
<tr>
<td>Econometrics</td>
<td>16</td>
</tr>
<tr>
<td>Descriptive report</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
</tr>
</tbody>
</table>

Source: Author’s own estimation.
3. Foreign direct investment

This section reviews the body of work related to the study of FDI across the Baltics, Russia, and Ukraine. The former Soviet economies have been relatively capital scarce and technologically outdated compared to their Western counterparts. Much of the empirical literature has focused on the incoming capital and market entry of foreign firms. As a result, the discussed studies paid significant attention to topics such as privatization, legal barriers, diffusion of technology, and economic integration (Borsos-Torstila, 1997; Ciešlik & Gurshev, 2021; Čičak & Sorić, 2015; Titarenko, 2006; Vahter, 2004).

3.1. Estonia, Latvia, and Lithuania

Research on the Baltics has been centered on potential technology spillovers from foreign to local firms, integration across the Baltic Sea, and their economic development. The majority of the reviewed studies in this subsection investigated FDI in the context of Estonia and were published during the first two decades of transition. Because the Baltics are a relatively homogeneous group of economies, there are pretty much no studies that focus on the spatial dimension of FDI in comparison to, say, the empirical literature that exists on Russia. The primary challenge of the early literature was data acquisition on established foreign firms. Therefore, some of the early studies in this section relied on self-developed surveys. More recent literature has utilized cross-country and firm-level data to study the investment activity of MNEs. Except for a few studies, the featured research utilized linear regressions to obtain their results.

One of the earliest studies in the context of Estonia explored the role of foreign investors as technology transferrers using data on 20 foreign-owned firms operating in Tallinn3 across the foodstuff, electronics, and services sectors. Through the self-developed questionnaire, Borsos-Torstila (1997) found that foreign-operated firms were pursuing a relatively significant amount of R&D activities. However, most of the R&D was still inconsiderable and concentrated within the parent firm located abroad (Scandinavia, Germany, and the United States). Further, Varblane and Ziacik (2000) used two annual surveys (investors and exporters) conducted in 1997 to study the impact of FDI on the export activities of Estonian firms. They found that export-oriented investors have different motivations for investing in Estonia compared to non-exporting ones. In particu-

---

3 This was done due to significant data collection constraints.
lar, export-oriented investors were particularly interested in Estonia’s low production costs, availability of labor, and free movement of capital. In a related study, Varblane et al. (2003) examined the role of inward FDI in job creation and employment structure across the Czech Republic, Hungary, Slovakia, and Estonia. As Estonia pursued privatization through direct sales giving equal access to all bidders (including foreigners), by the end of 1995, there were just about 15 percent of state-owned enterprises in the economy. Buyers had to guarantee a certain level of investments and employment in future years, which created a much-needed transition buffer in the market and prevented job erosion. This notion is further confirmed by a later study, where Radošević et al. (2003) employed firm-level data on manufacturing firms operating in Estonia, the Czech Republic, Hungary, Poland, Slovenia, and Slovakia for the years 1993-1999. They found that FDI in Estonia preserved employment and substituted for the overall loss of jobs following the initial period of transition. Finally, Mickiewicz et al. (2004) used firm-level data for 1995-1999 to empirically study access to financial capital between foreign-owned and domestic firms in Estonia. They employed the Arellano–Bond (Arellano & Bond, 1991) estimator and established that foreign companies are less financially constrained than their domestic counterparts, it is also the case that larger firms are able to access financial capital more easily than smaller ones.

The early period of Estonia’s transition is also associated with studies related to outgoing capital movements. In 1996, Estonia firms began using FDI as a method of entry to foreign markets. In particular, Estonian banks have moved into Latvia and Lithuania (Roolaht & Varblane, 2009). Overall, this internationalization has been primarily associated with the service sector (financial intermediation, real estate, and business services). Varblane et al. (2019) conducted a firm survey between May and September of 2001 focusing on firms that carry out outward FDI. Their results suggested that market-related motives were among the most important determinants of outward FDI. During its first fifteen years of transition, Estonia has seen a rapid growth of outward FDI, totaling about 15.8 percent of GDP and 16.1 percent of gross fixed capital formation in 2005 (Masso et al., 2008). To study the potential implications of the observed capital movements on the domestic economy (in particular, domestic employment), Masso et al. (2008) employed firm-level panel data for the years 1995-2002. It was discovered that outward FDI had a positive correlation with domestic employment growth, indicating that Estonia was not at risk of experiencing job losses. The researchers also observed that Estonia had received a significant
amount of FDI, ranking as the third highest among the new EU member states, behind only Cyprus and Malta. It is worth noting that FDI associated with Cyprus and Malta is now linked to the profit-shifting activities of MNEs (Damgaard et al., 2019). As Estonia was nearing its accession to the EU, the research argued for the promotion of vertical (or efficiency-seeking) production specialization. Using survey data on four foreign investors over 1997-2000 and the early theoretical literature studying determinants of FDI from Dunning (1994), Reiljan et al. (2001) pointed out that the main driver of efficiency-seeking FDI could be comparatively low production costs for servicing European markets. However, Estonia’s location at the very edge of the EU and the lack of qualified labor may have contributed to relatively high transportation and training costs incurred by foreign firms. Nevertheless, proximity to Russia could have a notable impact on market-seeking investments.

During that time, potential economic cooperation between Estonia, Finland, and the city of St. Petersburg was regarded as facilitating both FDI and trade (Borsos & Erkkilä, 2002). Part of this study was based on an updated gravity model from Wang and Winters (1992) that was estimated using average bilateral trade flows between 17 European economies across 1988-1990. The authors concluded that there was an underutilization of trade with St. Petersburg, and further integration across the Baltic triangle could yield economic benefits for Finnish firms in both Estonia and Russia. However, the authors highlighted the existence of a central planning legacy, legislation loopholes, complicated bureaucratic procedures, and other obstacles in the abovementioned economies.

The early literature also highlighted the role of Scandinavian economies. In a descriptive study, Ehrlich et al. (2002) reported that foreign firms from Finland and Sweden (at the time) held the largest equity shares in Estonia (1994-2000) and accounted for over 70 percent of the incoming FDI in Estonia. The largest share of Finnish FDI was allocated to finance, transport, communication, manufacturing, and retail trade sectors. In contrast, Swedish FDI was allocated mostly to the financial sector. Vahter (2004) studied the impact of FDI on labor productivity in Estonia and Slovenia using manufacturing firm-level panel data between 1994 and 2000 (Slovenia) and 1996-2001 (Estonia). The study was based on Aitken and Harrison (1999) and explored the existence of potential spillover effects (negative and positive) resulting from the presence of foreign equity. In the case of Estonia, the author did not find any intra-industry spillover effects from FDI. However, the author discovered that foreign-owned firms had, on average, higher labor productivity in comparison to indigenous firms. Overall,
the study emphasized the growing tendency of CEE governments to pursue FDI promotion schemes that were justified by possible technology transfers from MNEs.

More contemporary studies by Vahter (2011) and Masso et al. (2013) have investigated the relationship between FDI and innovation in Estonia. In particular, Vahter (2011) combined firm-level data from the Estonian manufacturing industry with CIS innovation surveys (two waves: 1997-2000 and 2002-2004). The author addressed the problem of the endogeneity of inward FDI using two-stage estimation (2SLS) with instrumental variables (IV) from other CEE economies such as Hungary, Poland, Latvia, etc. The study reported that there were no short-term effects on local total factor productivity and that there was a positive spillover concerning innovation pursued by domestic firms. Further, Masso et al. (2013) also employed data from CIS innovation surveys (three waves, 1997-2000, 2002-2004, and 2004-2006) to study linkages between inward and outward FDI and the innovation inputs and outputs of local and foreign firms in Estonia. The authors found that, after considering various firm characteristics, foreign firms were less innovative than their domestic counterparts. They also noted that firms, which performed outward FDI featured higher levels of productivity.

Using quarterly stock data from Latvia, Titarenko (2006) examined the impact of FDI through the crowding-in and crowding-out model across the years 1995-2004. This study documented the existence of a significant crowding-out influence of FDI on domestic investment. There appear to be two drivers behind this effect: relatively low FDI intensity and high concentration of FDI in the most rapidly developing sectors, such as banking, telecommunications, and retail. As a result, due to these industries’ oligopolistic nature, multinationals could outcompete and replace domestic firms. In a recent study, Čičak and Sorić (2015) considered the relationship between inward FDI and economic growth and European transition countries using bivariate vector autoregression (VAR) models. Their study reported the existence of a positive relationship between FDI and output growth in countries such as Poland, the Czech Republic, and Hungary. While in Latvia, investors were attracted by stable macroeconomic conditions. However, it is unclear how large is the collected scope of data as each country has a different time interval for FDI stock data.

In contrast, there are no empirical papers that focus solely on Lithuania. This Baltic economy has been considered in a number of cross-country studies by Güngör and Binatli (2010), Irandoust (2016), Kotilainen and Nikula (2010), and Simionescu (2018). The aforementioned works have looked into various topics, such as market surveys, European integration, and growth. All in all, their
methodology can be summed up as follows. FDI data have been drawn from net capital inflows and employed in a variety of econometric estimators, e.g., generalized method of moments (GMM), VAR models, and Bayesian methods. These studies emphasized the role of FDI in facilitating economic growth and development in Lithuania. However, the approach has been predominantly data-driven and did not provide any link between the existing mainstream theoretical literature related to MNEs’ location choice and the obtained empirical results.

Most recently, Cieślik and Gur shev (2021) studied the determinants of FDI location choice across the Baltics using an extended cross-country knowledge-capital (KC) model from Bergstrand and Egger (2007) and Bayesian model averaging (BMA) across inward FDI stock data between 2004 and 2019 for Estonia, Latvia, and Lithuania. The primary advantage of the authors’ approach is that BMA allows the investigation of a diverse set of possible factors that may or may not impact the decision of a multinational firm to locate FDI in a given economy. Moreover, the authors perform various counterfactual estimations to study the role of round-trip FDI and its impact on the obtained results. All in all, the study found that foreign MNEs usually perform vertical-type FDI in the Baltics, which is driven by the existing cost differences in skilled labor and physical capital. Second, external market barriers related to non-EU/EFTA countries generate “tariff-jumping” or horizontal FDI. Finally, the presence of offshore destinations creates a stronger horizontal motive in comparison to more restrictive partner samples.

### 3.2. Russia

Among the former Soviet economies, Russia has seen empirical research focused on the geographical distribution of FDI. Because Russia is such a heterogeneous economy, the first generation of studies (pre-2005) sought to explain the spatial dimension of FDI as well as the fact why Russia was attracting lesser levels of FDI in comparison to other European transition economies, such as the Czech Republic, Hungary, and Poland. As we discuss further, much of the more recent literature continued this tradition and explored issues related to local economic performance, governance, and the role of offshore capital. The conducted research has been, for the most part, based on national data reported by the local statistical agency (GOSKOMSTAT/ROSSTAT). Other notable sources were used, for example, Moody’s RUSLANA, World Bank’s Data Bank, and the Bank of Russia database on foreign equity positions. Most commonly, FDI data
are split between two types: net investments (debt and assets combined) and stocks (assets only). Method-wise, the existing early studies employ data-driven linear regressions, whereas more recent research has been related to the established theoretical literature on multinational firms, e.g., Markusen (2002), Bergstrand and Egger (2007, 2013).

In the initial transition period (1993-1995), incoming FDI and market entry of foreign firms were associated with job creation. At the time, Moscow was already accounting for nearly half of the total joint venture activity in the country (Bradshaw, 1997). Further research also emphasized the role of the skilled labor force available in the cities of Moscow and St. Petersburg (Brock, 1998). The author analyzed regional data on FDI across the years 1993-1995 using a static three-year-average linear regression. The author found a negative impact of crime rates on inward FDI and a positive relationship between regional consumption and the activity of multinational firms. In a similar study, Racanatini and Broadman (2001) considered regional FDI flows between 1995 and 1999. The authors reported that outside of Moscow and St. Petersburg, other parts of Russia attracted less than 2 percent of the total inward FDI. The authors documented the importance of market size, infrastructure development, and policy factors when explaining the variation of FDI across regions. Iwasaki and Suganuma (2005) continued the investigation into the regional allocation of FDI and employed region-based panel data across the years 1996-2003. The authors argued that endowment with natural resources and market and socio-economic development facts were important for decisions regarding the location of FDI across Russia. Further, the featured findings indicated that climate can be viewed as a cogent condition for investment activities within the country. Brock (2005) studied the impact of inward FDI on regional economic growth between 1995 and 2000. Similar to the earlier work, the author found that large regional economies tend to attract higher investment. Further, the analysis indicated that the impact of inward FDI on economic output was more pronounced toward the end of the 1990s.

More recent studies by Gonchar and Marek (2014), Kuzmina et al. (2014), Ledyaeva (2009), and Ledyaeva et al. (2015) have continued the analysis of inward FDI across Russia. This strand of the literature mostly employed regional data covering the second decade of the transition (2000-2010). The featured analysis became more granular as studies examined issues related to the persistence of institutions (Kuzmina et al., 2014; Ledyaeva et al., 2013), various spatial interdependencies (Ledyeva, 2009; Ledyaeva et al., 2015), and investment
motives (Gonchar & Marek, 2014). In particular, subsequent research paid a great deal of attention to the topics connected to capital flight and round-tripping. For example, Ledyaeva et al. (2013) examined the relationship between regional allocation of FDI and round-tripping activities of multinational firms across the years 1997-2011 using the original KC model of Markusen (2002). The authors found that round-trip investments between Russia and typical offshore destinations were closely related to the regional level of corruption. In a related study, Ledyaeva et al. (2015) argued that approximately 54 percent of the established firms in the period of 1997-2011 were based in offshore jurisdictions. The majority of these were located in destinations such as Cyprus, the BVI, and Switzerland. Next, Kuzmina et al. (2014) analyzed the impact of governance quality in the Russian regions on inward FDI by applying the exogenous variation across regions in worker strikes between 1895 and 1913. The authors found negative and insignificant effects of governance quality that may suggest that the motive behind round-trip FDI may be entirely different. Generally, the treatment of offshore destinations has remained conservative as the abovementioned studies neither considered countries such as the Netherlands, Luxembourg, and Singapore in the analysis nor went to great lengths in terms of offering counterfactual analysis. For example, Gonchar and Marek (2014) simply dropped potentially problematic round-trip destinations from their data sample based on the official list generated by the Russian Ministry of Finance. Whereas studies of Kuzmina et al. (2014), Ledyaeva et al. (2013), and Ledyaeva et al. (2015) mostly pointed in the direction of round-trip investments related to Cyprus or BVI and presented their results by removing problematic destinations from the studied sample.

Another strand of the literature has studied Russia’s macroeconomic factors as determinants of inward FDI: Cieślik and Gurshev (2022a), Gurshev (2019), and Mariev et al. (2016). In particular, Mariev et al. (2016) investigated the gap between actual and potential inward FDI employing a gravity-based framework using national data from 2001-2011. The authors arrived at a peculiar result arguing that incoming FDI to Russia from Cyprus is lower than its potential, while FDI from countries such as Austria, and the Netherlands is up to eight times higher than its potential values. As there is little analysis performed toward understanding the employed data, it is most likely the case that the obtained results in Mariev et al. (2016) suffer from the presence of round-trip FDI. More recently, Gurshev (2019) studied determinants of inward FDI using cross-sectional data between 1995 and 2017 obtained from the World Bank database and found...
that market size and tax rates are important factors in facilitating FDI, while trade barriers and sanctions exert negative effects. Based on the literature review, the author argued that the most commonly cited determinants of FDI include market size, skilled labor, the exchange rate of the ruble against the US dollar, the rule of law, and institutional quality. Lastly, Cieślik and Gurshev (2022a) examined the impact of factor endowments, trade agreements, sanctions, and round-trip FDI on inward investments. Unlike the previously discussed works on Russia, the authors collected data on bilateral FDI activity across Estonia, Latvia, Lithuania, and Russia to construct a multilateral dataset. The study was divided into two parts. First, the authors employed a modified knowledge-capital model from Bergstrand and Egger (2007) and demonstrated how differences in physical capital levels can identify vertical FDI activity in the presence of round-trip destinations such as Cyprus, Luxembourg, and the Netherlands. Second, the authors discovered that bilateral economic sanctions in 2014 had a short-lived negative impact on both outward and inward FDI activity. To perform counterfactual analysis, the authors used decomposed FDI stocks from Damgaard et al. (2019) to provide insight into the potential impact of round-trip FDI on the obtained results. Finally, the authors reported that the creation of the EAEU facilitated incoming FDI into Russia, but not vice-versa, which was the very first insight into how the restoration of economic ties around Russia impacted FDI in the region.

3.3. Ukraine

Similar to the previously discussed literature on the Baltics and Russia, the early research on Ukraine began in the second half of the 1990s. The featured empirical literature was built using original investor surveys and firm-level data obtained through the Ukrainian Statistics Committee. In general, the research has been rather critical to the early market reforms related to privatization and the establishment of legal rules around foreign investors (Ishaq, 1997; Kudina & Jakubiak, 2008). Akin to the seminal studies that quantify spillovers related to the presence of FDI, such as Aitken et al. (1999) or Smarzynska Javorcik (2004), studies in the Ukrainian context use industry dummies to measure potential firm-level effects of FDI.

At the beginning of its economic transition, Ukraine featured a plethora of administrative, legal, and economic barriers that prevented the potential market entry of foreign firms. In particular, the existing rules related to tax incentives
and privatization resulted in a lower level of foreign capital inflows in comparison to other post-Soviet economies (Ishaq, 1997). However, foreign firms that made it through the initial set of barriers were able to create much-needed industry-wide spillovers. Using data on 8500 Ukrainian firms from 1996-2000, Lutz et al. (2003) found that large domestic firms located in urban areas managed to diffuse and apply new technology brought by Western firms. Further, the study documented the fact that spillovers were larger if firms were engaged in the manufacturing sector. During the second decade of transition, many of the earlier problems faced by foreign investors remained. Kudina and Jakubiak (2008) performed an investor survey across the CIS and documented that foreign investors in Ukraine often faced operational issues related to corruption, ambiguity of legal rules, and bureaucratic hurdles.

Akulava et al. (2010) studied potential spillover effects from FDI using economy-wide national data on local firms from 2001-2007. The authors found that firms with foreign ownership outperform domestic firms in the economy. In a related study, Zvirgzde et al. (2013) employed a four-month-long enterprise survey collected from 2012 to study the location choice of foreign firms across Ukrainian regions. The obtained empirical results from multinomial logit regression indicated that market-seeking investors would most likely invest in the Kyiv agglomeration rather than the bordering regions of Lviv and Kharkiv.

Due to the ongoing military conflict, Ukraine was considered in an empirical study by Cieślik and Gurshev (2020). Because post-conflict countries often rely on aid-driven investments, the factor of FDI is often paramount for a steady economic recovery (Igbokwe et al., 2011). At the time, Ukraine presented substantial economic and political risks as a potential FDI destination and was ranked on par with Chad, Mali, and Sudan. Following the events\(^4\) of 2014, Ukraine has seen a nearly 30 percent drop in the overall FDI stock. In addition, much like Russia, the Ukrainian economy also records a significant amount of round-tripping by domestic firms through Cyprus. To account for the impact of political stability in Ukraine, the authors used a variety of indexes obtained from the Center for Systemic Peace database, such as the absence of violence and terrorism, governance, and political stability. The authors used FDI stock data from the period of 2013-2017 obtained from the State Statistics Service of Ukraine and investigated determinants of inward FDI using the modified version of the KC model from Markusen (2002). Based on the empirical results, the

\(^4\) Refers to events following Euromaidan and subsequent armed conflict in the Donbas region of Ukraine.
authors did not find any statistical relationships between political stability factors and incoming FDI. Further, the presented results documented the vertical motive of incoming investments, which was driven by differences in skilled labor. Overall, the authors highlighted Ukraine’s efforts in improving market access mechanisms and statistical transparency.

4. International trade and economic integration

The topic of international trade and its effects on the former Soviet economic space has undergone multiple stages. During the initial breakdown phase, studies were focused on the existing output shocks and their subsequent impact on bilateral trade. The occurring disintegration of economic links had a lot to do with the absence of bargaining mechanisms, which did not exist under the central planning system (Blanchard & Kremer, 1997; Kaufmann & Kaliberda, 1995). Further, the literature examined the potential accession of the post-Soviet economies to the World Trade Organization (WTO). In particular, the research looked into how WTO membership could impact the trade volumes of Russia and some of the transition economies (Babetskaia-Kukharchuk & Maurel, 2004; Campos, 2004). Most recently, due to the ongoing economic re-integration centered around Russia, there has been a significant number of quantitative studies (both ex-ante and ex-post) analyzing, inter alia, the EAEU, tariff barriers, comparative advantage, integration treaties, and trade links (Adarov, 2018; Adarov & Ghodsi, 2021; Cieślik & Gurshev, 2022b; Golovko & Sahin, 2021; Falkowski, 2018; Mazhikeyev & Edwards, 2021; de Souza, 2011; Tarr, 2016).

4.1. Eurasian Economic Union

The study of the EAEU and its members has become an important topic of economic and political research. This is because a considerable number of trade routes between the EU and China run through territories of the EAEU members, in particular Russia and Belarus. Hence, our attention in this section is primarily focused on the literature related to the EAEU. Because the EAEU research also covers parts of Central Asia, the second part of our review discusses studies connected to the lesser-known parts of the region, namely Uzbekistan and Tajikistan.5

---

5 Because the economy of Turkmenistan remains largely non-transparent, there are virtually no studies connected to this country.
An initial estimation of *ex-ante* economic effects of the initial customs union between Belarus, Russia, Kazakhstan, and Ukraine was conducted by the World Bank’s Development Prospects Group, which applied multiregional global trade model (GTAP) to the pre-existing bilateral trade flows between the four economies and concluded that the hypothetical trade union would be a GDP-reducing framework, where trade diversion outweighs trade creation (de Souza, 2011). Subsequent research based on cross-country data (2000-2014) and the Revealed Comparative Advantage (RCA) indexes from Balassa (1965, 1989) found that the EAEU members generally feature trade advantage in the medium and low-tech sectors, which significantly hinders long-term integration effects (Falkowski, 2018). Indeed, further examination of the EAEU integration effects on industry-level performance in Belarus, Russia, and Kazakhstan using the gravity model from Anderson and van Wincoop (2003) established the dissipation of trade creation effects by 2015 (Adarov, 2018).

Another strand of the literature has examined a network of preferential trade treaties (PTAs) centered around the EAEU. Overall, the research determined the existence of persistent economic gains only in cases, where participating members were outside the former Soviet economic space, e.g., Iran or Vietnam (Adarov & Ghodsi, 2021; Cieślik & Gurshev, 2022b). In the former case, Adarov and Ghodsi (2021) estimated the impact of the EAEU-Iran (2019) preferential treaty using HS 6-digit level products for the year 2017. To tackle data issues related to Iran’s trade and tariff data, the authors used tariff schedules published in the text of the agreement. The presented analysis implied major gains for both participating parties, especially in the agri-food sectors. The latter study by Cieślik and Gurshev (2022b) employed a nested gravity equation from Cieślik (2009) based on theoretical frameworks of Heckscher–Ohlin–Samuelson, Chamberlin–Heckscher–Ohlin, and pure monopolistic competition, to study the impact of per worker physical capital endowments on trade flows of the EAEU members. Based on the bilateral trade data for Armenia, Belarus, Kazakhstan, the Kyrgyz Republic, and Russia from 2008 to 2019, the authors argued that much of the generated trade across the EUEA had to be intra-industry. Further, using a two-lag specification of Baier and Bergstrand (2007), the authors reported that the EUEA-Vietnam treaty was highly beneficial for both parties as the initial impact on bilateral trade was quite large (+82.5 percent), while other integration/preferential regional PTAs generally did not feature persistent economic gains.
The third strand of the literature is closely related to the seminal studies that investigate the response of trade patterns to various institutional changes, e.g., the disintegration of the Soviet Union, Czechoslovakia, or the fall of the Berlin Wall (Djankov & Freund, 2002a, 2002b; Head, Mayer, & Ries, 2010; Nitsch & Wolf, 2013; Redding & Sturm, 2008). Golovko and Sahin (2021) employed a large-scale data set on cross-country trade between 1994 and 2018 to study the trade performance of the Eurasian economies of Armenia, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Russia, Tajikistan, Turkmenistan, and Uzbekistan. The authors concluded that the Eurasian countries were 35 percent less integrated with the world trade system than the level predicted by a gravity model. Moreover, the authors noted the slow adjustment of trade structure across the studied economies. In a related study, Mazhikeyev and Edwards (2021) utilized a panel of 37 economies from 1995 to 2011 and examined monadic (unique) and dyadic (pair-specific) changes in the gravity components during the transition of the former Soviet countries. The authors documented a significant trade recovery following the initial shock of the Soviet break-up between Russia and the CIS members.

4.2. Central Asia

We now turn to the discussion of studies connected to the Central Asian Republics (CARs) of Uzbekistan and Tajikistan. Due to various statistical capacity constraints linked to domestic political and economic instability, the early research has been, for the most part, descriptive (Pomfret, 2003, 2005). To some degree, this problem has been rather persistent as the majority of the featured studies in this section are based only on cross-country data.

In the early analysis of trade patterns across the region, Pomfret (2005) found that CARs, except the Kyrgyz Republic, were pursuing autonomous trade policies antipodal to the WTO-based system. Given this context, Uzbekistan and Tajikistan adhered to extremely conservative and self-sufficient trade regimes in comparison to the more progressive neighboring economies of Russia or China. The author documented that despite the existing attraction of regionalism, there was a general lack of progress in establishing or implementing trade-promoting policies across this part of the former Soviet Union after the initial break-up in the early 1990s.

Further research has investigated the impact of the region’s remoteness on trade participation (Raballand et al., 2006). Using survey data from transport professionals, the authors discovered the existence of significant transport bur-
den costs related to border-crossing problems across CARs. In particular, the authors noted a sharp increase in transportation costs and time when traveling from the EU toward the CIS. Next, the authors emphasized the impact of transportation barriers on the trade volumes between Uzbekistan and the EU.

With the increased availability of national trade data, more recent research has examined topics connected to comparative advantages (Lücke & Rothert, 2006), infrastructure and landlockedness (Grigoriou, 2007), expected trade flows (Oh et al., 2018), and potential economic integration with the EAEU (Cieślik & Gurshev 2023). In particular, Lücke and Rothert (2006) constructed RCA indexes using country- and product-level trade patterns across CARs and found that Tajikistan and Uzbekistan share comparative advantages in raw (unprocessed) cotton, refined copper, and aluminum (2003-2004 data). Next, Grigoriou (2007) estimated a gravity equation from Anderson and van Wincoop (2003) using a panel of 167 countries throughout 1992-2004 to study the impact of infrastructure and landlockedness on Central Asian trade. The authors emphasized the role of three key factors that could facilitate trade in the region: overland transportation costs, bargaining power with transit countries, and infrastructure capacity of the latter. Potential improvements in transit-country infrastructure could raise trade three times more for CARs. In a related study, Oh et al. (2018) applied a modified gravity equation from Anderson (1979) and Frankel (1997) based on Uzbekistan’s bilateral trade with 84 countries from 1992-2009. The authors compared Uzbekistan’s actual trade volume with the model-based estimates and showed that the existing trade flows are largely skewed to only a few countries – Ukraine and Russia for exports and China and Korea for imports. In contrast, trade with the neighboring CARs, such as Kazakhstan, the Kyrgyz Republic, and Tajikistan was marginal. Lastly, Cieślik and Gurshev (2023) studied the ex-ante trade effects of economic integration between Tajikistan, Uzbekistan and China, the EAEU, Iran, Turkey, a hypothetical SPECA-based trade union, and the WTO. The authors utilized a multi-region gravity model with interdependent trade flows from Viaene (1982) using bilateral trade data for 80 trading partners over 2010-2019 and demonstrated that there could be significant and substantial trade gains for the abovementioned economies if these economies would ascend to the EAEU in comparison to other alternatives such as bilateral trade agreements with China or Iran. Next, the authors documented the existence of trade gains if Tajikistan pursued export-oriented trade integration with Turkey and SPECA members.

---

5. Discussion

This section discusses three closely related results based on the conducted literature survey: the existing limitations connected to the availability of data on FDI and trade, the relevance of the existing research and methodology, and the lack of informed opinion regarding some of the more recent economic events.

First, we would like to cover the observed lack of data on foreign equity outside of the Baltics, Russia, and Ukraine. Based on own investigation of public sources, the majority of the post-Soviet economies still do not report outward FDI (Armenia, Azerbaijan, Belarus, Georgia, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan) or report it in a limited manner (Kazakhstan, Ukraine). As to inward FDI, it is often the case that country-level data are either i) highly aggregated (total only), ii) feature liabilities (net FDI), or iii) reported in national currency with many negative values (deemed generally not reliable). As a result, the economic literature is yet to learn about foreign-owned firms and their role in many of the former communist republics, as well as the potential use of outward FDI for profit shifting in these markets. When it comes to trade data, as of 2023, finding publicly available detailed data outside of the EAEU remains quite difficult. Pretty much all CARs do not publicly report any granular data (sectors, firms) that permit the use of modern theory and econometric methods.

Related to that is an apparent absence of relevant studies that employ (relatively) contemporary economic data. For example, most recent studies that look into the relationship between FDI and innovation in Estonia use firm surveys up to 2006. Another instance would be the study of spillover effects resulting from FDI in the context of Ukraine. The latest study on this topic has been done using firm data for the years 2001-2007. Out of all the featured literature, the only strands of the literature that have kept with time in terms of datasets are i) the study of FDI in Russia and ii) the trade analysis of the EAEU members and closely related economies of Uzbekistan and Tajikistan.

As a result of the aforementioned issues connected to economic data availability, the use of modern micro-founded theories remains quite limited as most often studies rely on various country-based theories that have been developed decades ago. But in cases, where the acquisition of high-quality (firms, regions) data is possible, authors are able to provide new insights into the process of economic transition using contemporary theories and methods.

Finally, the literature is yet to form an opinion regarding key economic events of the past two decades: the European accession of the Baltics, formation
of new preferential trade agreements and economic re-integration centered around Russia, Ukraine’s political stability, introduction of targeted economic sanctions, and many others.

6. Conclusions

The three decades of economic transition have seen a substantial amount of empirical work connected to the external economic activities of the former communist economies. Based on the conducted survey, our findings can be summarized as follows. First, we find that the majority of the discussed research connected to the determinants and subsequent effects of inward FDI across the Baltics, Russia, and Ukraine occurred during the first two decades of the transition. In contrast, more recent events, such as the impact of the EU membership across the Baltics, Russia’s participation in the EAEU, or Ukraine’s political stability remain largely understudied. Moreover, little is known about outgoing investments from any of the former republics. There are only a handful of studies that tackle this topic in the context of Estonia and Russia. Second, we discover an absence of systematic analysis associated with the study of preferential trade treaties, both old (pre-2000) and new (post-2010). Lastly, despite significant efforts undertaken by local governments to reform data publication processes, the existence of domestic data on trade or FDI (both inward and outward) remains a relevant issue. This is particularly apparent when examining studies linked to the Central Asian economies.

The limitations of the presented analysis are as follows. The first constraint is the number of studies considered and reviewed – 59. The second is the empirical focus of the survey, as we have predominantly examined papers with an empirical rather than descriptive or theoretical focus. The third is the rather narrow geography of our analysis. Other transitional economies in Central Europe and East Asia underwent significant economic changes due to moving away from the command economy.

The implications of this survey are several-fold. First, the majority of national governments from the studied region should undertake more effort concerning public access to granular economic data related to FDI and trade (e.g., country, sector, or commodity level). This is especially relevant for economies located in the Caucasus and Central Asia. Second, given that more public data will be made available, future research has to be focused on lesser-known geo-
graphical areas and more nuanced topics (e.g., the political stability of Ukraine or economic development in Central Asia). Third, the featured economic region presents a unique research opportunity (again, subject to data availability) on potential transnational profit shifting of foreign and domestic firms.

**Disclosure statement**

No potential conflict of interest was reported by the author.

**Acknowledgments**

I thank Andrzej Cieślkin, Ewa Ziembka (the Editor-in-Chief), and three anonymous referees for the detailed comments.

**References**


Foreign direct investment and international trade across the former...


