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Geographic patterns of Poland's FDI: the investment development path perspective

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ABSTRACT

The purpose of the present study is to incorporate geographic analysis of FDI into the classic IDP model. By supplementing the traditional analysis of the net outward investment (NOI) position with an analysis of geographic patterns in inward and outward FDI, the authors strive to offer a better explanation of Poland's current NOI position and provide more in-depth support to some necessary policy recommendations. Hence the main contribution of this study to the international business scholarship is two-fold. It (1) further develops the IDP research methodology; and (2) provides a better understanding of the idiosyncratic nature of the IDP of Poland.

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Introduction

The concepts of macroeconomic competitiveness and foreign direct investment (FDI) have always stood at the forefront of international business research. Their relationship has played a particularly crucial role in the context of the transition of former centrally planned economies of the region of Central and Eastern Europe (CEE) towards a market-led system. This process of economic transformation was accompanied by an increasing integration of local economies into the global business environment. Accordingly, one of the significant features of transformation in the CEE region initiated around 1989 was the systematic opening of the economies of the region towards FDI. This process was facilitated by economic reforms, including inter alia the liberalisation of legal regulations concerning the inflow of foreign direct investments, liberalisation of foreign trade and principles of currency convertibility, as well as privatisation of state-owned enterprises (Kubielas, Markowski, & Jackson, 1996).

The interplay between inward and outward FDI in conjunction with economic development of a given country constitutes the essence of the investment development path (IDP) paradigm (Dunning, 1986; Dunning & Narula, 1994, 1996). However, there is a general paucity of IDP studies which go beyond the analysis of the classic, aggregate variables, i.e. total FDI inward and outward stocks correlated with a country's economic development, invariably measured by the GDP or GNP per capita. On the other hand, some scholars studying the subject recognise the need for a structural analysis (including geographic patterns of a

country's FDI) that would reflect not only the degree of economic development and overall IDP position, but also each country's FDI peculiarities and the nature of its international trade. Therefore, the subject of this study is the idiosyncratic, geography-dependent trajectories of Poland's net outward investment (NOI) position and how this has evolved alongside economic growth. While we break down the conventional IDP analysis according to geographic criteria, we leave the complementary problems of the relationships between the IDP and the international trade development path for further separate scrutiny.

We contribute to the extant research on the IDP by incorporating the geographic analysis of FDI into the general model. By supplementing the traditional NOI (outward FDI stock–inward FDI stock) analysis, which has been criticised as being overly simplistic, with an analysis of geographic patterns in inward and outward FDI (with respect to main country groups and individual countries being providers and/or recipients of FDI to and from Poland), we strive to offer a better explanation of Poland's current NOI position and provide more in-depth support to some necessary policy recommendations. Hence the main contribution of this study to the international business scholarship is believed to be two-fold. It (1) further develops the IDP research methodology; and (2) provides a better understanding of the idiosyncratic nature of the IDP of Poland.

The structure of this article is as follows. The next section provides a literature review with a focus on identifying research that incorporates geographic analysis into the IDP model. In the following two sections, which constitute the main parts of the study, an analysis is conducted of the geographic patterns and Poland's NOI position with the Triad countries and transition countries, respectively. The last section contains conclusions and policy implications.

Conceptual framework

The concept of IDP was introduced by Dunning in the early 1980s (Dunning, 1981, 1986). It was thereafter refined and further developed by Dunning (1986) and his co-authors (Dunning, Kim, & Park, 2008; Dunning & Narula, 1994, 1996, 2002; Narula & Dunning, 2010). Several other authors contributed to the development of the concept (e.g. Durán & Úbeda, 2001, 2005; Lall, 1996; Narula & Guimón, 2010), while many researchers have conducted empirical studies using the IDP model as a research framework (e.g. Barry, Goerg, & McDowell, 2003; Bellak, 2001; Boudier-Bensebaa, 2004; Buckley & Castro, 1998; Clegg, 1996; Ferencikova & Ferencikova, 2012; Fonseca, Mendonça, & Passos, 2016; Gorynia, Nowak, Tarka, & Wolniak, 2012; Gorynia, Nowak, Trąpczyński, & Wolniak, 2013, 2016; Gorynia, Nowak, & Wolniak, 2005, 2006, 2007, 2010; Götz & Trąpczyński, 2016; Graham, 1996; Kayam & Hisarciklilar, 2009; Marton & McCarthy, 2006; Maşca & Văidean, 2010; Stoian, 2013; Verma & Brennan, 2011; Zdziarski, 2016; Zhang & Van Den Bulcke, 1996).

According to the IDP model, the inward and outward investment position of a country is associated with its level of economic development. Changes in the volume and structure of FDI lead to different values in the country's net outward investment (NOI) position, defined as the difference between the gross outward direct investment stock and the gross inward direct investment stock. The changing NOI position passes through five stages intrinsically related to the country's level of economic development (Dunning & Narula, 1996).

In stage 1 of the IDP, the NOI position is negative and its negative value is increasing due to the growth in inward FDI, flowing mostly to take advantage of the country's natural

assets. Outward FDI is, at the same time, negligible or non-existent, as foreign firms prefer to export and import as well as to enter into non-equity relationships with local firms. Stage 2 is characterised by an increased inflow of FDI with outward FDI remaining still low but larger than in the previous stage. The NOI position decreases but at a slower rate. Countries in stage 3 experience a growing NOI position due to an increased rate of growth of outward FDI and a gradual slowdown in inward FDI, geared in this case more towards efficiency-seeking motives. In stage 4, outward FDI stock continues to rise faster than the inward one and the country's NOI position crosses the zero level and becomes positive. Country location advantages are now mostly derived from created assets. This stage, as well as the last (the fifth) stage, is typical of most developed countries. In stage 5, the NOI position first falls and thereafter shows a tendency to fluctuate around the zero level but usually with both inward and outward FDI increasing.

Although the classic analysis of IDP concentrates on examining the relationship between a country's GNP or GDP and its NOI position to determine and predict the IDP stages, it is apparent that parallel to the IDP dynamics at the macro level there are important changes occurring in both the geographic and the industrial composition of inward and outward FDI when the country moves through its IDP stages. Therefore, the two aspects of the IDP – geographic and industrial – should supplement the analysis of the overall IDP path. And yet, it is difficult to derive prescriptions or predictions regarding the relationships between the IDP stages and the geographic and industrial composition of FDI from either Dunning's description of the model or empirical studies that have been undertaken to test that model. In the subsequent paragraphs of this literature review, the authors attempt to highlight the relationships between the IDP macroeconomic path of a country and its bilateral positions vis-à-vis groups of countries, with which the country has FDI inflows and outflows.

Dunning's model is largely silent on the geographic patterns of inward and outward FDI in relation to the IDP model. There seems to be a tacit agreement in the extant literature that a country is, at a given point in time, at only one stage of its IDP. However, it may conceivably be, at the same time, at quite different stages of its NOI position (NOIP) with respect to individual countries or regions. Thus, it is possible to identify separate NOIP paths with different geographic destinations and sources of FDI, with different NOIPs indicating different stages of the IDP. Such identification and analysis has a significant bearing on the geographic implications of existing and desirable economic policies and instruments used in the FDI sphere.

In stage 1, the geographic patterns of FDI are straightforward. Obviously, inward FDI comes from countries at higher stages in their IDP and outward FDI is virtually non-existent. In stage 2, the relevance and importance of the geographic patterns of FDI increase. According to Dunning and Narula (2002):

Outward direct investment emerges at this stage. This may be either of a market-seeking or trade related type in adjacent territories, or of a strategic asset-seeking type in developed countries. The former will be characteristically undertaken in countries that are either further back on their IDP than the home country, or, when the acquisition of created assets is the prime motive, these are likely to be directed towards countries further along the path. (p. 241)

Although Dunning and Narula are silent on the geographic patterns of inward FDI in stage 2, it can be implied that such investment will continue to originate mostly in

countries at higher stages of their IDP. In stage 3, it is predicted that outward FDI will be directed more towards countries at lower stages in their IDP than those ahead of the home country (Dunning & Narula, 2002). When a country moves to stage 4 of its IDP, the nature and geographic patterns of FDI change quite substantially. Inward FDI is '[...] increasingly sequential and directed towards rationalized and asset-seeking investment by firms from other stage 4 countries' (Dunning & Narula, 2002, p. 143).

Outward FDI, on the other hand, is increasingly directed to countries at lower stages and to a large degree takes the form of moving operations, which domestically lose competitiveness, to off-shore locations (Dunning & Narula, 2002, p. 143). It is noteworthy at this juncture that in stage 4 more and more FDI will be conducted within multinational corporations. Finally, a country being in stage 5 will receive FDI from both countries at lower stages in their IDP and countries being in the same stage 5. The former will be of a market-seeking and knowledge-seeking nature and the latter will be associated with the rationalisation of value-adding chains among the Triad countries and will reflect a high propensity for cross-border alliances, mergers and acquisitions. By the same token, outward investment will be directed to both groups of countries. Also, inbound and outbound investment will be complementary to each other (Dunning & Narula, 2002).

The few empirical studies that examined the geographic aspects of the IDP include those of Barry et al. (2003), Bellak (2001), Clegg (1996) and Götz and Trąpczyński (2016). Clegg's work represents a comprehensive and detailed analysis of the geographic (and sectoral) patterns of FDI in the context of the IDP model as applied to the UK economy. In the geographic aspect, Clegg investigates the UK's position with the developed regions, singling out Europe and the impact of market integration in this region, then moving to North America, Asia, Africa and finally South America. In the following step, he goes deeper into the UK's bilateral positions with only the developed countries, including in this more detailed analysis Australia and New Zealand. Clegg's study points to a rather idiosyncratic nature of the bilateral IDP position between the UK and other developed countries. In turn, Bellak (2001) looks at bilateral NOIPs between Austria and Germany as well as Austria and the USA. His findings are surprising. While the Austrian bilateral IDP with Germany, by far the most important source and destination for Austria's FDI, suggests stage 2 of the IDP, the NOIP Austria has with the US is consistently positive, pointing to stage 5. In the same vein, Barry et al. (2003) investigate the bilateral Ireland–US FDI position, due to the fact that the US is the most important source country for FDI in Ireland and the pre-eminent destination for Irish outward FDI. Their findings indicate that Ireland's NOI vis-à-vis the US during the studied period is consistently negative but, at the same time, one can observe the U-shaped curve for the bilateral NOI, which is in line with the prediction based on the IDP model. Götz and Trąpczyński (2016), on the other hand, analyse and assess bilateral FDI between Poland and Germany, attempting to determine Poland's position on the IDP vis-à-vis Germany. These authors find a significant asymmetry in Polish–German FDI relations (German FDI in Poland represents 17% of total FDI stock, while Polish FDI in Germany accounts for a mere 1% of the total). As far as Poland's position on the IDP with Germany is concerned, the decreasing NOI p.c. points to early stages of the IDP – end of stage 1 or beginning of stage 2.

In light of this scarce research into the geographic dimension of the IDP concept, we investigate Poland's position on the IDP vis-à-vis the groups of countries with which the country might be at different stages of the IDP. Thus, our article goes some way to filling

the identified research gap, while contributing to the development of the IDP concept and providing guidance to policy makers in the area of FDI.

Geographic analysis of Poland's NOI position

Research methods

In order to explore the geographic idiosyncrasies of Poland's IDP, we employed statistical information from the databases of the National Bank of Poland (NBP). To the best of the authors' knowledge, NBP is the only source of information on Poland's FDI inflows and outflows broken down by individual countries or groups of countries. Unfortunately, the NBP started to compile geographic FDI data only from 1996. Therefore, the present research covers the period from 1996 to 2015 and constitutes a partial extension of an earlier study (Gorynia, Nowak & Wolniak, 2006) by the authors with a similar focus, which covered the years 1996–2004. Coincidentally, 1996, as demonstrated in the aforementioned study, marked Poland's transition from stage 1 to stage 2 of its IDP versus all countries.

Based on the raw data provided by the NBP, the NOI position of Poland was computed with relation to:

- the Triad (Germany, USA, Japan);
- the European Union;
- Central and East European countries;
- all countries (for comparison).

This geographic selection aimed at capturing the institutional and economic diversity of various host countries towards Poland, in order to explore possibly different IDP paths.

NOI position vs. Triad countries

The first analytical section covers the region embracing the most developed countries, frequently referred to as the Triad economies with its three representative countries being Germany for Europe, the USA for North America and Japan for East Asia. The respective NOI positions of Poland versus the Triad as a whole, then all countries, then Germany, USA and Japan are presented in Table 1 and visualised in Figure 1.

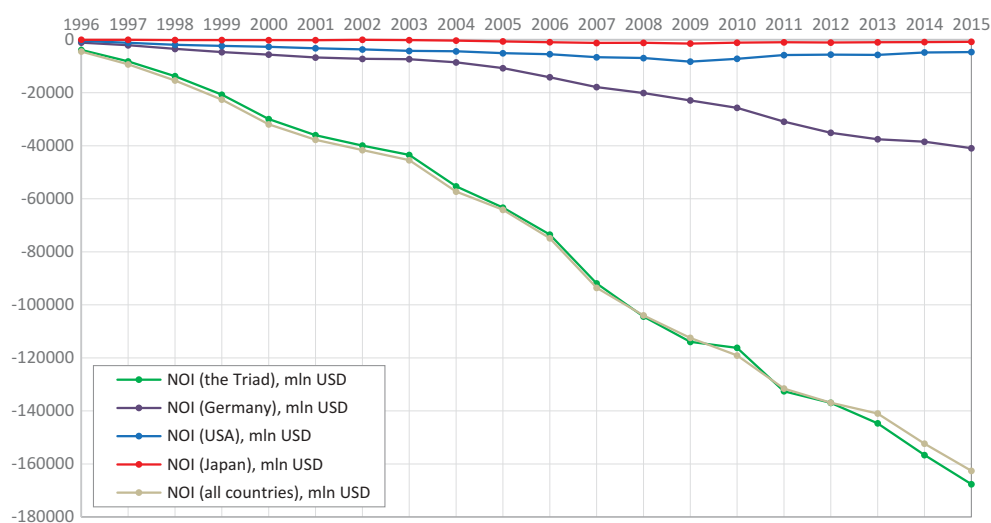
From the scrutiny of these data the first observation that emerges is that the NOI curves for the Triad and 'all countries' categories are practically identical and overlap almost completely. Both curves are downward sloping due to a persistent rising path of negative NOI values, showing that Poland was still a net receiver for FDI rather than a source for outward investment. Thus, according to Dunning's five IDP stages model, Poland versus the world and the most developed countries, was positioned as being at the (seemingly) very end of IDP stage 2.

A very similar trend appeared in the case of Poland's NOI position versus Germany, as a representative economy of developed Europe. The downward slope of the NOI curve was relatively small from 1996 to 2004 and only afterwards did it increase substantially, with a continued fall registered for the last year (2015) for which data were available.

Table 1. NOI position of Poland versus the Triad, Germany, USA, Japan and all countries, 1996–2015.

Year	NOI (the Triad), mil- lion USD	NOI (Germany), mil- lion USD	NOI (USA), mil- lion USD	NOI (Japan), mil- lion USD	NOI (all countries), mil- lion USD
1996	–3859.3	–1089.8	–454.7	–7.6	–4445.0
1997	–8186.9	–2072.7	–1147.7	–14.3	–9308.2
1998	–13,732.9	–3440.9	–1890.2	–113.6	–15,357.1
1999	–20,722.3	–4676.3	–2328.7	–111.4	–22,595.7
2000	–29,931.7	–5619.3	–2650.8	–150.3	–31,921.0
2001	–35,997.7	–6695.9	–3233.3	–182.0	–37,723.8
2002	–39,925.5	–7218.5	–3656.1	–9.3	–41,624.3
2003	–43,457.2	–7346.5	–4219.9	–140.8	–45,447.0
2004	–55,289.1	–8544.2	–4355.2	–328.6	–57,287.4
2005	–63,315.3	–10,710.8	–5087.6	–632.4	–64,137.5
2006	–73,503.7	–14,138.9	–5468.2	–945.3	–74,853.1
2007	–91,910.9	–17,872.9	–6589.1	–1219.9	–93,569.8
2008	–104,394.0	–20,106.4	–6902.2	–1173.8	–103,959.5
2009	–113,958.3	–22,882.3	–8246.3	–1441.6	–112,446.4
2010	–116,213.2	–25,677.1	–7180.7	–1106.6	–119,093.4
2011	–132,585.9	–30,888.6	–5783.3	–957.4	–131,557.2
2012	–136,957.4	–35,090.8	–5617.5	–1069.4	–136,900.1
2013	–144,675.0	–37,538.2	–5714.7	–968.1	–140,980.0
2014	–156,645.3	–38,466.3	–4809.2	–890.7	–152,348.6
2015	–167,616.7	–40,922.0	–4632.5	–791.4	–162,603.2

Source: National Bank of Poland.

**Figure 1.** Poland's NOI position in million USD versus the Triad, Germany, USA, Japan and all countries, 1996–2015.

Source: Authors' calculations.

The noted moderate increase in the negative NOI values lasted until 2003 which was just before the accession of Poland as a full member of the European Union (EU). The ensuing steeper downward slide can be interpreted as evidence of the positive effect of Poland's entry into the EU, becoming more attractive for foreign investors and spurring accelerated inward FDI from Germany. A still steeper fall was observed between 2010 and 2012, possibly as a recovery effect of German investments after the 2007

financial crisis. Thus, as the net effect, Poland was also firmly positioned on its IDP stage 2 towards Germany.

Quite a different situation appeared with respect to Poland's NOI versus the USA. There was a continuous deterioration of the NOI until 2009, with a steeper decline after 2008, pointing to more inward FDI from the USA. After 2009, the NOI curve ascended dramatically until 2011 and then again from 2013 to 2015, showing unequivocally that Poland versus the USA was well into stage 3 of its IDP. This can also be explained by the recovery of the US market after the 2007 crisis attracting more Polish investment.

Somewhat similar to the NOI position of Poland versus the USA was that of Japan. Here we can see a relatively small interest of Japanese investors in Poland up to 2002, followed by a big turnaround thereafter lasting practically (with the exception of the year 2008) until 2009. That year marked the passing of Poland from stage 2 to its IDP stage 3 with a decline in the growth of Japanese FDI in Poland as the aftermath of the 2007 global slowdown and growth of Polish based FDI in Japan. This turning point fell on the same year as in the case of the USA, but the negative NOI value for Japan was lower (−1441.6 million USD) than for the USA (−8246.3 million USD) signifying a much larger inward involvement of US investors. The general decreasing trend in the negative NOI values seems to be quite robust indicating Poland's firm thrust into the said stage 3 of its IDP trajectory. What should also be observed here were the relatively low absolute values of the NOI position reaching only −791.4 million USD in 2015 versus the much higher −4632.5 million USD for the same year for the USA.

For all countries, for the Triad as a whole and for Germany, Poland was at the end of IDP stage 2. In the last year on record (2015) the negative NOI value for all countries and for the Triad was practically the same, whereas for Germany it reached only 24% of the Triad value. In relation to the USA and to a larger extent versus Japan (with a smaller NOI negative value of −791.4 million USD in 2015 equal to 17.1% of that for the USA and only 1.9% of that for Germany) Poland was positioned as being in IDP stage 3. Thus, a trend was observed that less inward FDI from a country in this area led to a better positioning of Poland on its IDP trajectory.

These observations can be supported by firm-level evidence, which includes some more increasingly visible investments of Polish firms in Germany, including acquisitions like that of the furniture producer Nowy Styl Group or of the trailer producer Wielton. For Polish companies, these FDI projects, driven mostly by strategic asset-seeking motives, are an important aspect in enhancing their international competitiveness. On the other hand, German firms have remained predominant in Poland in acquisitions and greenfield investments since the outset of the transition process.

NOI position vs. the European Union

The NOI position of Poland versus the EU showed a very similar trajectory to that versus the Triad and all countries. Its curve ([Figure A1 in Appendix A](#)) was continuously sloping downward, indicating that Poland remained a net recipient of FDI and therefore was positioned in 2015 somewhere at the end of its IDP stage 2, with a negative NOI value of −162,192.9 million USD ([Table 2](#)).

A completely different situation appears when the NOI position of Poland is investigated versus Central and East European member states of the EU ([Table 2](#) and [Figure A2 in Appendix](#)

Table 2. NOI position of Poland versus European Union, Central and East European countries (EU members in 2015), Lithuania, Czechia, Hungary, Slovenia and Romania, 1996–2015.

Year	NOI (EU), million USD	NOI (CEE-EU), million USD	NOI (Lithuania), million USD	NOI (Czechia), million USD	NOI (Hungary), million USD	NOI (Slovenia), million USD	NOI (Romania), million USD
1996	–3397.0	–12.4	1.3	–13.5	–0.4	0.1	n.a.
1997	–7024.9	–129.2	1.6	–30.5	–3.5	–3.0	0.9
1998	–11,729.1	–196.2	3.8	–38.3	–13.8	–7.1	0.1
1999	–18,282.2	–210.4	7.2	–37.2	–11.5	–7.6	1.6
2000	–27,130.6	–210.2	7.8	–26.8	–8.5	–10.8	2.4
2001	–32,582.4	–214.8	11.7	–18.5	–14.8	–19.2	5.2
2002	–36,260.1	–282.9	12.4	–7.0	–75.6	–26.3	6.3
2003	–39,096.5	–257.0	12.8	18.1	–88.0	–29.9	10.2
2004	–50,605.3	–320.1	20.2	57.1	–246.7	–83.9	65.6
2005	–57,595.3	487.9	32.3	586.1	–20.5	–74.6	111.7
2006	–67,090.2	2872.1	2317.3	658.4	–103.4	–87.5	200.7
2007	–84,101.9	3588.5	2796.3	685.5	–39.4	–117.3	304.0
2008	–96,318.0	3707.9	2816.8	553.4	1.6	–173.5	449.3
2009	–104,270.4	3757.0	2969.8	544.5	–133.1	–79.4	464.9
2010	–107,925.9	3959.9	3113.6	824.2	–345.0	–20.0	531.7
2011	–125,845.2	4338.8	3502.1	980.2	–479.7	8.4	607.1
2012	–130,270.5	4390.3	3545.2	815.2	–449.5	39.1	674.1
2013	–137,992.2	4415.8	3443.0	868.4	–423.1	48.4	631.2
2014	–150,945.4	4979.9	3566.9	976.5	–332.1	38.4	620.7
2015	–162,192.9	4958.2	3608.5	712.1	–307.5	52.3	536.5

Source: National Bank of Poland.

A). The NOI curve remained almost flat with a low negative NOI value of –320.1 million USD in 2004 and then from 2005 it burst steeply upward until 2007, slowing down the upward climb afterwards and very slightly retreating in 2015. The jump in 2005 was clearly the result of EU accession of Poland as well as of all the other members of this subgroup. The slowdown from 2008 could be associated with the financial crisis of 2007. Also, from 2005 onward the NOI values remained positive unequivocally showing that Poland versus this group of its EU partners was well into stage 4 of its IDP, meaning also that Polish based firms were investing much more in this subgroup than the other way around, thus providing evidence of their rising competitiveness.

This common trajectory was also evident in the single country NOI curves for Lithuania, Romania and Czechia (Figures A3–A5 in Appendix A, respectively). As for Lithuania and Romania the starting NOI position recorded positive values, meaning that IDP stages 1, 2 and 3 were absent. The same observation applies to Czechia, although she recorded very small (two digit) negative NOI values until 2002. Moreover, in the case of Romania, the climb of positive NOI values started in 2004, pointing also to the effect of EU accession, and continued until 2012, to decrease thereafter until 2015, the last year on record. In the case of Lithuania, the rise of positive NOI values was much steeper, occurred two years later than in Romania, and started to level off from 2007 onwards. As for Czechia the NOI curve, after a one-year steep rise in 2005, began to fluctuate ending with a drop of positive NOI value in 2015. All those observations tend to indicate that Poland versus those three countries was, in the year of 2015, at the end of its IDP stage 4, indicating high competitiveness of its firms. Firm-level evidence suggests that a significant number of Polish outward investors have recently been active in CEE EU members states. In particular, Polish industry leaders, such as the oil company PKN Orlen S.A. (acquisition of Unipetrol a.s.), the chemical company Synthos S.A. (acquisition of Kaučuk a.s.) or the IT giant Asseco Poland S.A. (acquisition of stakes in, *inter alia*, LCS

International and Berit), are active in Czechia with market-seeking investments. This illustrates the asymmetry in the mutual FDI, which is reflected by a positioning in stage 4.

However, the relative importance of net outward Polish FDI was much greater in the case of Lithuania (being a direct neighbour) than in Romania (with the share of Romanian NOI value in 2015 being equal to only 15% of that of Lithuania) and in Czechia (the share of Czech NOI value being equal to 20% of that of Lithuania). It is also interesting to note that Lithuania was absorbing most (i.e. 73%) of Polish outward FDI directed towards all CEE countries that became members of EU in 2004. The reason for such an outcome, besides the obvious physical and psychic proximity, was not readily clear. At the firm level, one can mention the upstream investment by PKN Orlen S.A. in Mažeikiai in Lithuania, which alone significantly affects the mutual IDP position of both countries.

With respect to Slovenia (Figure A6 in Appendix A) and Hungary (Figure A7 in Appendix A) the NOI trajectory of Poland did indicate passing through IDP stages 1, 2 and 3. At the end of 2015 Poland was positioned on IDP stage 3 versus Hungary (with a negative NOI value of –307.5 million USD) and at the beginning of IDP stage 4 versus Slovenia (with a positive NOI value of 53.3 million USD). In the case of Hungary, the first surge in outward FDI from Poland happened right after its EU accession in 2005, then growth was somewhat slower between 2006 and 2008. Afterwards, as a consequence of the 2007 financial crisis, Polish investment was sharply reduced, only to rise again starting from 2012. As for Slovenia, Poland's NOI values reached their lowest point in 2008, ending Poland's IDP stage 2 positioning, and then started to rise, passing the zero NOI level and thus entering IDP stage 4 in 2011. Thus, Poland, when compared with all the investigated CEE countries that became UE members in 2004, was positioned in the advanced IDP stage 4, with Lithuania exhibiting the highest NOI values and therefore the deepest Polish investors' involvement on one end and with Slovenia showing the smallest NOI values on the other end. Hungary was the exception, still exhibiting negative NOI values, indicating that the Polish market was more important for Hungarian investors than the Hungarian market for firms investing from Poland. Indeed, Poland's overall position as investor in Hungary is not significant, with recent growth of Hungarian subsidiaries of Polish firms from the construction sector (e.g. Pezal or Dąbex).

NOI position vs. CEE countries (non-EU members)

The NOI position of Poland versus Central and East European countries which are not EU members focuses on the group as such and on its main constituent markets of Russia, Ukraine and Belarus which also happen to be Poland's eastern neighbours (Table 3 and Figures B1–B4 in Appendix B). From the beginning of the investigated period the NOI values remained positive: low until 2002 and then climbing until 2013 to level off afterwards. The steady rise was interrupted in 2005 by the probable divergence of part of Polish outward FDI to the EU as a consequence of Poland's EU accession effect. Then another slight annual slowdown occurred in 2010, this time as a partial effect of the global crisis of 2007. Thus, as a net outcome in 2015 Poland's position on its IDP trajectory versus this group of countries could be defined as being firmly entrenched in IDP stage 4.

In the case of Belarus, the NOI values point to the acceleration of Polish outward FDI starting from 2003, then to a slowdown in 2008, followed by an uninterrupted climb

Table 3. NOI position of Poland versus Central and East European countries (non-members of EU in 2015*), Belarus, Ukraine, Russia, 1996–2015.

Year	NOI (CEE-nonEU), million USD	NOI (Belarus), million USD	NOI (Ukraine), million USD	NOI (Russia), million USD
1996	3.2	n.a.	6.0	–2.8
1997	12.5	n.a.	12.5	0.0
1998	11.6	1.0	14.6	–3.0
1999	20.7	1.7	19.1	0.9
2000	38.4	2.4	15.5	21.6
2001	14.9	2.6	23.9	–10.3
2002	74.7	1.0	47.7	31.3
2003	279.9	4.3	126.5	154.4
2004	1107.6	9.3	184.1	910.9
2005	1105.4	20.0	82.2	1003.2
2006	1533.4	34.4	384.5	1116.6
2007	2199.2	58.4	346.4	1797.7
2008	2453.4	65.4	326.0	2067.9
2009	2770.0	52.2	457.6	2267.5
2010	2723.1	76.4	575.7	2075.7
2011	3036.7	94.6	643.6	2233.4
2012	3379.5	123.0	762.2	2400.0
2013	3394.8	200.3	383.9	2704.3
2014	3261.3	274.9	370.9	2506.2
2015	3340.1	282.5	416.4	2550.0

* Albania, Belarus, Bosnia and Herzegovina, Russia, Macedonia, Moldova, Ukraine, Montenegro, Serbia.
Source: National Bank of Poland.

until 2014. In the case of Ukraine, the NOI fluctuations were more pronounced: NOI values jumped in 2003, then decreased slightly between 2006 and 2008, then rose to 2012 in order to decrease steeply to 2013 and practically level off afterwards. These fluctuations show that Polish investors were more susceptible and sensitive to turbulences in the Ukraine market environment, especially its political and regulatory component, than in the case of Belarus. On the other hand, in both countries there was a common period (between 2008 and 2012 for Ukraine and between 2009 and 2014 for Belarus) when Polish investment experienced a steep rise. This could have been due to the relative imperviousness of Polish FDI in these economies to the aftermath of the global 2007 crisis. Going one step further: it could also mean that Polish investors tried to compensate for declining investments in many developed regions with expansion to their eastern, less advanced economic partners. One should also not omit the fact that the presence of Polish investors on the Belarussian market was smaller than in Ukraine (with a 68% share of the NOI value for Belarus in that for Ukraine, in 2015). Many Polish companies, like the diversified VOX Group, invest both in Belarus and Ukraine mostly for efficiency-seeking motives, re-exporting finished goods back to Poland and third countries. In the case of Belarus, some companies use their manufacturing or assembly sites located there as a springboard to Russia due to the customs union of eastern republics. However, in general, the political instability in the region since 2013 negatively affected further expansion plans by Polish outward investors, hence the IDP progression may be expected to stagnate or proceed less dynamically.

With respect to Russia, Poland's NOI trajectory showed similar attributes to those in the Ukraine and Belarus cases. During the entire investigated period the NOI values remained positive, proving that Poland was positioned on stage 4 of its IDP path versus the Russian economy. Moreover, until 2001 Polish investment remained practically at a standstill. Then it

started to climb until reaching its peak in 2013, albeit with less pronounced fluctuations than in the case of Ukraine and much less than in Belarus. There was also a common, relatively intensive Polish FDI growth period, in the Russian case from 2006 to 2013 (with a one-year exception in 2010). Moreover, in relative numbers, due to the difference in internal market size, Polish FDI in Russia was much larger than in Ukraine and Belarus, with Ukraine and Belarus having in 2015 a NOI share of only 16% and 11% respectively of that of Poland versus Russia.

NOI position vs. BRICS

The fourth important group of countries, in this case large emerging markets, was where Polish firms have been investing is BRICS (Brazil, Russia, India, China and South Africa). The relevant NOI values are presented in Table 4 and Figure 2. For the said group as a whole there was stagnation in positive NOI values until 2002 when they started to grow considerably, with minor fluctuations until reaching their peak in 2013, and then decreased, and at the end levelled off in 2015. The IDP trajectory of Poland versus the whole group thus points to Poland's positioning at the end of IDP stage 4, reflecting its firms' strong competitive advantages on these large country markets.

Discussion of findings

Poland's positioning on the IDP trajectory can be argued to reflect – even if in a simplistic manner – the relative competitiveness of the economy as a whole, and of the outward investing firms in particular versus their competitors and host country economies. The current analysis of Poland's competitiveness in the said meaning yielded certain general observations covering the investigated period between 1996 and 2015.

Table 4. NOI position of Poland versus BRICS: Brazil, Russia, India, China and South Africa, 1996–2015.

Year	NOI (BRICS), million USD	NOI (Brazil), million USD	NOI (Russia), million USD	NOI (India), million USD	NOI (China), million USD	NOI (South Africa), million USD
1996	–2.7	0.0	–2.8	–1.3	1.4	0.0
1997	1.6	0.1	0.0	0.1	4.6	–3.2
1998	0.6	0.4	–3.0	0.7	4.4	–1.9
1999	1.3	–1.3	0.9	0.4	3.3	–2.0
2000	15.9	–2.7	21.6	0.0	–1.1	–1.9
2001	–14.2	–0.5	–10.3	–0.1	–1.5	–1.8
2002	29.1	–0.6	31.3	0.2	0.4	–2.2
2003	152.3	–0.1	154.4	0.5	–0.6	–1.9
2004	914.7	4.6	910.9	–2.1	0.0	1.3
2005	970.1	3.3	1003.2	–5.5	–35.6	4.7
2006	1079.0	2.7	1116.6	5.1	–49.6	4.2
2007	1653.6	9.6	1797.7	–13.3	–134.0	–6.4
2008	1811.0	10.2	2067.9	4.5	–272.7	1.1
2009	2392.0	117.7	2267.5	92.0	–84.0	–1.2
2010	2214.2	125.7	2075.7	118.5	–90.7	–15.0
2011	2451.5	138.9	2233.4	137.4	–177.3	119.1
2012	2994.2	152.5	2400.0	168.9	5.4	267.4
2013	3492.7	157.7	2704.3	245.6	57.3	327.8
2014	3222.3	170.6	2506.2	261.8	–25.9	309.7
2015	3259.5	170.9	2550.0	245.7	–44.6	337.5

Source: National Bank of Poland.

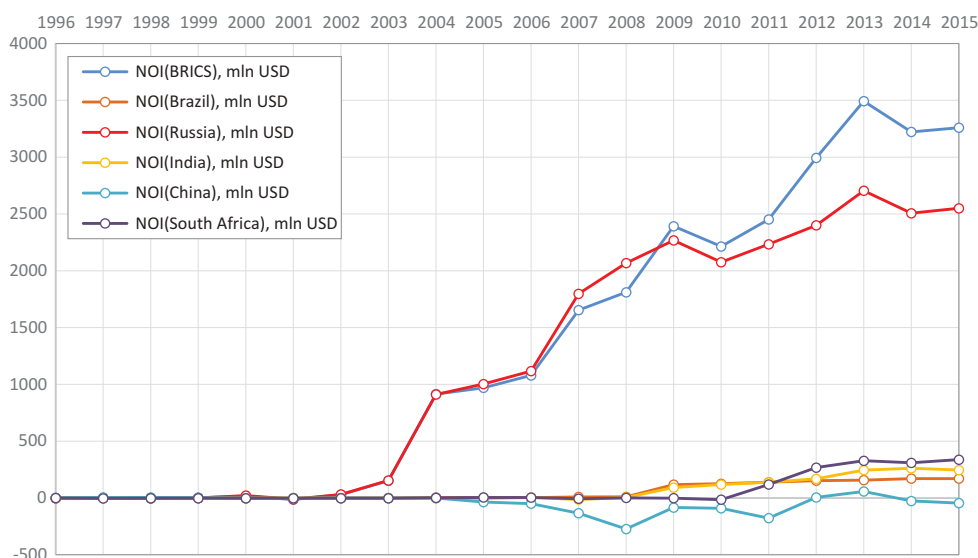


Figure 2. Poland's NOI position in million USD versus BRICS: Brazil, Russia, India, China and South Africa, 1996–2015.

Source: Authors' calculations.

When confronted with the previous analysis covering a smaller time segment (1996–2004) and a selected, narrower group of countries, the present study allows for verification of trends identified earlier.

With respect to the world's most developed region, the Triad, changes in the NOI values coincided with those in the 'all countries' category, generating practically fully overlapping IDP trajectories. As in the earlier study, (Gorynia, Nowak & Wolniak, 2006) Poland's position versus the Triad economies remained in the late stage 2 of the IDP model. The earlier concluding expectation was that in 2004 movement into the more advanced IDP stage 3 was imminent but the current investigation continues to point out that Poland still remains in its IDP stage 2 both versus 'all countries' and the Triad economies. This situation, seen from the inside of the Triad perspective, reveals however some promising changes. These essentially concern the firm positioning of Poland on stage 3 of its IDP trajectory versus USA and Japan. The NOI values of Poland versus those two countries remain still relatively low as compared to the Triad as a group but with their rise, generated by more Polish outward investment, they could eventually tilt Poland's trajectory versus the Triad into stage 3. But this is hardly feasible in a short or medium time perspective because of the countervailing force of Poland's key trade and investment partner Germany, whose NOI values still dominate compared to those of the Triad as a whole. In a general overview of this group of highly developed countries the competitiveness of Polish firms allows those firms to make significant inroads into the domestic markets of the Triad but the Polish internal market, with its large size and competitive skilled labour costs, remains a major attracting force for the still larger inward investment.

With respect to the EU member states coming from Central and Eastern Europe (CEE), the competitiveness of Poland and its outward investing firms was unequivocally higher than that

compared with the EU as a whole. Whereas the NOI values for Poland versus the EU positioned it in 2015 at the end of IDP stage 2, versus the said CEE group (but with the notable exception of Hungary), Poland was firmly in its IDP stage 4. Then there was the regional idiosyncrasy that in certain countries IDP stages 1, 2 and 3 were missing altogether. This could have been due to the relative unimportance of the CEE markets for Polish investors until all became EU members (except in the case of Hungary and Slovenia), which is clearly visible on graphs showing IDP trajectories rising in the time frame between 2003 and 2006, and also perhaps due to the fact that data were available only from 1996. Compared to the earlier study, (Gorynia, Nowak & Wolniak, 2006) Hungary advanced one IDP stage (from stage 2 to 3) and Czechia maintained its positioning on IDP stage 4. Regarding both those countries, Poland's IDP trajectory did pass through all the earlier stages, in conformity with the general IDP model.

As far as the CEE countries not belonging to the EU are concerned, Poland's competitive position was quite strong and so remained since the previous study. Against all the selected countries from this group (having large internal markets), Poland was positioned firmly in its IDP stage 4 and throughout the investigated time period IDP stage 1 was missing (with the exception of Russia) as well as IDP stages 2 and 3. This shows the sustained high competitiveness of Polish based firms versus competitors on those markets.

Poland versus the BRICS group in 2015 was also strongly positioned on its IDP stage 4. IDP stage 1 was practically non-existent, stages 2 and 3 were absent. Polish outward investing firms showed a strong preference for Russia within the BRICS group. The ambivalent outlier positioning of Poland versus China, in the sense of oscillating between IDP stages 3 and 4, points to the continuous attempts by Polish firms to gain a stronger foothold in the Chinese market but on the other hand attests to the rising presence of Chinese FDI in the Polish economy.

Interesting observations for Poland's attractiveness and competitiveness versus the selected groups of countries stem from comparing the appropriate NOI values in the investigated period. In 1996 the NOI position versus the Triad recorded the negative value of -3859.3 million USD. Taking this as the reference base, the share of the NOI position versus the EU was 88%. In 2015 the NOI position versus the Triad reached the level of -167,616.7 million USD, having deteriorated 4243% since 1996 and pointing to the sustained absorption capacity of Poland for inward FDI. Taking the 2015 level as the reference base, the share of the NOI position versus the EU was 97%. This can indicate that the attractiveness of the Polish market for EU investors rose compared to those from the Triad as a group.

The highest positive NOI values in 2015 were recorded for Poland versus the CEE EU members (4958.2 million USD). Set against this reference base the share of NOI values for CEE non-EU members was 67% and for BRICS it was 66%. Those numbers point to a highly competitive position of Polish outward investors on the markets of other CEE countries from the EU and a somewhat weaker position on the markets of CEE non-EU states as well as practically a similar (to the previous one) position in the BRICS group.

An earlier study on Poland's positioning on its IDP according to a geographic breakdown reached certain general conclusions (Gorynia, Nowak & Wolniak, 2006).. Our own investigation, although it embraces more groups of countries and more individual countries, confirms the actuality and adequateness of conclusions reached earlier and repeated below:

- i. The more developed the country the higher the negative value of Poland's NOI and the higher the positioning in stage 2 (i.e. closer to stage 3).
- ii. The less developed the country the higher the position in stage 4 (i.e. closer to stage 5) and the smaller the absolute value of Poland's NOI.
- iii. The less developed the country the greater the occurrence of omission of stages 2 and 3 on the NOI trajectory.

What changed since the previous study is the government support offered to Polish investors entering and expanding on foreign markets. The Polish authorities in various forms and at various institutional and organisational levels have managed to move their focus from solely attracting foreign investment to including also a fairly extensive programme to facilitate and encourage Polish outward FDI (Gorynia, Nowak, Trąpczyński, & Wolniak, 2015). In addition to dedicated financial and non-financial instruments devised by governments to promote OFDI, it can be argued that broader policies supporting the competitiveness and internationalisation of local firms should also be incorporated into the discussion of OFDI support. This approach is of particular relevance in the context of emerging markets and post-transition economies, where it is to be evaluated whether direct OFDI support can be effective unless preceded by an overall improvement of the domestic economy's and firms' competitiveness. This aspect should be an important consideration for policy-makers in choosing policies which serve the home country's sustainable development in the long-run.

However, still some of the issues identified earlier remain to be addressed. They include: (a) problems with adapting to a different cultural and/or institutional environment in a foreign market; (b) problems in dealing with negative country of origin effect abroad associated with many Polish products; and (c) the need to inform and educate Polish entrepreneurs about the advantages of internationalisation via cooperation, especially through the formation of business alliances.

Conclusion

Apart from contributing to the extant literature on IDP and FDI in general by shedding more light on the geographic structure of FDI inflows to and outflows from a post-transition economy, this article also offers some implications for the future design of FDI support measures.

The application of the IDP paradigm in a geographic cross-sectional framework leads to the general conclusion that the competitive position of Poland has been sustained and strengthened in all the key markets in which Polish firms have entered through FDI. In both some advanced markets and in many markets which are less advanced than that of Poland, the said position has improved considerably. All those achievements were possible because of advantages in products, technologies and strategies of firms investing from Poland. Policy support from the government has also been a positive element in this process, but still a gap exists on the part of state authorities at different levels in fulfilling the needs and expectations of the business sector.

The implication of this study for FDI support policies pertains to the diversity of geographic directions of FDI and is two-fold. On the one hand, support programmes for

outward FDI should be designed with the assumption that different host countries entail different challenges and, as a result, so will the needs of outward investors. For instance, for countries with which the home economy of the investors are still at lower stages of the IDP, the needs of support recipients can be expected to be geared towards image enhancement, legitimacy building or networking services, in order to become more competitive in economically more advanced host countries. At the same time, such settings may require developing a more competitive product or service in the home country in the first place, before foreign expansion is possible. Thus, the role of government policies in catching-up economies is to favour the development of technological or managerial resources of internationally-oriented companies to prepare them for competing in advanced economies. For countries vis-à-vis which the home economy is positioned in the more advanced stages of the IDP, depending on the type of host countries the support should be geared towards developing market knowledge and reducing political and business risks, through both guarantees and loans and diplomatic assistance.

Secondly, closely related to the location patterns of FDI are the specific motivations of particular projects, both inward and outward. Accordingly, strategic asset-seeking projects for outward FDI, for instance, should be promoted through more targeted acquisition financing and consulting services, given the limited experience of domestic companies with more complex FDI projects. Conversely, for inward FDI priority should be given to projects creating knowledge spillovers for the domestic economy.

Disclosure statement

No potential conflict of interest was reported by the authors.

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Appendix A

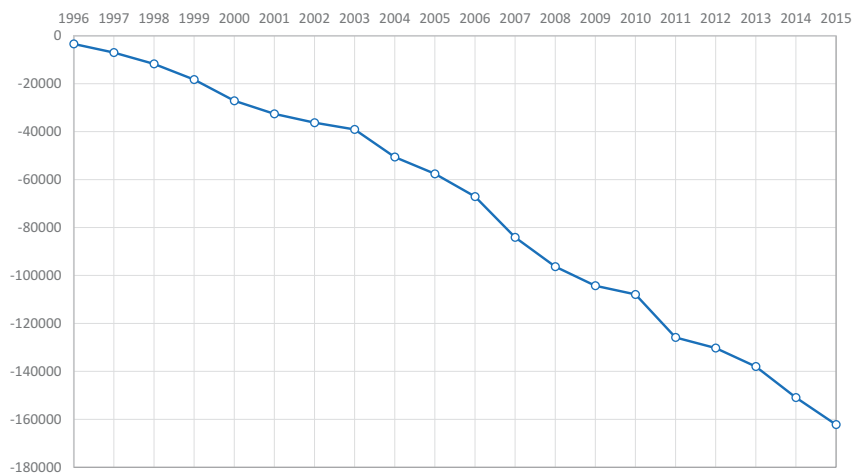


Figure A1. Poland's NOI position in million USD versus European Union, 1996–2015.
Source: Authors' calculations.

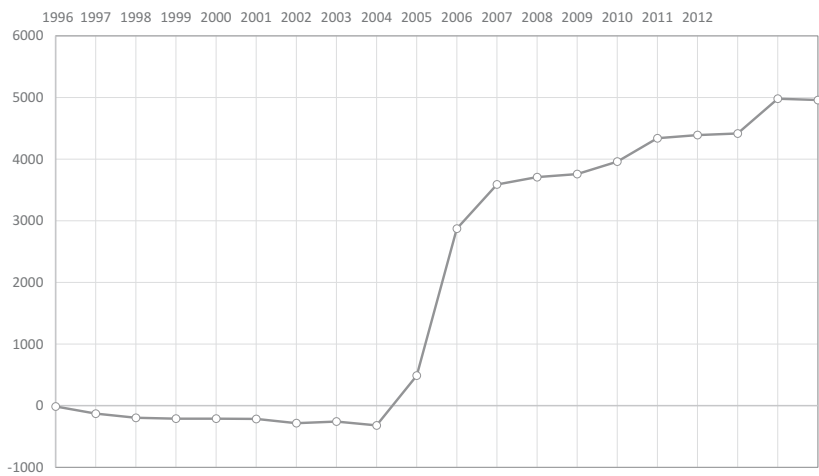


Figure A2. Poland's NOI position in million USD versus Central and East European countries (EU members in 2015), 1996–2015.
Source: Authors' calculations.

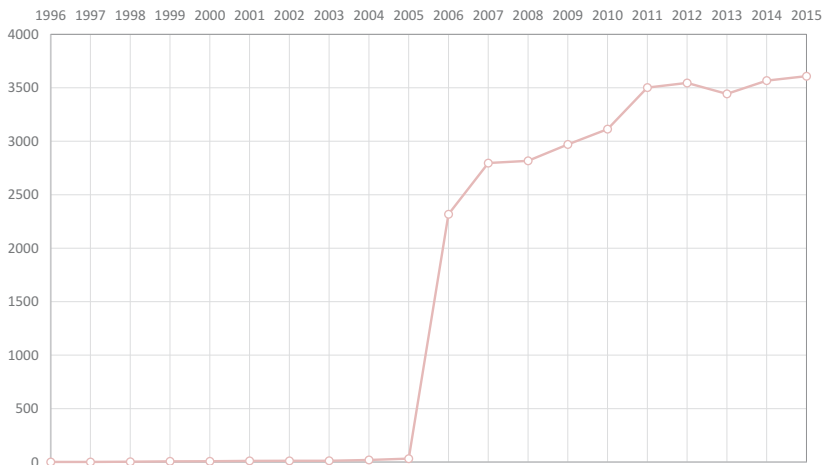


Figure A3. Poland's NOI position in million USD versus Lithuania, 1996–2015.

Source: Authors' calculations.

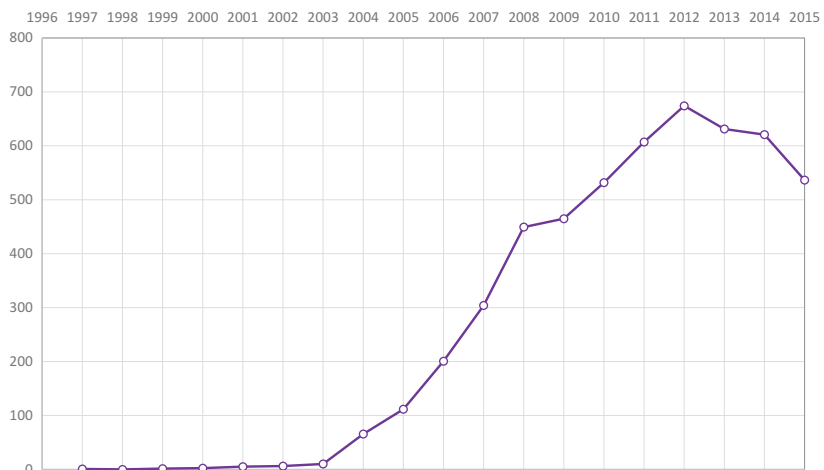


Figure A4. Poland's NOI position in million USD versus Romania, 1996–2015.

Source: Authors' calculations.

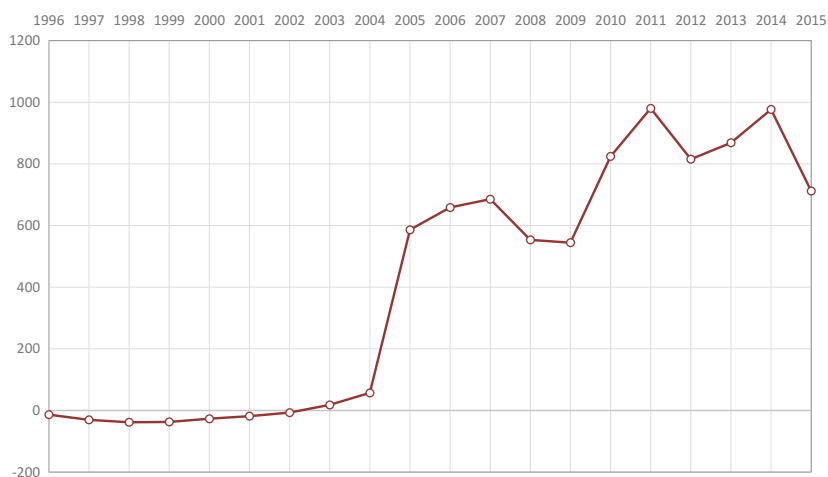


Figure A5. Poland's NOI position in million USD versus Czechia, 1996–2015.

Source: Authors' calculations.

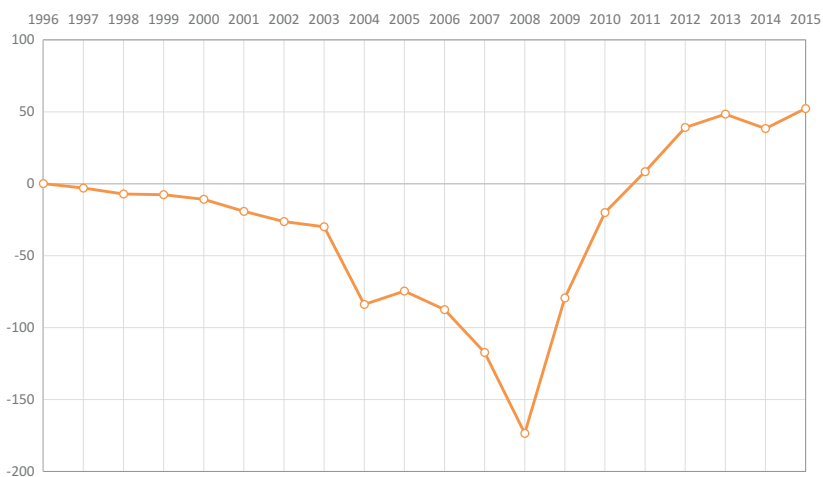


Figure A6. Poland's NOI position in million USD versus Slovenia, 1996–2015.

Source: Authors' calculations.

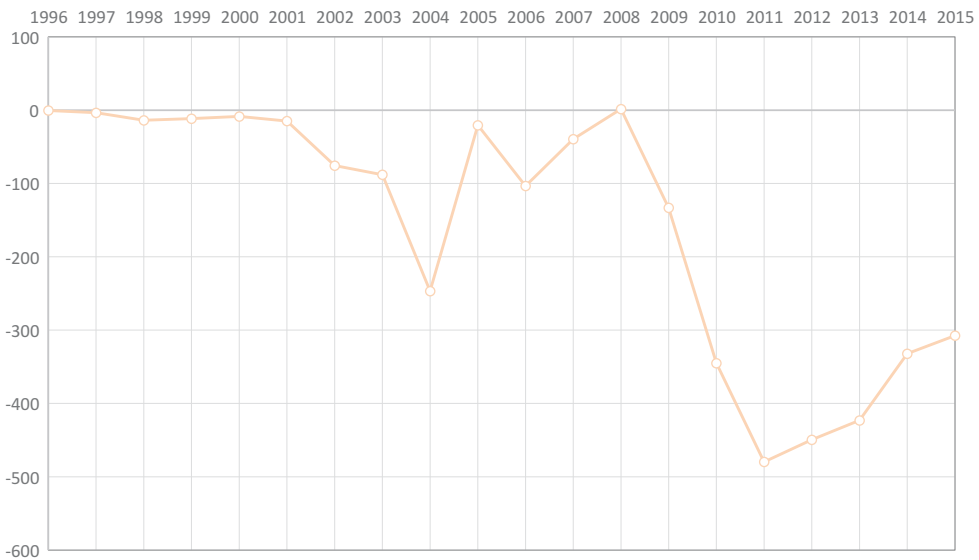


Figure A7. Poland's NOI position in million USD versus Hungary, 1996–2015.

Source: Authors' calculations.

Appendix B

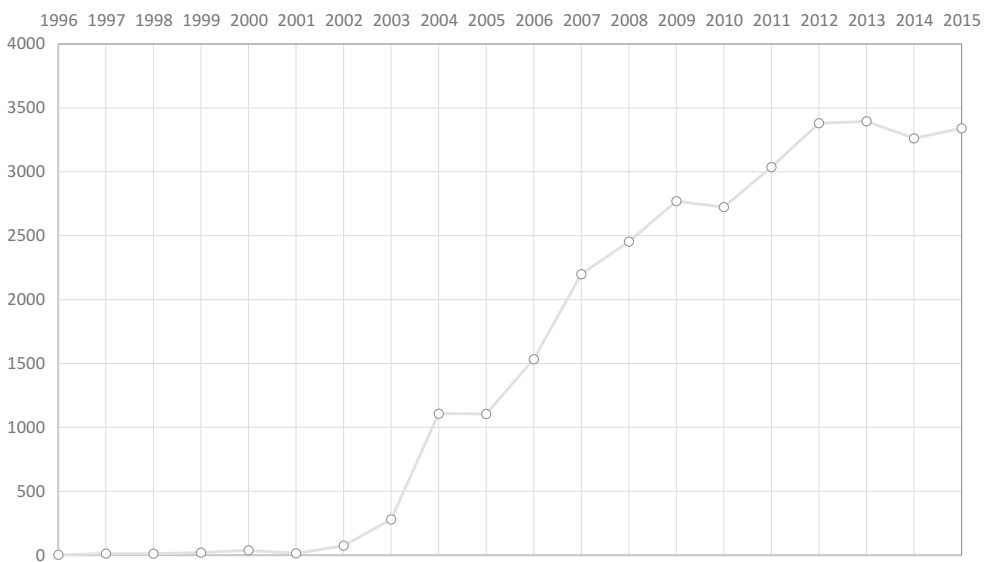


Figure B1. Poland's NOI position in million USD versus Central and East European countries (EU non-members in 2015), 1996–2015.

Source: Authors' calculations.

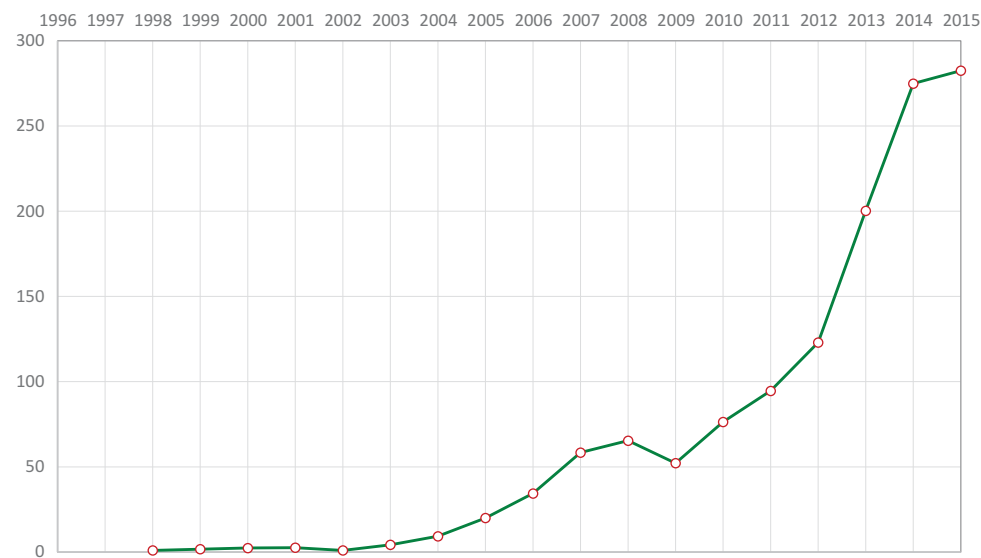


Figure B2. Poland's NOI position in million USD versus Belarus, 1996–2015.
Source: Authors' calculations.

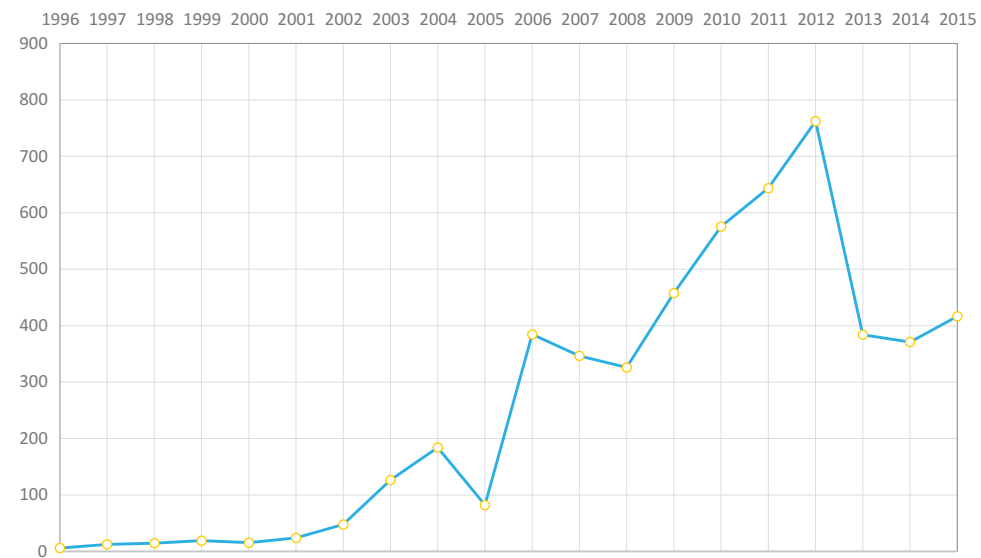


Figure B3. Poland's NOI position in million USD versus Ukraine, 1996–2015.
Source: Authors' calculations.

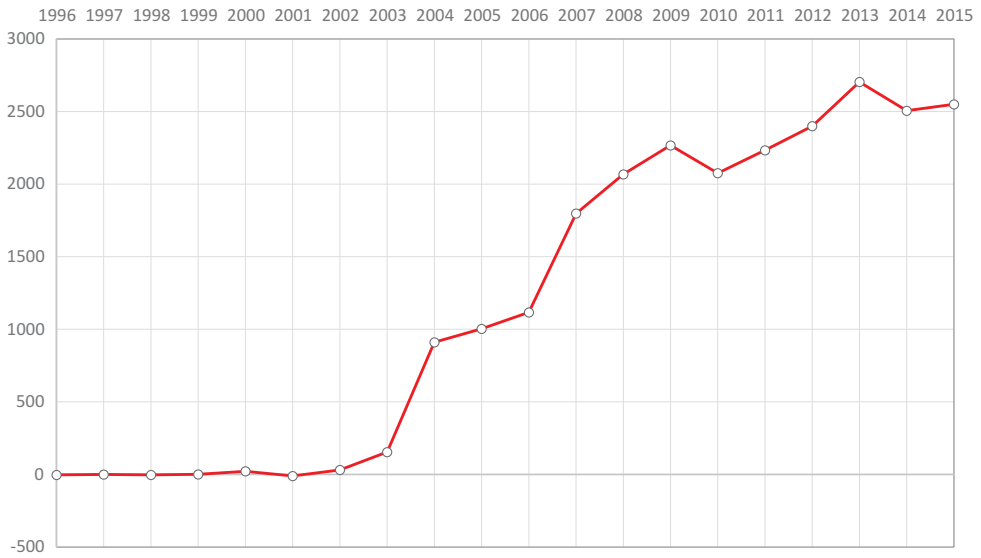


Figure B4. Poland's NOI position in million USD versus Russia, 1996–2015.
Source: Authors' calculations.