

Determinants of FDI Establishment Mode Choice of Polish Firms. The OLI Paradigm Perspective

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ABSTRACT

This study attempts to investigate the establishment mode choice of Polish firms when entering foreign markets via foreign direct investment (FDI) in the light of J. Dunning's eclectic OLI model. A dichotomous mode choice between green-field investment and acquisitions forms the basic framework for analysis. The theoretical part contains the application of Dunning's model to the investigated relationships with the said establishment mode choice as well as an overview of empirical research conducted so far on outward foreign direct investment (OFDI) from the countries of Central and Eastern Europe (CEE). Seven research hypotheses are formulated in this context and tested on a sample of firms registered in Poland with ongoing FDI. Data collection was made using an online survey, then four models were used to verify the statistical significance of the hypothesized relationships. The results showed no statistical significance for hypotheses linking mode choice with ownership and internalization advantages. Positive verification was recorded for all identified location advantages. Thus J. Dunning's OLI framework demonstrates limited applicability to establishment mode choices in an advanced emerging country context. The study concludes with an outline of its contribution to OFDI research, its limitations and finally with recommendations for future research in this area.

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INTRODUCTION

Firms from Poland and other CEE countries have been currently intensifying their expansion into foreign markets via FDI. The cumulative value of outward FDI (OFDI) from Poland for example exceeded 57 million USD in 2012 (Gorynia, 2014). The ratio of the cumulative value of Polish OFDI in 2012 to that in 2003 reached the level of 2682.5% while the same measure for the world as a whole recorded an increase of only 234.7% and for the European Union (EU) of only 201.3%. It should also be stressed that in the Polish case, for every year in the 2003-2012 period, this ratio calculated on a year to year basis was higher than 100%. This rising trend has generated a pressing need to better understand and explain the expansion strategies followed by these newcomer foreign investors, including factors influencing FDI establishment mode choices. This study attempts to apply J. Dunning's OLI paradigm as a salient theoretical base in identifying the key drivers behind FDI establishment mode choice considered by Polish firms, ranging from small to the very large ones.. An important feature of this research resides in its timeliness: the data set used as research input has been derived from a web based survey sent in the second and third quarters of 2013 to a sample of Polish firms engaged in international expansion. The results of this study based on processing the said data set allow for their confrontation with received theory and previous research in the same subject area.

The study begins with an outline of the theoretical framework based on J. Dunning's OLI paradigm and its interface with foreign market establishment mode choice followed by an

overview of empirical research on OFDI from CEE economies with a focus also on the said mode choice process. The next section contains the justification for and specification of seven key research hypotheses which will be subjected to verification based on the said survey data concerning Polish firms. The ensuing section presents the sample of firms used in the study, the characteristics of the data collection method, the independent, dependent and control variables as well as the essential aspects of the verification process based on statistical analysis and modeling. The following two sections present the results of testing the seven research hypotheses and the discussion on their significance and implications. The last section concludes with pinpointing the study's contribution to the state of research on the specified FDI issues, identifying its basic limitations and finally outlining further research avenues.

DETERMINANTS OF ESTABLISHMENT MODE CHOICE AND THE OLI PARADIGM: THE THEORETICAL FRAMEWORK

The choice of entry mode into a foreign country is one of the most popular issues investigated by international business (IB) researchers. An international firm's mode choice can be categorized into three groups, namely: (a) contractual vs. equity modes; (b) joint ventures (JVs) vs. wholly-owned subsidiaries; and (c) green-field investments vs. acquisitions (Slangen & Hennart, 2007). The last choice is often referred to as foreign establishment mode choice (Padmanabhan & Cho, 1999; Dikova & Van Witteloostuijn, 2007). At the same time, the choice between acquisition and green-field investment is considered an under-researched area (Chang, 1995; Barkema & Vermeulen, 1998; Müller, 2001; Harzing, 2002). And yet, the decision whether to acquire an existing operation abroad or build one from scratch carries a significant strategic importance (Chang & Rozenzweig, 2001; Dikova & Van Witteloostuijn, 2007), not least due to its implications for subsidiary performance.

Although a large number of variables influencing the choice of FDI entry mode is hypothesized in received literature, empirical research reviewed by Slangen and Hennart (2007) reveals a lack of significance of most of them, as well as a divergence of findings. Only six of the 22 independent variables used in the studies compared by Slangen and Hennart had significant effects on the establishment mode choice. These authors also note that some of the variables in regression models revealed opposing effects on the choice between green-field investment and acquisition across many studies.

In addition to the problems underlying the mixed results of the empirical studies identified by Slangen and Hennart (2007), a general lack of consistency of these results can be attributed to the differing theoretical perspectives that researchers of establishment-mode choice usually take. It should also be noted that most of the predications of the six dominant theories used in Slangen and Hennart's review (2007, p. 412) can be derived from the eclectic OLI Paradigm or Model formulated by J. Dunning (1988, 2001). This should come as no surprise, given the eclectic nature of Dunning's model, which incorporates a number of theoretical perspectives. In fact, there is empirical support for the applicability of Dunning's model to entry mode selection (see e.g., Brouthers et al., 1999; and Nakos & Brouthers, 2002). Therefore, the OLI Model is applied in the present study of the determinants of foreign establishment mode choice, assuming that using one instead of several theoretical perspectives may yield more consistent results. Furthermore, the OLI Model has been used in a number of related studies thus allowing for more meaningful comparisons of such studies conducted within the same theoretical perspective.

The theoretical framework based on the OLI Model, as applied to the FDI establishment mode choice, is presented in Exhibit 1. Under each of the Model's three pillars – ownership advantages, location advantages and internalization advantages – those determinants of FDI entry mode choice are listed that have been identified in the literature review as the most significant.

*****Exhibit 1 about here*****

Among ownership advantages, the relevant literature points to the importance of firm-specific intangible resources, such as technological knowledge or capabilities (Brouthers, Brouthers & Werner, 2003; Slangen & Hennart, 2007); the firm's prior experience in investing abroad (Chang & Rosenzweig, 2001; Ogasavara & Hoshino, 2007; Ogasavara, 2010); and its experience in the host country where the studied choice of the FDI mode was made (Larimo, 1993; Slangen & Hennart, 2008). Cultural distance is the variable often investigated among the location determinants of the FDI mode choice (Kogut & Singh, 1988; Brouthers et al., 1996;; Brouthers & Brouthers, 2001; Brouthers, 2002), together with industry growth and market size (market attractiveness) (Agarwal & Ramaswami, 1992); and host-country risk, including political, currency and expropriation risk (Busse & Hefeker, 2007; Brouthers et al., 2009). Lastly, internalization factors influencing FDI mode choice are primarily concerned with reducing transaction and coordination costs (Brouthers et al., 1999; Nakos & Brouthers, 2002), and are represented in the said theoretical framework by an aggregate variable – contractual risk, encompassing such components as costs of contracting, risk of unwanted information disclosure and problems with quality control. While using the theoretical framework set out in Exhibit 1 as a point of reference, in a subsequent section a number of hypotheses is formulated, related to the three groups of variables in accordance with the Dunning's OLI model.

OVERVIEW OF EMPIRICAL RESEARCH ON OUTWARD FDI FROM CEE WITH FOCUS ON ESTABLISHMENT MODE CHOICE

Although OFDI from the CEE countries is a relatively new phenomenon, empirical research into this area has only recently gained momentum. However, the vast majority of this research takes a macroeconomic perspective, where the locus of analysis is the entire country

economy or/and its sectors (Antalóczy & Éltető, 2003; Bohata & Zeplinerova, 2003; Varblane et al., 2003;), or a comparison of OFDI from a certain number of CEE countries (Svetličič & Jaklič, 2003; Kalotay, 2004; Radlo & Sass, 2012), although one can find studies combining macro-level analysis with that of firm-level (Svetličič et al., 2000; Rugraff, 2010; Zemplinerová, 2012; Ferencikova & Ferencikova, 2012; and Gorynia et al., 2012a). All these studies point to the emergence of OFDI in the latter part of the 1990s and its subsequent acceleration in the 2000s, albeit the gap between inward and outward FDI is reported to remain relatively large. They also point to a geographic concentration of CEE firms' outward FDI in Europe, and within this continent - in the neighbouring countries.

When it comes to firm-level studies of OFDI from CEE, most of them focus on emerging multinationals. Those that stand out are reports on emerging multinationals from Hungary, Poland, Russia and Slovenia that have been published in recent years within the Emerging Market Global Players (EMGP) Project, coordinated by Vale Columbia Center on Sustainable International Investment at Columbia University in New York (Sass & Kovacs, 2012; Kaliszuk & Wancio, 2013; Kuznetsov, 2013; Jaklič & Svetličič, 2009). These reports focus on the profiles and activities of the largest investors (typically about 20) from each country, in the context of the country overall OFDI trends. They recognize the rapid expansion of these new multinationals, although their size is still not comparable to their large competitors in other parts of the world (with the exception of perhaps the largest Russian multinationals). The vast majority of these firms have become regional, rather than global, players and many of them remain state-controlled. Although these companies' FDI modes are not extensively covered by the aforementioned reports, a certain pattern in this respect can nevertheless be discerned: The most common FDI mode is acquisition although green-field investments seem to be growing in importance.

Focusing on Polish OFDI, which forms the empirical background for the present study, a similar predominance of macroeconomic research can be observed. The studies of Rosati & Wilinski (2003) and Gorynia et al. (2011) reveal a geographical concentration of OFDI in the neighboring European countries. The latter study, in addition to overall trends, covers geographical and sectoral structures of OFDI. Obłój & Wąsowska (2012) analyze the impact of host-country determinants of Polish outward investment, pointing to the dominance of market size and economic growth as the key factors, which were also confirmed by other Polish studies (Karpiełińska-Mizielńska & Smuga, 2007; Kępką, 2011). It was found that, due to the regional concentration of Polish OFDI, psychic distance was not a strong determinant of investment location choice. Also, political risk specific to the region was not regarded as an impediment to capital expansion (Obłój & Wąsowska, 2012). Among the few firm-level studies, Kaliszuk et al. (2012) found that the search for new markets was a dominant motive for Polish outward investors, while other motives varied with the host countries' level of development (Jaworek et al., 2009). Likewise, the study of Radło (2012) found a predominance of market-seeking motives (increasing market power and gaining access to new markets) among the largest Polish companies investing abroad, while confirming, once again, the geographic concentration of these companies' investment in Europe. A comprehensive study of Polish outward investors, conducted by Szałucka (2009), explores the role of FDI in increasing firm competitive potential and position depending on internationalization degree, establishment and ownership modes. Although none of the studies on Polish (and indeed - CEE) OFDI has so far undertaken the effort to investigate specifically the determinants of firms' foreign investment establishment mode choice, some studies have included such determinants in broader research agenda. Two such studies, one qualitative (Gorynia et al., 2012b) and one quantitative (Kowalewski & Radło, 2012), investigate, among other things, the relationship between FDI motives and FDI modes.

Gorynia et al. (2012b) found that most foreign investment projects undertaken by the investigated companies were of the market seeking category. These authors also discovered cross-case patterns between market- and efficiency-seeking motives and FDI modes: In FDI projects driven by these two motives, the studied firms preferred green-field investments as establishment mode, allowing them to exploit firm-specific advantages and to better adjust the scale of operations relative to the home country and, if applicable, other host country operations. Similarly to the other studies referred to above, Kowalewski and Radlo (2012) found that Polish multinationals prefer to invest in host countries that are close to their home base. These authors also found that market-seeking motives are important determinants of FDI regardless of the entry mode used by the investor. The entry-mode choices are affected not only by FDI motives but also by other factors such as the economic sector in which the investor operates, the openness of the host economy, economic growth of the host country and labor quality.

The above literature review clearly points to the lack of focused research on the determinants of entry mode choices by CEE foreign investors. So far, FDI entry modes have been studied sporadically and only as one of the issues investigated within a given research project. As more and more firms from the CEE region invest abroad, there seems to be an urgent need to undertake more focused studies in order to better understand what determines entry mode choice and to be able to offer recommendations to foreign direct investors from the said region.

KEY RESEARCH HYPOTHESES

The literature review presented in the preceding section, as well as the results of earlier qualitative and exploratory research conducted by the authors of this study, led to the formulation of seven key research hypotheses concerning FDI establishment mode by firms from Poland, conceived in this case as a dichotomous choice of either green-field investment or acquisition. In

line with the OLI model used as the basic point of reference, the said hypotheses were classified into those relating to advantages stemming from : a/Ownership , b/Location and c/Internalization.

Thus in the first group of ownership advantages observations covering firms with superior intangible assets revealed a propensity for using the green-field investment mode. Such intangible assets consisted of possession of superior technological and new product development capabilities, managerial expertise as well as flexibility in adjusting product offerings to local market specificity. Thus according to the first hypothesis :

H1: Firms with superior intangible assets tend to use green-field investment as their FDI mode.

The second independent variable in this group was that of previous experience of the investing firm in the chosen host country. Some firms in the qualitative study used such experience as a basis for opting for green-field investment whereas others indicated this factor as the reason for choosing the acquisition mode. Hence the following two hypotheses were formulated:

H2a: Firms with prior experience in a host country tend to use acquisition as their FDI mode.

H2b: Firms with prior experience in a host country tend to use green-field investment as their FDI mode.

The last investigated variable in this group covered previous FDI experience in operating in foreign markets. This concept was understood as a product of the number of foreign affiliates of the investing firm and the number of years of FDI operations before establishing the largest foreign affiliate. Thus the relevant hypothesis states that:

H3: Firms with more FDI experience tend to use green-field investment as their FDI mode.

The second group of hypotheses relates to location factors perceived by firms in making their FDI decisions. In this framework the first variable was cultural or psychic distance separating the home and host country and defined by factors such as differences in legal regulations, the economic system, political structure and especially the cultural environment. The hypothesis that was set as applicable in this context states that:

H4: Firms perceiving higher cultural distance tend to use green-field investment as their FDI mode.

The next investigated variable that emerged in the previous qualitative research and is applied in the present study was host country market potential as perceived by the investing firms' management and determined by such factors as the industry growth rate and potential market size. Thus the hypothesis advanced here states that:

H5: Firms in host-countries with higher perceived market potential tend to use greenfield investment as their FDI mode.

The last variable in this group focused on the issue of risk of operating in a foreign market, also as perceived by the investing firm's management. The main determinants were the degree of political instability in the host country as well as currency and expropriation risk. The hypothesis formulated in this context states that in a host country:

H6: Firms facing higher perceived risk tend to use green-field investment as their FDI mode.

The advantages relating to internalization were reflected in one hypothesis based on the summary concept of contractual risk in the host countries that was stressed in the previous qualitative research. This construct as applied to countries hosting FDI is based on the following components: general costs of contracting, risk of unwanted information disclosure and difficulties with quality control. The hypothesis that emerged here states that:

H7: Firms in host-countries with higher contractual risk tend to use green-field as the FDI mode.

RESEARCH METHODS

Sample and data collection

Research on investments made by Polish firms abroad requires recurring to the creation of proprietary databases, since there is no consolidated, exhaustive source of information pertaining to this phenomenon. Hence, the estimation of the entire population size encounters difficulties. A report of the Central Statistical Office refers to 1501 Polish companies having capital shares in firms registered abroad (GUS, 2013). Yet, these data do not define minimal capital requirements in line with the predominant understanding of FDI, i.e. 10% (OECD, 2008), hence the actual pool of outward investors is estimated to be significantly smaller. Thus, to achieve a relatively high coverage of the population under study, some information sources were holistically integrated, including Bureau van Dijk's Amadeus, Kompas Poland or BPR Benchmark Poland, as well as certain publications in the business press. The said sources were further complemented with a preliminary inquiry sent to 14 712 Polish firms involved in international operations (import and/or export), concerning the fact of having FDI operations. This finally resulted in a proprietary database of 910 firms investing abroad and registered in Poland.

An invitation to take part in an online survey was thereafter sent to executives whose scope of duties embraced foreign operations. As web-based surveys often raise doubts as to their effectiveness and reliability (see e.g. Sills & Song, 2002; Kim & Gray, 2008), a professional IT service provider designed and implemented a dedicated survey platform, including its ongoing monitoring and repeated reminders. Moreover, the online survey was accompanied by numerous personal contacts with sample firms in order to identify the most appropriate respondents in each

case in terms of their knowledge of the firm's FDI projects and their rationale. In case of incomplete data, supplementary interviews and additional data sources provided by firms were used for the purpose of triangulation. On the whole, a final sample of 100 complete surveys was obtained, which corresponds to an effective response rate of 11%.

*****Table 1a about here*****

*****Table 1b about here*****

*****Table 1c about here*****

*****Table 1d about here*****

The data obtained from the survey provide an overview of sectoral, geographic, modal and organizational structure of Polish OFDI (see Tables 1a-d). The analyzed sample was dominated by manufacturing industries (61% of firms), followed by services (39%). As far as firm size goes, parent firms with more than 500 employees accounted for 50% of the sample. To be eligible for the present survey, parent firms had to be registered in Poland, however their owners themselves could be headquartered in another country. Thus, firms with more than 10% foreign capital constitute 46% of the sample. However, only 18% of the sample declare both a share of foreign capital above 10% and the presence of a parent firm located abroad, indicating that the remaining firms have either minority investors from abroad or foreign capital is in reality controlled by Polish owners using foreign-based legal entities to transfer capital back to the Polish firm. Accordingly, the present sample can be, with some limitations, regarded as representative for firms whose foreign operations are determined by Polish headquarters and supported by resources thereof.

The sample firms located their major FDI projects mostly in Germany (20%), Ukraine (17%), Romania (12%) and the Czech Republic (10%). This reflects the fact that respondents were prompted to provide information on affiliates involved in actual manufacturing and

distribution, thus excluding purely financial operations and also reducing in this aspect the specific role of such host countries as Luxembourg, the Netherlands or Switzerland. The still limited scope of foreign operations is reflected by the fact that 69% of the firms control affiliates in only up to 3 countries, whereby sales and marketing activities remain predominant (in 59% of analyzed FDI projects), followed by production (38%) and services (30%).

Dependent, independent and control variables

The dependent variable for Hypotheses 1-7 is the establishment mode of the major foreign affiliate in terms of total assets in the last available fiscal year. It adopts a value of 0 if it is a green-field affiliate and 1 if it is an acquisition (see e.g. Slangen & Hennart, 2008a). While there are studies simultaneously analyzing joint ventures, green-field investment and acquisitions (see e.g. Anand & Delios, 1997; Kogut & Singh, 1988), establishment mode choice can be regarded as a separate decision problem in the internationalization process. Hence, ownership choices (joint ventures vs. wholly-owned subsidiaries) *per se* were not subject of the present analysis.

Among ownership advantages, intangible resources of the sample firms were measured with reference to each firm's major competitor on a five-point Likert-type scale for each of the following capabilities: technological, new product development, marketing, managerial and product adaptation (Brouthers, Brouthers & Werner, 2008), achieving a high value of Cronbach's α of 0.85. Another explanatory variable, host-country experience was measured as a dichotomous variable, adopting the value of one if the firm had prior experience in the host country in the form of equity or non-equity operation modes (Larimo, 1993; Slangen & Hennart, 2008). Prior experience of firms undertaking FDI projects was measured as the total number of countries, in which the firm had established foreign subsidiaries prior to the FDI under study (Ogasavara & Hoshino, 2007; Ogasavara, 2010), multiplied by the number of foreign affiliates the firm had, thus reflecting both the length and scope of FDI operations.

On the side of location advantages, cultural distance was measured on a five-point scale in relation to 4 items: legal regulations, economic system, political structure and cultural environment with Cronbach's $\alpha=0.88$ (Brouthers et al., 1996). While different studies have used secondary data to measure host-country variables, Brouthers (2013) suggests that the antecedents of managerial decisions, such as FDI modes, need to be measured as perceptions of decision-makers. This relatively broad operationalization remains in line with the understanding of Brouthers (2002, p. 91), according to which the cultural context should not be confined to cultural values but also embrace "different host country economic, legal, political and cultural systems". Foreign market attractiveness at the moment of FDI entry was measured by two items on a five-point Likert scale (1-very low, 5-very high): industry growth rate and market size (Agarwal & Ramaswami, 1992) yielding a Cronbach's alpha value of 0.63. The perceived host-country risk prior to investment was measured by using the constructs of political instability, currency risk and expropriation risk also measured on a five-point Likert scale as compared to the investing firm's home market (Brouthers et al., 2009), yielding a Cronbach's alpha of 0.55. Although the last two reliability measures appear to be relatively low (compare e.g. Hair et al., 1998), Bowling (2002) regards values over 0.5 as still acceptable.

In the context of internalization advantages contractual risk was used as one aggregate variable embracing such components as costs of contracting, risk of unwanted information disclosure and problems with quality control. The perception of this type of risk was registered prior to the FDI investment decision and measured on a five point Likert scale (from 1-very low to 5-very high). The variable's reliability in this case was moderate but still important with a Cronbach's alpha of 0.60.

Finally, considering the significant number of potential determinants of establishment mode choice, several control variables were introduced based on the findings of previous studies.

Industry sector (1=Manufacturing, 0=Non-manufacturing) was controlled for in line with the argument that industry-specific factors exert influence on internationalization processes (Brouthers, Brouthers & Werner, 2003). Likewise, industry relatedness (1=Related sector, 0=Non-related) between the parent firm and the focal affiliate was considered (Dikova & Van Witteloostuijn, 2007). Capital ownership share of the parent firm in the focal affiliate was also controlled for (Ghahroudi, 2011). The number of control variables was limited by sample size, which determines the total number of variables to be included in a single econometric model. A summary of all variables and their scales is provided in Appendix 1. Table 2, in turn, provides an overview of descriptive statistics for all variables used in the present analyses.

*****Table 2 about here*****

RESULTS

Since FDI mode choice is a dichotomous dependent variable, logistic regression analysis (using IBM SPSS 21 software package) was carried out to verify the aforementioned research hypotheses. The modeling process started with the inclusion of all control variables in the initial model, continued by a gradual addition of ownership (Model 2), location (Model 3) and internalization (Model 4) advantages, with the aim of verifying the statistical significance of hypothesized relationships under simultaneous control of other variables. Prior to carrying out regression analyses, several statistical checks, including correlation analysis, were conducted in order to detect any multicollinearity between the explanatory variables, as well as to provide an initial understanding of the relationships between FDI modes and both independent and control variables. Given the nominal character of some of the variables, correlation analysis was only possible for ownership level, intangible assets, FDI experience, cultural distance, host country market potential, perceived host-country risk and contractual risk (see Table 3). It did not reveal

any major multicollinearity problems, except a weak correlation between market attractiveness and both intangible assets and FDI experience, which may be due to the fact that more competitive and experienced firms perceive more opportunities in foreign markets. Moreover, moderate correlation was detected between cultural distance and both host-country risk and contractual risk, which is also related to the fact that distance affects managerial perceptions. Nonetheless, for the purpose of the present analyses, which explicitly differentiate several risk types, as well as cultural distance as a crucial determinant of establishment modes *per se*, this correlation is accepted as one of the limitations of our research design.

*****Table 3 about here*****

In order to test Hypotheses 1-7, we ran four logistic regression models, all of which are statistically significant at least at $p < 0.1$. The Hosmer and Lemeshow test reveals a good fit of the models with the empirical data. Most importantly, all models are able to correctly classify more than 63% of FDI establishment modes, which is a satisfactory value (Brouthers & Brouthers, 2001; Padmanabhan & Cho, 1996). In all three models, the coefficients of none of ownership advantages are statistically significant. Specifically, coefficient signs for intangible assets and host-country resources are negative, indicating that an increase in the level of firm-specific skills and capabilities, as well as prior operations in the country of the major FDI project both reduce the likelihood of choosing the acquisition mode of entry. On the contrary, the coefficient for FDI experience is positive, providing a hint that an increase in overall FDI operations increases the propensity to acquire firms abroad. Given the lack of statistical significance, no support can be provided for Hypotheses 1-3.

As for location advantages, cultural distance was found to be negatively related to the choice of acquisition, a result which is statistically significant at $p < 0.1$. Hence Hypothesis 4 could be supported. Likewise, market potential is also negatively related to acquisition choice at

$p < 0.1$, supporting Hypothesis 5. The third of location advantages, perceived host-country risk is not significant in Model 3; however it becomes significant with a negative coefficient when contractual risk is simultaneously included in Model 4, thus providing support for Hypothesis 6. Finally, in regards to internalization advantages, contractual risk turns out not to be significant, its sign suggesting a positive relationship with the choice of acquisition mode. Therefore, no support could be found for Hypothesis 7.

As for control variables, the industry dummy turns out to be significant (at least at $p < 0.05$) in all Models with a positive sign, thus indicating a preference for acquisitions among firms from the manufacturing sector. Industry relatedness between the parent and its affiliate is significant, likewise with a positive sign, in Models 3 and 4, suggesting that investments in related sectors are more likely to occur in the form of acquisitions. The negative coefficient for the ownership share of the parent firm suggests that green-field investments are related to a higher degree of affiliate control.

*****Table 4 about here*****

DISCUSSION

Earlier studies focused on developed country multinationals demonstrated that the higher the constellation of OLI factors, the higher the preference for more integrated entry modes, such as wholly-owned subsidiaries or joint ventures (Tse, Pan & Au, 1997) and the better foreign market performance (Brouthers, Brouthers & Werner, 1999). Also Nakos and Brouthers (2002) found no support for international experience or investment risk perception. However, the comparability of these FDI-related studies to the present findings is rather limited since this study presents a novel attempt to apply the OLI framework to FDI establishment mode choices. Thus, the specificity of the findings related to multinationals originating from an advanced emerging

market can only be discussed referring them to other studies on the said FDI establishment mode choices.

Based on the present results, Dunning's OLI framework demonstrates a limited applicability to FDI establishment mode choices in an advanced emerging country context. First, none of the ownership advantages turns out to be relevant for establishment mode choices of Polish MNCs. This remains in partial contradiction with advanced country contexts, whereby Hennart and Park (1993) demonstrated that the intensity of advertising in a host country favors green-field investments, although Chen and Zeng (2004) found that advertising intensity is insignificant at the level of the parent firm. As regards R&D intensity, it has consistently been found to favor green-field investments with the aim of exploiting extant sources of competitive advantage (Andersson & Svensson, 1994; Brouthers & Brouthers, 2000). One of the possible explanations thereof might be the limited scope of intangible resources of CEE firms, which leaves room for the relevance of home country-related advantages in explaining expansion decisions (Del Sol & Kogan, 2007). The considerable share of acquisitions in Polish OFDI provides an indication that the still limited scope of Polish firms' internationalization raises the need for strategic asset-seeking and thus increasing their international competitiveness, similar to Asian firms (Cui & Jiang, 2010; Yamakawa et al., 2008).

In terms of international experience, some establishment mode studies in the context of advanced economies have found host-country experience to favor the choice of acquisitions (see e.g. Barkema & Vermeulen, 1998). However, others have found in such cases a non-significant relationship (see e.g. Hennart & Park, 1993; Larimo, 2003; Padmanabhan & Cho, 1999). The lack of significance of this type of experience can arguably be traced back to the fact that most Polish companies expanded in sequential steps, preceding FDI with exports (see e.g. Antalóczy & Éltető, 2003). This corresponds to previous research findings in the CEE context, whereby the

evolutionary behavior of firms can be explained by the leverage of previous business networks, often established still in the previous socio-economic system in the region. At the same time, an important share of major FDI projects of our sample firms were not preceded by any host-country experience. This could partly be attributed to the fact that most CEE countries share a similar, historically determined institutional background, which tends to facilitate foreign expansion, even given the lack of previous experience in this field (Del Sol & Kogan, 2007).

As regards FDI experience, the present study can be considered as a novel attempt at investigating this variable, with one precedence of Padmanabhan and Cho (1999), who identified experience both with acquisitions and green-field projects, finding a positive effect of the said experience on the propensity to select acquisitions. As the present project uses a general construct of FDI experience, regardless of establishment modes behind that experience, the non-significant finding of FDI experience should be interpreted with caution. Nonetheless, again given the limited scope of international operations of multinationals from Poland, FDI experience apparently remains a limited determinant of FDI establishment mode decisions.

Moving on to location advantages, several significant findings can be reported in the present study. As far as the effect of cultural distance is concerned, earlier studies in the context of advanced country multinationals found this variable to be insignificant (Brouthers & Brouthers, 2000; Padmanabhan & Cho, 1999) or to favor green-field investments (Barkema & Vermeulen 1998; Larimo 2003). These mixed findings may result from the desired extent of and ability to integrate the affiliate by the parent, whereby the transfer of parent company practices may be more costly in case of acquired affiliates whose employees are embedded in a different culture (Slangen & Hennart, 2008). The capability of managing foreign operations is arguably still limited in the case of emerging markets multinationals, thus the factor of perceived cultural distance gains in importance in their foreign market expansion decisions. Not surprisingly, most

foreign investments of Polish firms are in fact located in neighboring countries where the said distance is perceived as small.

Further, the present study confirms the relevance of market potential, similar to evidence from developed country firms. Agarwal and Ramaswami (1992) demonstrated, based on the OLI framework, that higher market potential is related to more capital-intensive entry modes. For FDI establishment modes research, market potential was found to be insignificant in some studies (such as Barkema & Vermeulen 1998), however in others it favored acquisitions (Andersson & Svensson, 1994; Larimo 2003; Padmanabhan & Cho, 1999). This contradiction with the present evidence for Polish emerging multinationals should be discussed in the context of their aforementioned geographic presence which - like their peers from other CEE countries - points to a predominant focus on CEE markets. Thus, they prefer to operate in institutionally similar environments, which they had mostly penetrated through exports before, with a green-field affiliate frequently being the next logical step in this process. In fact most foreign investment projects of Polish firms are of the market-seeking category (Gorynia et al., 2013), thus confirming the concept of Dunning that this type of motives usually appears in strategies of firms embarking on moving into foreign markets in the early, extensive stages of the internationalization process, and also remains in line with other studies in the CEE context (Czaplewski & Wiśniewska, 2007; Karpińska-Mizelińska & Smuga, 2007; Varblane et al., 2003).

Finally, a higher risk perception was found to favor green-field investments. For developed country multinationals higher risks were generally found to be related to lower commitment modes (Agarwal & Ramaswami, 1992), while in terms of establishment modes Barkema and Vermeulen (1998) found only partial support for preference for green-field FDI. Given the aforementioned role of institutional similarity in the CEE region, firms originating

from similar environments may be better equipped to cope with host-country risks, thus establishing their own affiliates to control foreign market operations from scratch via green-field investment. This finding is consistent with the results of Guillen and Garcia-Canal (2009) who identified the competitive advantages of “new” MNCs from emerging economies as compared to the American model of the multinational firm.

At the same time contractual risk, which has been found a relevant determinant of FDI for firms from developed countries, was also found to be insignificant in the present study, again providing an indication of the ability of CEE multinationals of operating in similar, under-developed institutional contexts and thus better coping with such types of host-country risk.

CONCLUSIONS

The contribution of the present study is believed to be twofold. Firstly, it attempts to contribute to the ongoing discussion on the explanatory character of Dunning's eclectic approach to modeling FDI patterns. Secondly, it is positioned within the current debate as to the specific character of FDI by firms from developing and transition economies by presenting new empirical evidence from Poland as an example of an advanced emerging market. Quantitative analysis on a sample of 100 outward investors based in Poland reveals that the variables embraced by Dunning's eclectic OLI framework can be applied only to a limited extent to FDI establishment mode choices of Polish multinationals. To be precise the study in fact points to a limited role of ownership advantages, which can be partly explained by the latecomer status of Polish firms in the global economy and a corresponding lack of significant ownership advantages to be successfully exploited abroad. These firms tend to leverage their knowledge of regional, more familiar and still growing transition economies markets by establishing green-field operations. Their knowledge of this regional environment suggests an apparently higher risk tolerance, as

reflected by their preference for the green-field investment mode. At the same time, contractual risks turn out to be irrelevant for their establishment mode choices.

The present study is clearly encumbered by several limitations, the major one being limited sample size. Nonetheless, it is so far one of the largest samples on Polish FDI which, given the lack of available databases and the reluctance of the investigated firms to disclose information on their motivations and determinants of strategic decisions, can still be regarded as an important base for tracing patterns of internationalization of Polish firms. Another limitation relates to the reliance on subjective items in operationalizing variables. While such items clearly bear the risk of managerial bias and misinterpretation, they do reflect the rationale of making establishment mode choices, which are not always necessarily based on fully available objective data but rather on individual managerial judgments. Nonetheless, the use of secondary data might have improved the reliability and robustness of results that were obtained in this study. Furthermore, some of the indicators, such as the dichotomous variable for host-country experience, might not account for the nuances of learning from such different types of host-country operations as exporting or licensing.

Further research on the expansion of firms from more or less advanced emerging CEE economies should investigate the role which different determinants of FDI establishment mode choices have in locations, which are both economically and institutionally less and more advanced as compared to the country of origin. This would certainly shed more light on the partly inconclusive evidence from the present study, which did not recur to sub-sample analysis due to limited sample size. In fact, a joint analysis of risk and its potential factors can be a promising avenue for such related studies. Another research problem is the impact of different types of distance on the internationalization of emerging markets multinationals, given their still limited experience in international operations. While perceived distance, embracing the perception of

both informal and formal institutional differences between countries, turned out to be significant in this study, further research should explicitly look into other specific types of distance, benefiting from the institutional diversity of the CEE region. Likewise, different types of experience, including notably experience in different country settings, should be included in the analysis of the effects of distance in order to account for possible moderating effects on FDI establishment mode choices.

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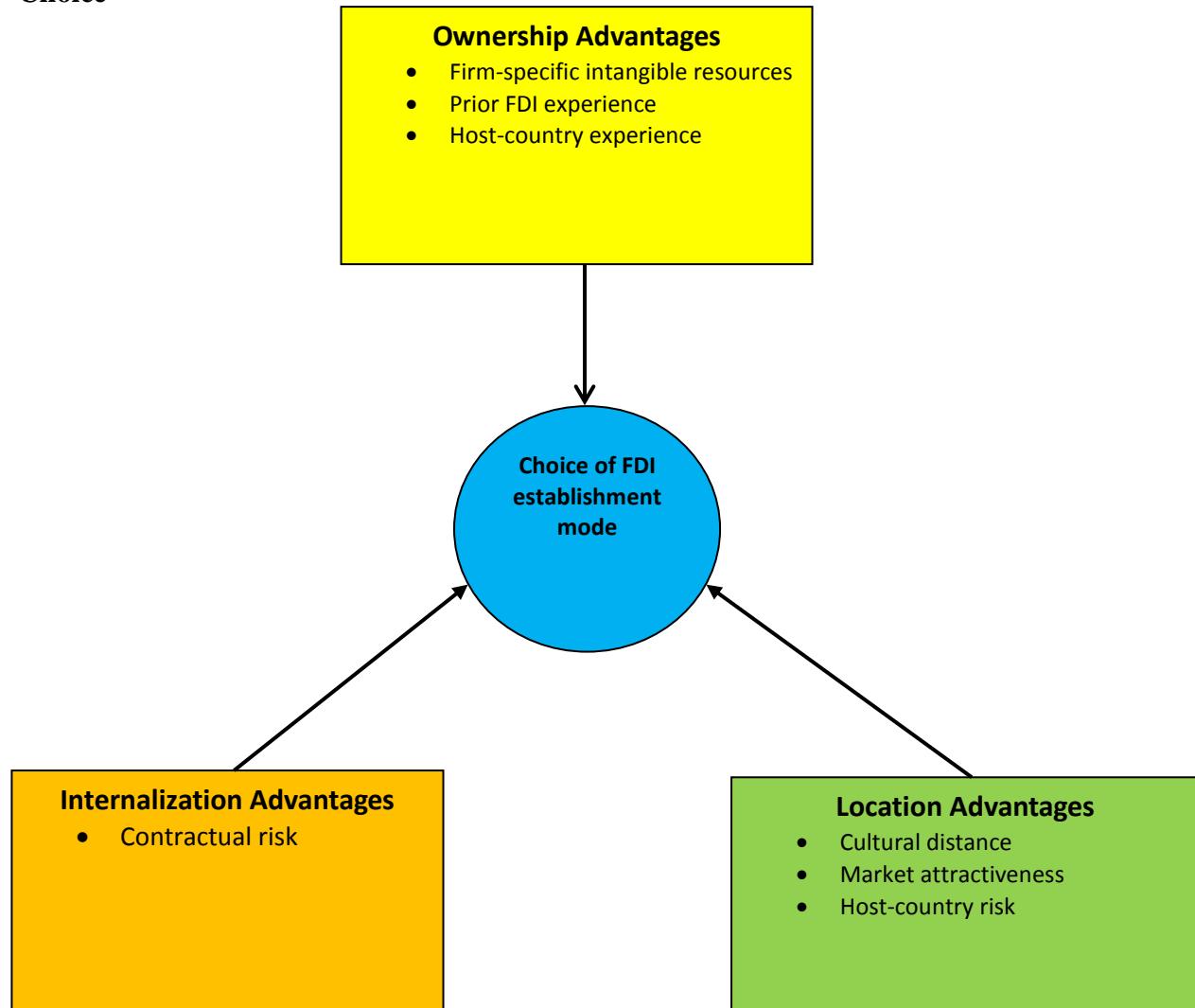
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APPENDICES, EXHIBITS AND TABLES

Exhibit 1. The OLI Model as a Framework for Determinants of FDI Establishment Mode Choice

Source: Authors' perception based on Dunning's OLI Paradigm. Dunning 1988, 2001

Appendix 1: Overview of survey items

Variable	Scale	Cronbach's Alpha
Dependent variable		
Establishment mode (1=Acquisition, 0=Greenfield)	Binary	N/A
Control variables		
Industry sector (1=Manufacturing, 0=Non-manufacturing)	Binary	N/A
Relatedness (1=Related sector, 0=Non-related)	Binary	N/A
Capital ownership share of the parent in the largest foreign affiliate (1=11-24%; 2=25-49%, 3=50-74%; 4=75-95%; 5=95-100%)	Interval	N/A
Ownership advantages		
Intangible assets in relation to major competitor (<i>technological capabilities, new product development capabilities, managerial capabilities, market offering adjustment capability</i>)	Five-point Likert scale (1-far worse, 5-far better)	0.85
Experience in the host country prior to the major FDI project (1=experience, 0=no experience)	Binary	N/A
FDI experience as a product of the number of foreign affiliates and the number of years of FDI operations before establishing the major affiliate	Continuous	N/A
Location advantages		
Cultural distance perception (<i>legal regulations, economic system, political structure, cultural environment</i>)	Five-point Likert scale (1-very similar, 5-very different)	0.88
Market attractiveness perception at the moment of the investment (<i>industry growth rate, market size</i>)	Five-point Likert scale (1-very low, 5-very high)	0.63
Host-country risk perception at the moment of the investment (<i>political instability, currency risk, expropriation risk</i>)	Five-point Likert scale (1-very low, 5-very high)	0.55
Internalization advantages		

Contractual risk perception at the moment of the investment (<i>costs of contracting, risk of unwanted information disclosure, difficulties with quality control</i>)	Five-point Likert scale (1-very low, 5-very high)	0.60
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Source: the authors

Table 1a: Sectoral distribution of sample firms (N=100)

<i>Sector</i>	Total Manufacturing	Total services
<i>Number of FDI</i>	61	39

Source: survey data

Table 1b: Geographic distribution of major FDI of each firm in the sample (N=100)

<i>Country</i>	Germany	Ukraine	Czech Republic	Romania	Russia	Slovakia	Others
<i>Number of FDI</i>	16	16	13	10	9	5	69

Source: survey data

Table 1c: Firm size distribution of FDI in the sample (N=100)

<i>Size (employment)</i>	0-99	100-249	250-499	500-999	1000-2000	>2000
<i>Number of firms</i>	15	14	21	13	15	22

Source: survey data

Table 1d: Capital share of parent in the major affiliate (N=100)

<i>Percentage</i>	11-24	25-49	50-95	95-100
<i>Number of firms</i>	12	9	21	58

Source: survey data

Table 2: Descriptive statistics for all variables (N=100)

	Minimum	Maximum	Mean	Std. Deviation
Establishment Mode	0.00	1.00	0.39	0.49

Industry	0.00	1.00	0.61	0.49
Relatedness	0.00	1.00	0.77	0.42
Ownership Level	1.00	3.00	2.37	0.81
Intangible Assets	1.00	5.00	3.48	0.74
Host-Country Experience	0.00	1.00	0.67	0.47
FDI Experience	0.00	153.00	15.30	33.00
Cultural Distance	1.00	5.00	2.62	1.09
Market Potential	1.00	5.00	3.17	0.92
Risk	1.00	5.00	2.51	0.74
Contractual Risk	1.00	4.33	2.49	0.83

Source: survey data

Table 3: Pearson correlation matrix for continuous variables (N=100)

	1	2	3	4	5	6	7
1. Ownership Level	1						
2. Intangible Assets	0.05	1					
3. FDI Experience	0.06	-0.07	1				
4. Cultural Distance	-0.07	-0.04	0.0	1			
5. Market Potential	-0.03	0.21*	0.17 [‡]	0.16	1		
6. Risk	0.06	-0.01	0.05	0.53***	0.13	1	
7. Contractual Risk	0.01	0.07	-0.02	0.26**	0.18 [‡]	0.21*	1

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; [‡] $p < 0.10$; $N = 100$

Not included: Establishment Mode, Industry, Relatedness, Host-Country Experience

Source: survey data

Table 4: Logistic regression estimates of the probability of acquisition choice

Variable	Model 1	Model 2	Model 3	Model 4
<i>Control variables</i>				
Industry	1.14* (0.48)	1.21* (0.50)	1.46** (0.56)	1.46** (0.56)
Relatedness	0.48 (0.54)	0.47 (0.54)	1.31 [‡] (0.68)	1.31 [‡] (0.68)
Ownership Level	-0.45* (0.00)	-0.41* (0.27)	-0.52 [‡] (0.30)	-0.52 [‡] (0.30)
<i>Ownership Advantages</i>				
Intangible Assets		-0.07 (0.29)	-0.01 (0.33)	-0.02 (0.33)
Host-Country Experience		-0.47 (0.47)	-0.29 (0.51)	-0.30 (0.51)
FDI Experience		0.00 (0.00)	0.01 (0.01)	0.01 (0.01)
<i>Location Advantages</i>				
Cultural distance			-0.49 [‡] (0.27)	-0.49 [‡] (0.42)
Market Potential			-0.52 [‡] (0.28)	-0.55 [‡] (0.29)
Risk			-0.65 (0.41)	-0.68 [‡] (0.41)
<i>Internalization Advantages</i>				
Contractual Risk				0.22 (0.31)
Constant	-0.47 (0.83)	-0.15 (1.26)	3.28 [‡] (1.75)	3.11 [‡] (1.75)
Cox & Snell R Square	0.08	0.09	0.22	0.23
Nagelkerke R Square	0.11	0.13	0.30	0.31
Percentage correctly classified	68.0	63.0	73.0	70.0
Chi-square	8.54 [‡]	9.93 [‡]	25.04**	25.45**
*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; [‡] $p < 0.10$; $N = 100$				

Source: survey data