Extending Dunning's Investment Development Path:
The role of home country institutional determinants in explaining outward foreign direct investment

1. Introduction

The aim of this paper is to investigate the home country determinants of outward foreign direct investment (OFDI) from post-communist economies. In particular, we address three research objectives: First, we put forward a novel conceptual framework, extending Dunning's Investment Development Path (IDP) (Dunning, 1981,1986,1988) by incorporating institutional variables, drawing on institutional theory (North, 1990; Peng, 2002; Meyer and Nguyen, 2005; Wright et al., 2005). Second, we test this new conceptual framework using a panel data set of twenty post-communist economies for fifteen years (1996-2010). Third, we put forward several contributions to theory and practice. We present below the justification for our paper.

Firstly, recent years have seen an increase in outward foreign direct investment (OFDI) from emerging markets and post-communist economies alike (UNCTAD, 2011; Luo et al., 2010; da Silva et al., 2009). Given the specific institutional fabric of these countries (JIM, 2010), the question is whether mainstream theory can explain the drivers of OFDI outflows or whether new theories are needed to explain this phenomenon (Zhang and Dally, 2011; Kalotay and Sulstarova, 2010; Kalotay, 2008; Liu et al., 2005). For example, patterns of OFDI from Russia challenge the propositions of the Uppsala School and the Investment Development Path (IDP) and indicate the need to extend the eclectic paradigm (OLI) to include home country institutions (Kalotay and Sulstarova, 2010; Kalotay, 2008). Moreover, Buckley et al. (2007:499) argue that in order to explain Chinese outward FDI, three special explanations (capital market imperfection, special ownership advantages and institutional factors) need to be 'nested within the general theory of the multinational firm'.

We follow Ramasamy et al. (2012) and Buckley et al. (2007) according to whom rather than rejecting conventional theories, specific modifications are needed to explain OFDI from emerging economies. The recent increase in FDI from emerging and post-communist economies suggests that these countries have reached levels of economic development and competitiveness that allow them to generate OFDI. In other words, based on the economic development and competitiveness of the home country, local firms have developed ownership advantages that allow them to expand successfully aboard. However, the IDP alone does not explain the surge in OFDI for countries that are technically in stage 2 of their investment development path (Kalotay and Sulstarova, 2010; Kalotay, 2008). IDP does not account for the ownership advantages of firms that are 'embedded' in the institutional context of their home country and that allow multinational

enterprises (MNEs) to overcome the 'liability of foreignness' when expanding abroad. This suggests extending the IDP by drawing on institutional theory and accounting for differences in the home countries' institutional context. By augmenting the IDP to explore the home country institutional determinants of OFDI from post-communist economies we answer calls by Peng et al. (2008), Dunning and Lundan (2008) and Eden (2010) for International Business research to focus more on institutions. This is our first contribution to theory.

Secondly, in line with Meyer and Peng (2005), we believe that through their distinctive institutional context, the Central and Eastern European countries (CEECs)[1] represent an ideal context to test the applicability of extant theories and to develop new ones by exploring the role of home country institutional determinants in explaining OFDI. For the most part of the last two decades these countries have been known as 'transition economies' (EBRD, 2010), a distinctive group of countries (Meyer and Peng, 2005). These countries share the communist legacy and the radical challenges of the political and economic transformation that followed the fall of Communism (Meyer and Peng, 2005). Furthermore, many of the transition reforms have continued even after EU membership and are still in progress, especially in the Commonwealth of the Independent States (CIS) and the South-Eastern European countries (EBRD, 2011). These reforms have affected considerably the institutional environment and business strategy in the CEECs (Meyer and Peng, 2005), highlighting the need to account for institutional factors when investigating the determinants of OFDI from this geographical area.

Furthermore, the CEECs are distinctive from other emerging economies (UNCTAD, 2011; Meyer and Peng, 2005; Hoskisson et al., 2000). Andreff (2003) argues that, although there are commonalities between transition economies across various geographical areas, MNEs from [European] transition economies are distinct from third world multinationals. They have different drivers and have different starting points for their internationalisation process. This makes comparisons through longitudinal studies difficult, as third world multinationals have reached higher stages of internationalisation than [European] transition economies and some emerging economies are in a later stage of the IDP than the CEECs (Andreff, 2003). Furthermore, due China's specific institutional characteristics -such as it's one party system, its reliance on state owned enterprises, its guanxi and Confucianism, its size, its different reforms path (Peng el al, 2008) and its heavily regulated economy (Kang and Jiang, 2012)- comparisons between the CEECs and China -another 'transition economy'- area also challenging. According to Demekas (2007), European emerging markets are different from other emerging economies because they have different economic fundamentals and different policy challenges. Moreover, unlike other emerging economies, their post-communist transformation has been influenced dramatically by their

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[1] In this study we use the terms 'post-communist economies', 'transition economies' and the CEECs interchangeably.

economic and political relations with the European Union, including the accession to the EU or the prospect of such membership. Political stability, economic convergence and the liberalisation of trade and capital brought by the quest for EU membership have also affected OFDI from these countries (Demekas, 2007; Andreff, 2003). Furthermore, emerging European economies are more advanced than other emerging economies with regard to institutional factors such as democracy, rule of law, intellectual property rights, regulation quality and financial sector development (Demekas, 2007). All these institutions are likely to affect directly or indirectly OFDI, thus limiting the applicability of extant research on emerging economies to the CEECs (Pananond, 2007; Klein and Wöcke, 2007). Moreover, at present there is a lack of cross-country studies of determinants of OFDI from post-communist economies and this study aims to fill this gap.

By focusing on the CEECs we are able to clarify the boundaries of extant theories, test the limits of the applicability of the IDP to a specific context and demonstrate the need to extend the IDP by drawing on institutional theory. This is our second contribution to theory. In particular, we show that overall institutional reforms and competition reforms increase the competitiveness of the home country and enhance OFDI. In doing so we consolidate and extend existing theory (Meyer and Peng, 2005) and answer the call by Liu et al. (2005) to identify other factors that complement GDP per capita as a reflection of home country development. This is also an empirical contribution of this study.

Thirdly, whilst OFDI can lead to depletion of resources in the home country (Witt and Lewin, 2007), it is also associated with increased home competitiveness (Zhao et al., 2010), country exports and jobs (Kalotay, 2004) and hence economic benefits (JIM, 2010; Globeram and Shapiro, 2008; Svetlicic and Rojec, 2003). Thus, investigating the determinants of OFDI allows us to highlight several implications for policy makers so that OFDI is encouraged responsibly. This is our contribution to practice.

Thus, we address several gaps in the literature and make several important contributions: firstly, we augment the IDP framework by incorporating institutional theory; secondly, we conduct a cross- country empirical analysis of home country determinants of OFDI from post-communist economies, analysis that allows us to test and augment extant theory and to identify specific institutional factors that affect OFDI from post-communist economies; finally, we put forward policy implications. The remainder of the paper is organised as follows: we first present the literature review, followed by our conceptual framework and our methodology; we then discuss our results, followed by conclusions, including implications for theory, and implications for policy makers; finally, we discuss the limitations of the paper and present avenues for further research.

2. Literature review

2.1. The determinants of OFDI from emerging economies

Extant literature on the determinants of OFDI from emerging economies varies in focus and approaches. A lot of discussion focuses on OFDI from the largest originators of outward FDI such as China (Kang and Jiang, 2012; Wang et al., 2012; Cui et al, 2011; Zhang and Dally, 2011; Tolentino, 2010; Voss et al., 2010; Boateng et al., 2008; Mork et al., 2008; Buckley et al., 2007), India (Bhaumik and Driffield, 2011; Hattari and Rajan, 2010; Tolentino, 2010; Nayyar, 2008; Luo and Tung, 2007), Russia (Kalotay and Sulstarova, 2010; Kalotay, 2008). However, there is a lack of multi-country studies that can highlight how home country factors influence outward FDI.

Although many studies are of qualitative nature (Eren-Erdogmus et al., 2010; Cui and Jiang, 2010; Voss et al., 2010; Gammeltoft et al., 2010; da Silva et al., 2009; Saez and Chang, 2009; Kalotay, 2008), or focus on firm level data (Wang et al., 2012; Ramasamy et al., 2012; Bhaumik and Driffield, 2011; Tan and Meyer, 2010; da Silva et al., 2009), recent papers conduct country level quantitative analysis to ascertain the determinants of OFDI from emerging economies. Most OFDI data used in extant studies represents bilateral outflows, allowing for an in-depth investigation of the impact of host country variables on OFDI (Kolstag and Wiig, 2012; Goh and Wong, 2011; Zhang and Dally, 2011; Chou et al., 2011; Kalotay and Sulstarova, 2010; Buckley et al., 2007).

A smaller group of authors acknowledge the significant impact of home country variables on OFDI (Appendix A). Extant studies account for home country macro-economic indicators (Kalotay and Sulstarova, 2010; Tolentino, 2010; Goh and Wong, 2011; Buckley et al., 2007; Pantelidis and Kyrkilis, 2003; Andreff, 2002) or include home country development- related indicators (Andreff, 2002; Pantelidis and Kyrkilis, 2003; Liu et al., 2005). Several papers account for home country institutional factors. Kang and Jiang (2012) find that institutional distance related to economic freedom, political influence or FDI restriction affects the location of Chinese OFDI. Furthermore, the determinants of Chinese OFDI depend on whether the target economy is a developed economy or an emerging one. Wang et al. (2012) examine the drivers of Chinese OFDI integrating and testing insights from institutional theory, industrial organisation and the resource-based view of the firm. They find that government support and home country industrial structure are crucial in explaining Chinese OFDI, whereas technological and advertising resources are less important. However, given the unique characteristics of the Chinese economy highlighted earlier, the findings of the two studies above cannot be extrapolated to other transition economies and specific investigations are required.

Goh and Wong (2011) show that the liberalisation of Malaysia's capital outflows increases OFDI. However, this study uses the foreign exchange reserves as a proxy for the liberalisation

policy, thus capturing a very limited aspect of the home institutional environment. Kalotay and Sulstarova (2010) find that the policy changes in the Russian Federation have affected Russian outward FDI. However, their study focuses on Russian mergers and acquisitions (M&As) abroad rather than all aggregate OFDI and also uses a dummy to capture the impact of policies on OFDI. Furthermore, they apply the OLI paradigm by testing the impact of Oa (privileged access to income-generating assets) and Ot advantages (transaction based intangible assets) (Dunning and Lundan, 2008a, b), rather than Oi advantages (institutional based assets) (Dunning and Lundan, 2008a, b) as such. Using a data set comprising both emerging economies and post-communist countries, Salehizadeh (2007) shows that there is a positive relationship between economic freedom and political transparency on the one hand and OFDI on the other hand. However, this study only focuses on bi-variate relationships, highlighting the need for an in-depth cross-country investigation of the determinants of OFDI from emerging countries and post-communist economies in particular. Finally, Buckley et al. (2007) find that policy liberalisation has had a significant impact on Chinese outward FDI, highlighting the importance of institutions as an OFDI determinant. However, this study focuses on Chinese OFDI only and uses a dummy to capture institutional change rather than employing continuous or interval specific institutional variables.

Overall, we believe that more in depth investigation with regard to the impact of the home country institutions on OFDI is needed, using more specific institutional variables and allowing for cross-country comparison across time. The ownership advantages are 'embedded' in MNEs' home countries (Tolentino, 2010; Erramilli et al., 1997; Dunning, 1980), including the home country institutions or institutional reforms (JIM, 2010; Cheng et al., 2009; Andreff, 2002). Our study makes a novel contribution to extant literature by extending the IDP drawing on institutional theory and examining how specific institutional reforms such as trade and foreign exchange liberalisation, privatisation, enterprise restructuring, competition reforms or overall institutional change affect OFDI. Despite their relevance to creating the 'rules of the game' in emerging (and transition) economies, these particular institutional factors have not previously been analysed in the literature. Instead, previous literature has accounted for policy change using dummies (Kalotay and Sulstarova, 2010; Buckley et al., 2007), proxies (Goh and Wong, 2011) or has used alternative measures of institutional factors (Salehizadeh, 2007), such as the ICRG risk variables, for example (Kang and Jiang, 2012). Furthermore, more studies into the determinants of OFDI from the CEECs are necessary as they have a specific institutional context, as explained earlier. We review below several transition economies studies that are the building block for our investigation.

2.2. The determinants of OFDI from post-communist economies

Although the fall of Communism has led to considerable research on transition economies (Lavigne, 1999, 2000; Stiglitz, 1999; Kodolko, 2000) studies on determinants of OFDI from the CEECs are scarce and vary in focus and approaches. Some papers use firm level data (Damijan et al., 2007; Blanke-Ławinczk, 2009), others focus on country level analysis (Rugraff, 2010; Kalotay, 2004; Ginevičius and Tvaronavičienė, 2005; Andreff, 2002). We review briefly the country level studies- as these are most relevant to our investigation.

In a cross-country qualitative study, Rugraff (2010) compares the FDI paths of four CEECs countries- the Czech Republic, Hungary, Poland and Slovenia. He finds that foreign affiliates are pivotal in enhancing OFDI from the Czech Republic and Hungary, Polish OFDI is driven by state-owned extractive and infrastructure companies whilst private indigenous-grown multinationals drive OFDI from Slovenia (Rugraff, 2010). Comparing Lithuania and Estonia, Ginevičius and Tvaronavičienė (2005) identify several patterns of inward and outward foreign direct investment and state that there are significant differences between the two countries. Using country level statistics, Ginevičius and Tvaronavičienė (2005) focus mainly on external factors that enhance OFDI. They find that Estonian OFDI is driven by the search for larger markets that allow economies of scale and scope and is facilitated by geography and historical ties (Ginevičius and Tvaronavičienė, 2005). They also distinguish between OFDI carried out by domestic Estonian companies and OFDI carried out by affiliates of MNEs that use Estonia as a springboard for expanding in neighbouring countries such as Lithuania (Ginevičius and Tvaronavičienė, 2005). However, these studies are exploratory and limited to a few countries only. This highlights the need for more in depth, cross-country explanatory research into the determinants of OFDI from post-communist economies.

In a cross-country qualitative study, and adopting the terminology of Dunning's (1981, 1986, 1988) Investment Development Path, Kalotay (2004) discusses the drivers of OFDI from Central and Eastern European countries. The study notes that the region is in stage 2 of the IDP - with the notable exception of the Russian Federation that is in stage 3- and stresses the importance of EU integration and government policies, including privatisation and liberalisation, in enhancing outward FDI (Kalotay, 2004). Kalotay (2005) also finds that the geographical location, cultural and personal ties, as well as the knowledge of neighbouring countries facilitate OFDI, especially for Estonian, Hungarian and Slovenian enterprises. Furthermore, Kalotay (2005) argues that OFDI is a means to achieve competitiveness in the absence of a large home market. This study is exploratory and thus paves the way for more in depth explanatory research into the home country determinants of OFDI from the CEECs.

Applying the IDP framework in a study of the 'new multinationals from transition countries', Andreff (2002) finds that the major determinants of outward FDI are the home country

level of economic development and the size of the home domestic market (proxied by population). The importance of the home country development confirms the IDP's propositions, whilst the finding regarding the salience of home market size contradicts the literature according to which smaller countries generate more OFDI as MNEs search for larger markets (Varblene et al., 2001; Chudnovski and Lopez, 2000). Furthermore, Andreff (2002) finds that the sector structure of the home country is influential, but does not distinguish between 'transition' and emerging economies, whilst the technological level of the home country is not a strong determinant of OFDI. Andreff (2002) suggests that extant literature may have exaggerated the role of technology in encouraging OFDI and propose that more emphasis is given on the role of the industry restructuring in enhancing OFDI (Andreff, 2002). However, whilst Andreff (2002) argues that the internationalisation of 'transition' MNEs has been triggered by the process of privatisation, restructuring and modernisation in the home country, he does not account for these institutional factors in his model and does not explicitly explain how exactly these institutional changes foster OFDI.

We believe that this complex set of institutional reforms adopted by the CEECs after the fall of Communism makes the CEECs an ideal context for testing and augmenting extant theory (as explained earlier). We extend the IDP by drawing on institutional theory and including in our conceptual framework and empirical investigation various institutional factors- such as trade and foreign exchange liberalisation, privatisation, enterprise restructuring, competition policy reforms and overall institutional reforms. In line with Meyer and Peng (2005), by focusing on the CEECs, we are able to test the applicability of extant theory to a new context, thus consolidating (Meyer and Peng, 2005) as well as augmenting extant theory. We are also able to show *how* institutional factors affect strategy (Peng et al., 2008) by focusing on OFDI. In doing so we fill a gap in the literature and also make an empirical contribution to the literature.

We present a synopsis of extant literature in Figure 1 and Appendix B, followed by a discussion of our conceptual framework.

Insert Figure 1 here.

3. Conceptual framework

We argue that IDP alone does not explain the surge in outward foreign investment from post-communist economies (Kalotay and Sulstarova, 2010; Kalotay, 2008), as the IDP does not account for the new multinationals' (MNEs) ownership advantages that are 'embedded' in the institutional context of their home country (Andreff, 2002) and allow MNEs to overcome the 'liability of

foreignness' when expanding abroad. As outlined above, our conceptual framework complements hypotheses based on the IDP with hypotheses derived from institutional theory in an attempt to augment the IDP model and enhance its explanatory power with regard to the level of OFDI. Thus, our first set of hypotheses (H1a-c) draws on the IDP (Dunning, 1981, 1986, 1988), while our second set of hypotheses (H2a-e) integrates institutional theory (North, 1990; Peng, 2002; Meyer and Nguyen, 2005; Wright et al., 2005). We sum up our conceptual framework in Figure 2 and explain the argumentation of our hypotheses below.

Insert Figure 2 here.

3.1. IDP and OFDI determinants

Dunning's (1981, 1986, 1988) IDP, an extension of the eclectic paradigm, (Dunning, 1977, 1998, 2001) is the most developed theory explaining simultaneously both inward and outward FDI (Stoian and Filippaios, 2008a) and has been followed up by several economists (Dunning and Narula, 1998; Durán and Ubeda, 2001; Durán and Ubeda, 2005). According to the IDP, the outward and inward FDI of a country depend on the country's level of economic development (measured by its GDP per capita), leading countries to follow a predictable path that consists of five stages. In stage 1 a less developed economy neither attracts, nor generates FDI. In stage 2, industrialising developing economies attract FDI through their improved location advantages and perhaps generate minimum OFDI, leading to a negative net investment position (outward FDI-inward FDI). In stage 3, with the improvement of the country's technological capabilities and the expansion of its domestic market, the country attracts significant FDI and generates OFDI based on its innovations and international specialisation. The net investment position remains negative. In stage 4, outward FDI is higher than inward FDI and the net investment position becomes positive. In stage 5, most advanced countries are characterised by a balanced net investment position with very high levels of both inward and outward FDI.

Each stage of economic development is associated with certain location advantages that attract FDI as well as certain ownership advantages of local firms that enhance OFDI (Stoian and Filippaios, 2008a). Furthermore, the IDP assumes that inward FDI contributes to an improvement of the country's location advantages and the local companies' ownership advantages, thus enhancing both FDI and OFDI in the future. In this model stages 1 to 3 are associated with developing economies and 4 and 5 are associated with developed economies (Durán and Ubeda, 2005). However, research shows that certain emerging economies have leapfrogged along the development path and have originated more OFDI than the path would have predicted (Kalotay, 2008; Liu et al., 2007).

The development-related variables of the home country can be used to explain levels of OFDI. Firstly, according to the IDP (Dunning, 1981, 1986, 1988), there is a strong positive relationship between **home country development** level and outward FDI. This relationship is proven by further studies on developed countries (Barry et al., 2003; Bellak, 2001; Buckley and Castro, 1998) or on a mix of developed and developing economies (Dunning and Narula, 1994; Tolentino, 1993). Andreff (2002) also finds that outward FDI from transition and developing economies is a function of the home country's level of economic development. With economic development come ownership advantages that domestic companies can exploit when investing abroad. These ownership advantages-embedded in the level of development of the home country- include higher capital availability, high productivity, specialised know-how and research and development, leading to increased ability to invest abroad (Durán and Ubeda, 2005). We thus formulate the following hypothesis:

H1a: OFDI is positively associated with home country economic development.

Secondly, the IDP model suggests that countries with larger **technological endowments** generate more OFDI, as local firms have access to more advanced technology that they can exploit as competitive advantages when internationalising (Lall,1996; Narula, 1996; Durán and Ubeda, 2001). This link has received extensive theoretical and empirical support (Lall, 1980; Cantwell, 1981,1987; Pearce, 1989; Kogut and Chang; 1991, Dunning, 1993), especially for developed economies. However, Andreff (2002) suggests that extant literature may have exaggerated the role of technology in encouraging OFDI and others find that the competitive advantages of EMNEs tend to be based on price competition rather than technology or brand (JIM, 2010). Furthermore, according to Salehizadeh (2007), some emerging economies multinationals have access to 'lower level' technologies and management practices that may be better suited to other emerging markets, thus enabling them to generate OFDI into similar economies. Accordingly, we formulate the following hypothesis:

H1b: OFDI is positively associated with home country technological development.

Thirdly, the IDP model suggests that *(inward) FDI* enhances OFDI. As a result of spill-overs from FDI, local companies improve their ownership advantages and exploit these new ownership advantages through outward FDI (Dunning, 1981, 1986, 1988; Stoian and Filippaios, 2008a; Durán and Ubeda, 2001). Moreover, affiliates of MNEs that invest in post-communist or emerging economies often expand abroad (Ruganoff, 2010; Ginevičius and Tvaronavičienė, 2005),

or become regional centres for the MNEs' operations in other similar countries (Rugraff, 2010; Stoian and Filippaios, 2008a,b), thus enhancing OFDI. We thus propose:

H1c: OFDI is positively associated with inward foreign direct investment.

3.2 Home-country institutional factors and OFDI

According to Ramamurti (2009) and Khanna and Palepu (2006), emerging MNEs develop significant ownership advantages that they exploit when investing abroad in similar economies based on their capability to deal with institutional voids in their home countries. Moreover, Andreff (2002) argues that extant literature may have exaggerated the importance of technology in enhancing OFDI and that more attention should be paid to economic reforms such as privatisation and modernisation. Furthermore, Liu et al. (2005) argue that GDP per capita is an incomplete measure of economic development and thus supplementary factors that contribute to economic development should be included in the IDP. This suggests that to account for the increasing OFDI originating from emerging economies and transition economies, the IDP needs to be extended and incorporate institutional theory (North, 1990; Peng, 2002; Meyer and Nguyen, 2005; Wright et al., 2005).

Institutional theory posits that the strategies of firms are embedded in the institutional context of their home country i.e. are influenced by the 'rules of the game' that are formally and informally enforced by the government and its agents (Scott, 2002). According to North (1990:3), institutions 'are humanly devised constraints that structure human interactions', also known as the 'rules of the game' that provide the context within each organisations engage in production, exchange and distribution. Through isomorphism, i.e. by conforming to the rules, norms and expectations in their environments, organisations achieve legitimacy (DiMaggio and Powel, 1983; Meyer and Rowan, 1977). Institutions influence the firms' strategies through regulative, normative and cognitive channels (Scott, 1995). As a result, MNEs' strategic decisions reflect the institutional environments from their home country, i.e. display 'institutional imprinting' (North, 1990; Peng, 2003; Cheng et al., 2009). Furthermore, this institutional 'imprinting' together with firm specific norms and values guiding the firm's decision making constitute institutional ownership advantages (Dunning and Lundan, 2008a,b) that can be transferred to host countries -alongside other with other competitive advantages-and can influence the institutional development of the host countries (Cantwell et al, 2010). In doing so, institutions and organisations co-evolve in close interaction (North, 1990; Kostova et al., 2008; Cantwell et al., 2010) and the 'liability of foreignness' is diminished (Cantwell et al., 2010).

Overall, we thus argue that MNEs from post-communist countries derive their ownership advantages not only from the level of economic development of their home country and its technological development, but also from the business environment of the home country and in particular the institutional context in which they operate (Peng et al., 2008). The 'rules of the game' at home offer these MNEs ownership advantages that they can exploit abroad in two ways: either when expanding in other emerging economies- due to the similarity of institutions and the EMNEs' ability to take risks in uncertain institutional environments that mirror their home institutional fabrics -present or past- (Khanna and Palepu, 2006; Cuervo-Cazurra and Genc, 2008); or, when expanding in developed economies- by doing things differently, and hence differentiating themselves from their competitors. In doing so, emerging multinationals can turn institutional disadvantages into competitive advantages (da Silva et al., 2009; Khanna and Palepu, 2006).

Various institutional factors have been suggested to affect OFDI flows. Firstly, **_trade openness and liberalisation_** enhance OFDI (Blanke-Ławinczk, 2009; Kalotay, 2008, 2005). Buckley at al. (2007) find that both imports and exports between the home and the host country enhance OFDI. Imports generate new strategic resources that MNEs capitalise on through OFDI (Buckley and Casson, 1976). An export-oriented economy allows local companies to learn about foreign markets and operating internationally. This leads to companies changing their mode of internationalisation from exporting to investing abroad (Kogut, 1983). Furthermore, to make the best of trade liberalisation, emerging multinationals set up subsidiaries abroad in order to control their markets or their supply chains (Kalotay, 2008:96). A similar pattern is followed by affiliates of MNEs that invest in emerging or transition economies and become regional centres (Rugraff, 2010; Stoian and Filippaios, 2008a,b). Furthermore, OFDI often occurs to provide a local support function for domestic exporters and help them improve their hard currency earnings (Wu and Sia, 2002). Finally, foreign exchange liberalisation also encourages OFDI (Goh and Wong (2011), as it eases exports, imports and investment. We thus formulate the following hypothesis:

H2a: OFDI is positively associated with trade and foreign exchange liberalisation reforms.

Secondly, existing research acknowledges the impact of **_institutional (or policy) change_** on OFDI (Luo et al., 2010; Saez and Chang, 2009; Kalotay and Sulstarova, 2010; Peng et al., 2008; Salehizadeh, 2007; Liu et al., 2005) but fails to discuss in depth how specific institutional reforms affect OFDI, focusing instead on general indicators of economic or political freedom (Kang and Jiang,2012) or on change in policy orientation (Kalotay and Sulstarova, 2010; Buckley et al., 2007). Institutional building and reforms are typical for post- communist economies that, with the fall of

Communism, have embarked on a process of transition from centrally planned economies to market economies (Stoian and Vickerman, 2006). According to Andreff (2002:377), 'privatisation, industrialisation and modernisation have often preceded and triggered [the developing and transition MNCs'] internationalisation', a proposition that has not been tested empirically. Institutional reforms such as large scale privatisation and enterprise restructuring were interdependent processes necessary to overcome the legacy of Communism, change firm ownership, put in place the mechanisms of market economy, and increase the competitiveness of domestic firms, both locally and internationally (Stoian and Vickerman, 2006). Through privatisation local firms were able to strengthen their financial position and thus generate OFDI (Kalotay, 2004). Some companies were even listed on local stock exchanges, enabling them to raise additional capital and then invest abroad (Kalotay, 2004). Privatisation methods and pace affected the extent to which domestic firms had access to capital, know-how and technology and their capacity to compete both internally and externally. Through participation of foreign investors in the privatisation process, local firms were integrated in the network of various multinationals and some of them became regional centres from which MNEs could expand further in other CEECs countries through OFDI (Rugraff, 2010; Stoian and Filippaios, 2008) as a result of the cultural similarities and ties (Kalotay, 2005; Ginevičius and Tvaronavičienė, 2005) and facilitated by the economic integration in the area (Kalotay, 2004). On the other hand, in Russia, 'insider privatisation' allowed the concentration of assets in the hands of a few oligarchs who could exploit these new financial resources through investing abroad (Kalotay, 2008). We thus formulate:

H2b: OFDI is positively associated with large scale privatisation reforms.

Enterprise restructuring-an institutional reform that complemented the privatisation process-increased the efficiency, productivity and profitability of firms, leading to additional financial resources that could be used to expand abroad via OFDI (Kalotay, 2004). Efficiency and productivity became significant ownership advantages for transition economies-based firms. These ownership advantages were exploited by expanding in other economies that were less advanced institutionally and hence had less competitive domestic firms. These newly developed ownership advantages complement other 'embedded' ownership advantages, such as the experience of operating in 'institutional voids' (Ramamurti, 2009; Khanna and Palepu, 2006)- as most CEECs firms would have experienced such institutional voids in the early years of the transition. Overall, these combined ownership advantages encouraged firms from the CEECs to invest internationally, mainly in other transition economies or in developing economies. Furthermore, as part of enterprise restructuring, domestic firms reconfigured their supply chains to ensure efficiency and outward FDI

was one way to do so. Through OFDI, CEECs firms serve additional markets -often in the neighbouring countries (Rugraff, 2010)- via sales subsidiaries. As part of the restructuring process, MNEs from the CEECs also use OFDI to access natural resources in other transitional economies or in developing economies (UNCTAD, 2011). Several MNEs from the CEECs invest abroad for efficiency seeking motives (Rugraff, 2010), also as part of the enterprise restructuring institutional reforms, although this motivation is less prevalent due to the cost advantages that many of the countries in the area still enjoy. We thus formulate the following hypothesis:

H2c: OFDI is positively associated with enterprise restructuring reforms.

Both privatisation and enterprise restructuring are part of a wider mix of institutional reforms implemented throughout post-communist economies in order to ensure the transition from centrally planned to market economies, by putting in place market mechanisms (EBRD, 2011). These institutional reforms also include: small scale privatisation, price liberalisation, trade and foreign exchange, competition policy, banking reform and interest rate liberalisation, securities markets and non-bank financial institutions (EBRD, 2011). Although these institutional reforms were also a requirement for joining the European Union (Stoian, 2007), they have been adopted throughout the CEECs, regardless of the country's relationship with the EU (EBRD, 2011). Overall institutional reforms are part of the institutional context and reflect the competitiveness and the level of economic development of the economy. The more advanced the overall institutional reforms, the more efficient the allocation of resources in the economy and the more competitive the domestic companies become. This increased competitiveness as a result of advanced reforms leads to enhanced entrepreneurial confidence and increased investment, both in the domestic market and abroad (Andreff, 2002). Furthermore, advanced institutional reforms and adoption of market economy institutions attract FDI (Stoian and Vickerman, 2006; Bevan et al. 2004) by minimising uncertainty and costs related to the understanding and following the 'rules of the game'. MNEs that target CEECs as a result of advanced institutional reforms can then use these countries as springboards for investment in other markets (Rugraff, 2010) that are riskier but where knowledge and experience of operating in the CEECs can be leveraged. We thus put forward the following hypothesis:

H2d: OFDI is positively associated with overall institutional reforms.

Finally, whilst advanced institutional reforms are associated with ownership advantages for MNEs from CEECs, *institutional disadvantages* can also turn into competitive or ownership

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advantages (Khanna and Palepu, 2006). Using data for Russian OFDI, Kalotay (2008) argues that emerging multinationals derive competitiveness from their oligopolistic or monopolistic advantages in their home markets, as a result of 'insider privatisation' and imperfect competition. Such ownership advantages include significant financial resources, access to cheap loans and other financial incentives economies of scale or privileged access to information and networks. In line with Hymer (1960), emerging multinationals use these oligopolistic or monopolistic advantages when expanding abroad and generating OFDI for their home country. However, research also shows that some emerging multinationals invest abroad to escape from the very competitive home country environment (Yamakawa et al., 2008; Andreff, 2003) that results from advanced reforms regarding competition policy. Alternatively, strong rivalry encourages innovation, enhances the competiveness of domestic companies and facilitates OFDI (Porter, 1990) that exploits knowledge based ownership advantages. However, as many emerging and transition economies lag behind with regard to their innovative capabilities, such a driver of OFDI from the CEECs may be less important. We thus formulate the following hypothesis:

H2e: OFDI is positively associated with less advanced competition reforms.

4. Methodology

4.1. Sample description and data

To test our conceptual framework we use a panel data set for 15 years and 20 post-communist economies (the CEECs). The transitional aspect of these economies makes the CEECs an ideal context to test the limits of applicability of extant theories and extend them (Meyer and Peng, 2005). Furthermore, the variety of institutional contexts across the sample allows us to draw lessons with regard to the institutional reforms that 'matter' for OFDI. This ensures the timeliness of our investigation and its relevance to both theory and practice. Our focus on a particular region is further justified by the fact that most research is pursued on a region by region basis (Meyer and Peng, 2005).[2]

We include in the sample the following countries which are considered as Central and Eastern European economies (UNCTAD, 2011; EBRD, 2010a) and for which the EBRD (2010b) has calculated its transition indicators: Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, FYROM, Georgia, Hungary, Latvia, Lithuania, Moldova, Poland, Romania, the Russian Federation, Serbia, the Slovak Republic, Slovenia, and Ukraine.

These countries have attracted significant FDI, especially in the manufacturing sector (food and beverage, motor vehicles, and chemicals), followed by services and the primary sector

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[2] For a further justification of our focus on post-communist economies, please see the 'Introduction'.

(UNCTAD, 2011). Most FDI originates from developed economies, although the CEECs are increasingly targeted by other CEECs or developing economies (UNCTAD, 2011). The CEECs have also generated OFDI, especially targeting other transition economies or developing ones (UNCTAD, 2011). According to our data (GMID, 2011), all countries in our sample are in the stage 2 of the IDP, apart from Russia, which is in stage 3. Furthermore, FDI is expected to increase, driven by investor friendly policies, new rounds in privatisation and stronger commodity prices (UNCTAD, 2011). This increase in FDI is likely to affect positively OFDI in the area, thus further ensuring the timeliness and relevance of our research.

We use country level data from two datasets: Passport GMID (for development related variables and control variables) and the European Bank for Reconstruction and Development (EBRD) database (for institutional variables). The variables are described in Table 1. The exact description of the EBRD indicators is presented in the Appendix C. Our data covers fifteen years, from 1996 to 2010. This data covers the main transition period when wide range institutional reforms were carried out (EBRD, 2011) and when firms from this geographical area have engaged in OFDI (GMID, 2011).

1996 is justified as a starting point by the fact that in the early years of the economic transition in the CEECs the political and economic instability prevented OFDI (Rugraff, 2010; Blanke-Ławinczk, 2009; Andreff, 2002). Furthermore, in the early 1990s, OFDI was also insignificant as a result of the negative public opinion that associated OFDI with capital flight (Andreff, 2002) and potential negative effects on the home economy. Moreover, as the early 1990s were dominated by efforts to achieve macroeconomic stabilisation, the main significant progress in institutional reforms started only in the mid-1990s (Sinn, 1997).

2010 is justified as the end point as 2010 is the last year for which we have access to data across all variables relevant to the analysis. However, this sample allows us to include a few years that were dominated by the global financial crisis and to test whether the financial crisis has affected OFDI from the CEECs. Furthermore, despite the global financial crisis, OFDI from transition economies has increased considerably in 2010 and continued to target mainly other emerging economies (including both transition and developing markets) (UNCTAD, 2011). Moreover, although some CEECs have joined the European Union (in 2004 and 2007 respectively), institutional reforms and transition are not yet completed, and some countries- especially the members of the Commonwealth Independent States- are still lagging behind with regard to institutional reforms, yet generate significant OFDI. This further ensures the timeliness and the continued relevance of this research. Finally, from practical point of view, this sample size allows us to minimise missing data and perform meaningful statistical analysis.

4.2 Variables

Our ***dependent variable***, OFDI, is measured using OFDI flows rather than the net investment position, because of the potential loss of information associated with using the net investment position (Durán and Ubeda, 2005). An increase in the net investment position can occur either as a result of the increase in OFDI based on increased competitiveness of the home country, or as a result of the decrease in FDI, based on the loss of attractiveness of the home country (Durán and Udeda, 2005). Also, two similar net positions could result from two very different scenarios: least developed countries that neither attract, nor generate FDI or on the contrary, advanced economies that generate and attract very high but equal amounts of outward and inward FDI (Durán and Ubeda, 2005). Hence, our dependent variable is LOFDIFLO.

In line with our conceptual framework, we use two sets of ***independent variables***. Our first set of variables relate to the IDP and the economic development of the home country. These are GDP per capita (LGDPCAP) (capturing the economic development), percentage of R&D expenditure in GDP (LRDGDP) (capturing the technological development) and the annual inflows of foreign direct investment (LFDIINF) (capturing the inward FDI and the country's ability to attract FDI). Our second set of variables includes institutional variables. We use the EBRD (2010b) transition indicators that capture the progress that post-communist economies make in conducting institutional reforms. These variables include: trade and foreign exchange liberalisation reforms (TRA) (capturing the progress in reforms relating to trade and foreign exchange), large scale privatisation reforms (LSP) (capturing the progress in the privatisation of large firms), enterprise restructuring reforms (ENT), (capturing the progress in the restructuring of large firms), overall reforms (REF) (an average of all reform related EBRD transition indicators, capturing the progress in overall institutional reforms) and competition reforms (COMP) (capturing the progress in reforms relating to competition). These indicators are measured on a scale from 1 to 4.75 and their definitions are described in detail in Appendix C.

Drawing on extant literature, we ***control*** for a number of factors of potential relevance for OFDI. We use dummy variables to control for countries' ***membership of the European Union*** (EUJOIN1 and EUJOIN2) or   their ***membership of the Commonwealth of Independent State*** (CIS), based on the likely institutional effects such membership has on countries. As it is generally accepted that an undervalued ***exchange rate*** encourages exports but discourages outward FDI (Goh and Wong, 2011; Tolentino, 2010; Pantelidis and Kyrkilis, 2005; Stevens,1993) we control for exchange rate (LEXCHDOL). We also control for ***population*** (LPOP).[3] Despite mixed evidence in the literature (Andreff, 2002; Varblane et al., 2001; Chudnovsky and Lopez, 2000), researchers

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[3] We ran several estimations including also GDP growth as a control variable, but this was not significant. We hence excluded this variable from our final estimations.

have suggested that larger home markets lead to higher OFDI (Andreff, 2002) as these markets allow for ownership advantages derived from economies of scale.

In line with previous research, the variables (apart from the dummies and the EBRD indicators) are transformed into natural logarithms, assuming non-linear relationships (Buckley et al., 2007). Table 1 provides an overview of the variables, their measurement and the respective data source.

Insert Table 1 here.

4.3. Analytical approach

Similarly to Buckley et al. (2007), we use two statistical models to estimate our equations: pooled ordinary least squares (POLS) and the random effects (RE) generalised least squares method. We conduct the Lagrangian multiplier test (LM) to identify whether POLS or RE provides the better model. As the value for the LM test is significantly different from 0 we conclude that the RE estimation is preferable to POLS. Also, for the equations that do not include time dummies we find that the Hausman test also indicates that the RE model is appropriate (as opposed to the fixed effects method).[4] We thus report only the results for the estimations using the RE method below. The random effects method allows us to include time dummies in our estimations. Furthermore, the random effects method allows us to generalise our results beyond the sample used in the analysis. In order to assess the value of complementing IDP-based explanations with explanations based on institutional theory, we run models containing (1) only IDP-variables (Model 1), (2) IDP and control variables (non-related to institutions) (Model 2) and (3) IDP, control and institutional variables (Models 3 to 7) (Table 2).

5. Results and discussion

The correlation matrix (Appendix D) shows that there are no problems with the data. The following table shows the results of our regressions. Our coefficients are robust throughout all our models. Furthermore, comparing model 1 with model 2 and models 3 to 7, Table 2 shows an increase in the explained variance (adjusted R square) for the augmented IDP model as compared to the pure IDP model. This supports out argument that the IDP model can be enhanced by taking into account institutional variables and drawing on institutional theory.

Insert Table 2 here.

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[4] We are aware of the methodological challenges when testing the IDP (Liu et al., 2005). However, our models differ from Liu et al. (2005) as we estimate OFDI flows rather than stocks.

More specifically, we find that two of the IDP related variables are significant and have the expected sign. In tune with the propositions of the IDP (Dunning, 1981, 1986, 1988), countries with higher level of economic development and hence higher GDP per capita generate higher OFDI flows. Also, OFDI is associated with higher FDI. This suggests that local firms have developed ownership advantages that they can exploit through investing abroad. These advantages may be a result of advanced infrastructure that is associated with a higher level of a country's economic development or with spillovers from foreign investors. Furthermore, foreign investors may drive OFDI through establishing regional centres in various CEECs and using some CEECs as springboards for further investment in neighbouring countries. This is consistent with findings by Rugraff (2010), Ginevičius and Tvaronavičienė (2005) and Andreff (2002). We thus find support for hypotheses H1a and H1c.

However, contrary to our expectations, we find that outflows of foreign direct investment are associated with lower percentage of R&D expenditure in GDP, and hence lower technological development of the country (LRDGDP is significant but has a negative sign). This is a very interesting finding and helps 'contextualise' the IDP for the CEECs. It appears that in post-communist economies technological development *per se* does not enhance OFDI. This may reflect budget constraints under which most post-communist economies have been operating since the beginning of transition. These budget constraints reduced the percentage of R&D in GDP and hence the firms' reliance on R&D as a competitive advantage. Indeed, much of the investment originating in the CEECs targets CEECs or developing markets (UNCTAD, 2011)- with similar budget constraints. Hence, out-dated technologies are more suitable for transferring across (Salehizadeh, 2007). Furthermore, some of the OFDI from the CEECs occurs in the primary sector (UNCTAD, 2011; Andreff, 2002) and is asset seeking and hence does not rely on the multinationals' R&D as a competitive advantage. The fact that our dummy CIS is significant and positive also appears to reflect this latter understanding, as the CIS states are less technologically advanced, resource rich, and have recently generated significant OFDI (UNCTAD, 2011; Kalotay and Sulstarova, 2010). We thus do not find support for hypothesis H1b.

If technological development *per se* does not enhance OFDI, then do institutions matter? We now discuss the results for the institutional variables. In tune with our expectations, we find that OFDI is associated with advanced overall institutional reforms (REF is significant and has a positive sign- model 6). For post-communist countries institutional reforms were a means to improve their economic development and overall competitiveness (Stoian and Vickerman, 2006). Advanced institutional reforms minimise the costs associated with operating in uncertain environments and complex 'rules of the game', allowing multinationals from transition economies to develop ownership advantages based on efficiency and productivity. Having previously

experienced the 'institutional voids' of their home country -in the early years of transition-transitional multinationals can leverage these combined ownership advantages by expanding in other emerging economies. These findings complement studies by Ramamurti (2009) and Khanna and Palepu (2006) that argue that emerging multinationals develop ownership advantages based on their ability to operate in institutional voids. As overall institutional reforms are a significant determinant of OFDI in the CEECs, we are thus able augment the IDP by adding institutional development variables. In doing so we complement Wang et al (2012) and Kang and Jiang (2012) who show that institutions matter for OFDI from China, but we show *how* institutions matter (Peng et al., 2008) for OFDI and in particular in the context of post-communist economies.

We also show which specific institutions matter for OFDI from the CEECs, complementing extant literature (Rugraff, 2010; Andreff, 2002; 2003). We find that advanced reforms with regard to competition policy enhance OFDI. This shows that firms that are used to operating in a competitive environment in the CEECs develop significant ownership advantages that they can exploit by investing abroad. This is in tune with Porter (1990), who argues that rivalry is a crucial driver of competitiveness at both national and firm level, thus facilitating OFDI. However, our results may also suggest that OFDI from the CEECs is driven by escapist motives, as highly competitive environments seem to crowd out investors. This understanding is consistent with findings by Andreff (2003). Our results appear to contradict Kalotay (2008) according to whom OFDI from transition economies is driven by monopolists that have acquired significant ownership advantages such as economies of scale or preferential access to resources. We thus find support for hypothesis H2d but we cannot find support for hypothesis H2e (models 6 and 7).

However, the remaining institutional variables (TRA, LSP and ENT) are not significant and hence we do not find support for hypotheses H2a, H2b and H2c (models 3, 4 and 5). This suggests that institutional reforms such as large scale privatisation and enterprise restructuring do not work in isolation and hence do not provide the local firms the resources or competitiveness necessary to engage in outward FDI. Instead, a concerted approach to institutional reforms is more likely to enhance OFDI. These findings complement Andreff (2002:377) according to whom 'privatisation, industrialisation and modernisation have often preceded and triggered [the developing and transition MNCs'] internationalisation'. The fact that TRA is not significant is intriguing, as extant literature suggests that trade liberalisation encourages FDI (Blanke-Ławinczk, 2009; Kalotay, 2008, 2005). However, our results may be influenced by the way this institutional variable is defined and by its little variation. Furthermore, the impact of trade liberalisation is captured by other factors such as FDI inflows and hence an indirect effect may be assumed. Indeed, FDI can be considered a proxy for capital flows liberalisation but also an indication that trade liberalisation is high. This may also explain why the dummies EUJOIN1 and EUJOIN2 are not significant determinants of OFDI.

Whilst Kalotay (2005) and Blanke-Ławinczk (2009) propose that EU membership enhances OFDI, most of the trade and FDI liberalisation occurred before the actual joining the EU, hence the lack of a structural change once membership was achieved.

Finally, we find that the control variables (LPOP and LEXCHDOL) are significant and have the expected signs. In tune with Andreff (2002), we find that larger markets generate larger OFDI. This may suggest that local companies develop ownership advantages based on economies of scope and scale and on learning about various trends in the market. Furthermore, consistent with extant literature we find that countries with stronger currencies are likely to generate more OFDI.[5]

6. Conclusions

Implications for theory

This paper investigates the home country institutional determinants of recent outward foreign direct investment from post-communist societies. Our motivation is to test the extent to which mainstream theory is applicable to other contexts such as post-communist economies. As discussed earlier, and in line with Meyer and Peng (2005), we believe that post-communist economies offer an ideal context to test the applicability of existent theory, given their unique institutional fabric. We join recent research that argues that in order to explain OFDI from emerging economies (including post-communist economies) extant theoretical frameworks need to be extended (Kalotay and Sulstarova, 2010; Kalotay, 2008; Buckley et al., 2007). Drawing on institutional theory, we extend the IDP to account for the home country institutional determinants of OFDI from emerging economies, including post-communist economies. We then test this new conceptual framework in a new context, by using an up to date and comprehensive panel data set for twenty CEECs and employing a wide range of independent variables in our regression analysis.

We find support for the Investment Development Path theory, as OFDI is positively associated with both GDP per capita and inward foreign direct investment. Based on the economic development of their home country, local firms develop ownership advantages that they can exploit through investing abroad. Furthermore, these firms also benefit from spill over effects from foreign investors and are able to capitalise on these through OFDI. Moreover, multinationals that invest in post-communist economies often establish there regional centres and thus generate OFDI for the countries they target. We thus complement findings by Andreff (2002;2003), who also focuses on OFDI from transition economies and also contribute to the transition literature (Lavigne, 1999, 2000; Stiglitz, 1999; Kodolko, 2000).

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[5] We also find that the time dummies for 1998 and 2008 (corresponding to the two global financial crises) are not significant and hence we do not include them in our estimations.

However, contrary to the IDP's propositions, we find that OFDI is negatively associated with the technological level of the home country. This suggests that MNEs from CEECs have developed other ownership advantages rather than those based on R&D, perhaps advantages based on economies of scope, economies of scale or operating within institutional voids. This may also suggest that MNEs from the post-communist economies have less advanced technologies that are easier to transfer into other post-communist economies through OFDI (Salehizadeh (2007). In doing so, multinationals from post-communist economies turn ownership (technological) disadvantages into advantages. In tune with Andreff (2002), these results suggest that the OFDI from the CEECs challenge to some extent the IDP as the structural features inherited from the former centrally - planned system still prevail in the economy and affect OFDI. Hence, these results support the view that in order to account for the determinants of OFDI from emerging and in particular post-communist economies the IDP needs to be augmented and contextualised. As the IDP is an extension of the eclectic paradigm- which is a 'holistic yet context specific framework' (Stoian and Filippaios, 2008) - contextualising the IDP appears a valid proposition.

We augment and contextualise the IDP by drawing on institutional theory and including in our model several institutional factors such as *trade and foreign exchange liberalisation reforms, large scale privatisation reforms, enterprise restructuring, competition reforms* and *overall institutional reforms*. As institutional reforms were necessary to enhance the economic development of the former communist states and drive their transition to market economy, we believe that institutional variables facilitate a natural extension of the IDP. This is because institutions in the CEECs differ significantly from developed economies and affect business strategy (Meyer and Peng, 2005; Hoskisson et al., 2000), including OFDI. By extending the IDP and drawing on institutional theory we contribute to extant literature that has already extended the IDP, albeit mainly in the context of developed economies (Bellak, 2001; Dunning et al., 2001; Durán and Ubeda, 2001) and without drawing on institutional theory. By focusing on the CEECs, we also confirm extant theory in a new context (Meyer and Peng, 2005), thus making a contribution to theory. In doing so we also contribute to the debate anchored in the *institution based view of strategy* (Peng et al., 2008; Peng et al., 2009) and answer Peng et al.'s (2008) call to examine *how* institutions affect strategy, including the firm's internationalisation strategy. Extant literature argues that institutional change matters for OFDI but only a few studies (Wang et al., 2012; Kang and Jiang, 2012) show *what* institutional reforms influence OFDI and *how*.

In particular, we find that reforms related to competition policy enhance OFDI. Such reforms increase the competition in the market and hence lead to higher competitiveness of firms and industries, also reflected in increased OFDI. These findings support the extension of the IDP by drawing on institutional theory and contrast with Khanna and Palepu (2006) who argue that MNEs

from emerging economies invest abroad as a result of monopolistic or oligopolistic advantages obtained by operating in uncompetitive environments in their home countries. Our results are in tune with Porter (1990) and Yamakawa et al. (2008) but the operationalisation of this relationship represents a unique theoretical and empirical contribution of this paper. Previous literature has accounted for policy change using dummies (Kalotay and Sulstarova, 2010; Buckley et al., 2007), proxies (Goh and Wong, 2011) or has used alternative measures of institutional factors (Salehizadeh, 2007), such as the ICRG risk variables, for example (Kang and Jiang, 2012).

We also find that large scale privatisation, enterprise restructuring or trade liberalisation alone do not enhance OFDI. Instead, OFDI is enhanced by the home country's progress in overall reforms -including large scale privatisation, small scale privatisation, enterprise restructuring, price liberalisation, trade and foreign exchange, competition policy, banking reform and interest rate liberalisation, securities markets and non-bank financial institutions. These overall institutional reforms reflect the level of competitiveness and economic development of the home country and enhance the ownership advantages of post-communist economies multinationals, allowing them to invest abroad. By reflecting the economic development and competitiveness of CEECs, overall institutional reforms may also attract FDI from multinationals that can use advanced CEECs as springboards for FDI into other CEECs. Extending the IDP by including institutional reforms is consistent with Liu et al.'s (2005) argument that GDP per capita is an incomplete measure of economic development and thus supplementary factors that contribute to economic development should be included in the IDP. These findings support the theoretical extension of the IDP by incorporating institutional theory and answer calls by Dunning and Lundan (2008a) to account for institutional factors when examining OFDI from emerging economies. This is another theoretical, as well as an empirical contribution of the present study. The EBRD indicators have been used before to account for the institutional context of host countries and its impact on FDI (Mishra and Daly, 2007; Stoian and Vickerman, 2006), but to our knowledge this is the first study to employ these indicators to account for the home country determinants of OFDI.

Contrary to expectations, we find that neither trade liberalisation reforms, nor EU membership (as a proxy for trade and capital liberalisation) enhance OFDI. However, it is widely accepted that many of the promised benefits of EU membership occurred before countries actually joined the EU, as the liberalisation of trade and capital was incremental and started in the 1990s (Stoian, 2007). Furthermore, EU membership was conditional on countries conducting internal institutional reforms (Stoian, 2007) and these appear to have enhanced OFDI. Moreover, as FDI inflows enhance OFDI, FDI can be considered a proxy for capital liberalisation, showing that capital liberalisation affects OFDI positively. This understanding is in tune with findings for

emerging economies by Goh and Wong (2011). The investigation of the impact of EU membership on OFDI represents another empirical contribution of this paper.

Implications for policy makers

Based on our findings we are able to put forward several implications for policy makers. These represent this study's contribution to practice. Although some associate OFDI with capital flight (Andreff, 2002), OFDI also brings significant benefits to the home economy (Zhao et al., 2010; JIM, 2010; Globeram and Shapiro, 2008; Svetlicic and Rojec, 2003) through increased competitiveness, job creation and economic growth. This makes a strong case for policies that can encourage OFDI responsibly. Policy makers in post-communist economies should consider implementing extensive economic and institutional reforms, including large scale privatisation, small scale privatisation, enterprise restructuring, price liberalisation, trade and foreign exchange, competition policy, banking reform and interest rate liberalisation, securities markets and non-bank financial institutions. Progress in all these areas should be encouraged simultaneously, as overall institutional reforms enhance the competitiveness of the local economy and its capacity to generate OFDI. Overall institutional reforms also increase the absorptive capacity of the local economy, facilitate learning by local firms from multinationals and increase the local firms' competitive advantages necessary to invest abroad. Furthermore, competition policy reforms should be promoted, as they also increase the competitiveness of the home firms and their ability to generate OFDI. Institutional reforms should be prioritised ahead of policies to improve R&D (Andreff, 2003), as CEECs seem to turn their technological disadvantages into advantages by investing in countries with similar levels of technological development.

To further stimulate OFDI, CEECs governments should use financial and fiscal incentives to encourage FDI, as many multinationals tend to use CEECs as springboards for investing in similar or neighbouring economies. As explained above, FDI also leads to spill over effects that enhance the competitive advantages of local firms and increase OFDI. As higher OFDI is associated with higher GDP per capita, in order to encourage OFDI, governments need to implement policies that encourage economic growth. All the above policies are more likely to enhance OFDI in larger economies (by population), as these can provide local firms with opportunities to develop ownership advantages based on economies of scale and learning from a wide market. Finally, when designing policies to enhance OFDI, governments need to make sure that OFDI is encouraged responsibly, as large OFDI can lead to capital flight and negative implications for the balance of payment, employment levels and economic growth.

7. Limitations and avenues for further investigation

  This study has focused on post-communist economies with the aim of augmenting and contextualising the IDP through the analysis of an extensive panel data. As OFDI originating from the CEECs is conducted by both local (internationalised) companies and affiliates of foreign multinationals (Andreff, 2002), our model is unable to distinguish between the determinants of each of these types of OFDI. Furthermore, due to the rather limited literature in this area, we are unable to compare our results to a sufficient number of extant studies on the determinants of OFDI from the CEECs. However, this study paves the way for further research that will be able to confirm or contrast our findings. In time, future research can expand the database to more recent years to allow more insights into the impact of the global financial crisis on OFDI from his area. To further test the role of home country institutional determinants in enhancing OFDI, future research can use alternative institutional variables related to political and economic risk, political and economic freedoms, various aspects of competitiveness, or cultural characteristics. The sample can also be expanded to include Asian post-communist economies such as Azerbaijan, Tajikistan, Turkmenistan, Uzbekistan or other members of the Commonwealth of Independent States that are in transition to market economy and democracy. This study can also be replicated for other subsets of emerging economies, such as Latin American, South East- Asian or African countries to establish whether OFDI home country institutional determinants vary across these regions. Using bilateral OFDI flows, future studies can investigate the interplay between home and host country institutional determinants in influencing OFDI from CEECs and other emerging economies, focusing on institutional distance. They can also concentrate on OFDI from individual countries, leading to more country specific policy recommendations. Finally, other studies can focus on acquisitions only -as they are a preferred mode of entry for emerging multinationals (UNCTAD, 2011)- or can analyse the role of home country institutional factors in determining entry mode choice by multinationals from emerging economies, further answering Peng et al.'s (2008) call for investigating *how* institutions affect strategy.

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Tables and appendices

Table 1. Variables, measures and data sources

Variable	Measurement[6]	Data source
Dependent variable		
Outward FDI	Flows of outward FDI from country (*LOFDIFLO*)	Passport GMID (2011).
Independent variables		
Home country economic development (H1a)	Home country GDP per capita *(LGDPCAP)*	Passport GMID (2011).
Home country technological level (H1b)	Home country percentage of R&D expenditure in GDP *(LRDGDP)*	Passport GMID (2011).
Home country inward direct investment flow (H1c)	Home country inward direct investment annual flows *(LFDIINFL)*	Passport GMID (2011).
Home country trade and foreign exchange liberalisation reforms (H2a)	Home country trade and foreign exchange liberalisation indicator (*TRA)* (ranges from 1 to 4.75)	EBRD (2010b).
Home country privatisation reforms (H2b)	Home country large scale privatisation indicator (*LSP)* (ranges from 1 to 4.75)	EBRD (2010b).
Home country enterprise restructuring reforms (H2c)	Home country governance and enterprise restructuring indicator (*ENT)* (ranges from 1 to 4.75)	EBRD (2010b).
Home country overall institutional reforms (H2d)	Home country overall reforms indicator (average of EBRD's transition (institutional) indicators) (REF) (ranges from 1 to 4.75)	EBRD (2010b).
Home country competition reforms (H2e)	Home country competition policy indicator (*COMP)* (ranges from 1 to 4.75)	EBRD (2010b).
Control variables		
EU membership 2004	Dummy for (home) countries that joined the EU in 2004 (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia) (1 for years since 2004, else 0). *(EUJOIN1)*	Author's own.
EU membership 2007	Dummy for (home) countries that joined the EU in 2007 (Romania and Bulgaria) (1 for years since 2007, else 0). *(EUJOIN2)*	Author's own.
CIS membership	Dummy for (home) countries membership of CIS (Belarus, Ukraine, Georgia and the Russian Federation) (1, else 0) (*CIS*)	Author's own.
Exchange rate against US dollar	Home country currency exchange rate against dollars *(LEXCHDOL)*	Passport GMID (2011)
Home country population	Home country population *(LPOP)*	Passport GMID (2011)

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[6] Based on theory and previous studies, the variables are transformed into natural logarithms as we expect non-linearity in the relationships (Buckley et al., 2007).

Table 2. Determinants of OFDI from post -communist economies

	Model 1 (RE)	Model 2 (RE)	Model 3 (RE)	Model 4 (RE)	Model 5 (RE)	Model 6 (RE)	Model 7 (RE)
LGDPCAP	3.66* (.30)	4.22* (.31)	4.02* (.42)	3.91* (.41)	3.88* (.43)	3.49* (.48)	3.54* (.42)
LRDGDP	-.11 (.34)	-.65** (.34)	-.62* (.35)	-.59** (.34)	-.64** (.34)	-.49 (.35)	-.64** (.33)
LDFIINFL	.43* (.8E-01)	.25* (.9E-01)	.26* (.9E-01)	.25* (.9E-01)	.24* (.9E-01)	.23* (.9E-01)	.28* (.9E-01)
LPOP		1.28* (.25)	1.01* (.25)	.99* (.25)	1.00* (.25)	.99* (.25)	.91* (.25)
LEXCHDOL		-.42* (.10)	-.39* (.10)	.-36* (.11)	-.37* (.10)	-.32* (.11)	-.32* (.11)
EUJOIN1			.31 (.27)	.32 (.27)	.24 (.27)	.31 (.26)	.10 (.27)
EUJOIN2			-.77 (.51)	-.14 (.51)	-80 (.51)	-.11 (.50)	-.12 (.50)
CIS			1.71* (.67)	1.72* (.66)	1.83* (.67)	1.86* (.67)	1.59* (.67)
TRA			.13 (.59)				
LSP				.34 (.20)			
ENT					.42 (.37)		
REF						1.05* (.67)	
COMP							.88* (.30)
Constant	-32.58* (2.50)	-47.26* (3.90)	-44.22* (4.16)	.-43.59* (4.19)	-43.38* (4.240	-41.93* (4.29)	.-40.86* (4.30)
LM test	192.13*	244.52*	181.34*	136.04*	160.12*	155.85*	205.17*
Hausman test	22.90	8.82	11.03	8.81	8.80	9.51	10.03
Adjusted R-Squared	.69	.74	.78	.79	.79	.79	.78

Notes: Standard errors are in parentheses.
* - Significant at 5% level.
**- Significant at 10% level.

Appendix A.

Key studies on home country determinants of OFDI from emerging economies

Study	Research focus	Theoretical framework	Methodology	National and industry contexts	Institutional variables	Findings related to institutional factors
Studies focusing on home country macroeconomic and development-related determinants of OFDI						
Pantelidis and Kyrkilis (2005)	The macroeconomic determinants of OFDI from developed, transition and developing economies (including development related variables)	The IDP	Panel data regression analysis	Cross-country analysis of total OFDI, including developed, transition and developing economies	Not included.	The home country determinants of OFDI vary between developed, transition and developing economies.
Liu et al. (2005)	The macroeconomic determinants of OFDI from China, with a focus on development related indicators	The IDP	Panel data regression analysis	China, total OFDI	Not included.	There is no need to extent the IDP by including variables that capture the distinct features of transitional and/ or developing economies.
Tolentino (2010)	The macroeconomic determinants of OFDI from China and India	The OLI	Panel data regression analysis	China and India total OFDI	Not included.	It is suggested that further research focuses on other home country and industry specific factors.
Luo et al. (2010)	The governmental institutions and policies that influence Chinese OFDI	The political economy perspective	Conceptual paper	China, OFDI across various industries	Governmental institutions Governmental policies	It is called for convergence between two seemingly paradoxical views of OFDI drivers: institutional escapism and governmental promotion.
Studies including home country institutional determinants of OFDI						
Buckley et al. (2007)	The determinants of Chinese OFDI, including	The general theory of FDI,	Panel data regression	China, total OFDI	Dummy for policy liberalisation	Policy liberalisation enhances OFDI.

	home, host country determinants and cultural and physical distance between the home and the host country	complemented by three special explanations: capital market imperfections, special ownership advantages and institutional factors	analysis			
Salehizadeh (2007)	The drivers and patterns of internationalisation by emerging economies' multinationals	The OLI	Descriptive statistics	Developing and post-communist economies, total OFDI	Economic freedom indicator (The Heritage Foundation) Policy transparency indicator (Transparency International's Corruption Perception Index)	There is a positive relationship between economic freedom and political transparency on one hand and OFDI on the other.
Kalotay and Sulstarova (2010)	The dynamics, determinants and geographical destinations of Russian M&As	The eclectic paradigm (OLI)	Panel data regression analysis	Russia, M&A across various industries	Dummy for policy change-related to state ownership Dummy to reflect cultural proximity	Policy change influences the M&As of Russian firms in other countries. M&As are targeted towards countries that are culturally close.
Cui and Jian (2010)	The determinants of ownership decision by Chinese firms with a focus on the choice between wholly owned subsidiaries (WHOs) and joint ventures (JVs)	An integrative framework of the resource based view and the institution based view of international business strategy	Case study of ten Chinese outward investing firms	China, firm level data for ten selected firms	Level of financial support from the Chinese government Perceived level of	It is proposed (yet not tested) that the level of financial support from the Chinese government is positively associated with the likelihood of choosing WHOs and

						government approval restriction	that the perceived level of government approval restriction is negatively associated with the likelihood of choosing WHOs.
Voss et al. (2010)	The impact of home country institutional effects on the internationalisation strategy of Chinese firms	Traditional economic factors (market seeking motives), capital market imperfections and the institutional perspective	Conceptual, semi-structured interviews	China, firm level data for 9 firms	China's domestic institutions	It is proposed (yet not tested) that China's domestic institutions impede the internationalisation of smaller Chinese firms and that these institutions developed to different levels of sophistication to support the internationalisation of Chinese firms.
Cui et al. (2011)	The entry-mode decision of Chinese outward FDI	The strategy 'tripod'- the resource based view, the industry based view and the institution based view of strategy	Panel data, logistic analysis- based on survey data	China, firm level data for 138 firms	The level of cognitive pressure through the government's approval system	Different firms react to the home country institutional environment differently with regard to their entry mode choice with state-owned enterprises being more inclined to adhere to the government's expectations than private firms.
Goh and Wong (2011)	The effects of foreign market size and home country government policy on OFDI from Malaysia	The eclectic paradigm (OLI)	Panel data regression analysis	Malaysia, total OFDI	Foreign exchange reserves as a proxy for capital liberalisation	The liberalisation of capital outflows enhances OFDI.

Kang and Jiang (2012)	The determinants of FDI location choice of Chinese multinationals in East and South East Asia	Traditional economic factors (market seeking, natural resource seeking, efficiency seeking and strategic asset seeking motives) and the institutional perspective	Panel data regression analysis	China, total OFDI	Institutional distance measures such as: The difference in economic regimes between China and the host country The difference in political and legal regimes between China and the host country The difference in FDI restriction between China and the host country The cultural distance between China and the host economy	Institutional distance related to economic freedom, political influence or FDI restriction affects the location of OFDI.
Wang et al. (2012)	The drivers of FDI by Chinese firms, including firm characteristics and home country industry-based and institutional-based variables	An integrative framework of institutional theory, industrial organisation and the resource based view	Panel data regression analysis	China, firm level OFDI across various industries	State ownership (percentage of state owned assets in an enterprise) Dummy variable to control for firms that operate in 'encouraged' sectors	Government support- including state ownership of firms- is crucial in explaining Chinese OFDI.

Appendix B.

Key studies on the home country determinants of OFDI from post-communist economies

Study	Research focus	Theoretical framework	Methodology	National and industry contexts	Institutional variables	Findings related to institutional factors
Andreff (2002)	The macroeconomic determinants of OFDI from transition and developing economies	The IDP	Panel data regression analysis	Cross-country analysis of total OFDI, including transition and developing economies	Not included.	It is suggested (yet not tested) that 'privatisation, industrialisation and modernisation have often preceded and triggered [the developing and transition MNCs'] internationalisation' Andreff (2002:377).
Andreff (2003)	The macroeconomic, economic development and industry structure determinants of OFDI from post-communist economies compared to third world OFDI	The IDP and traditional economic factors (market seeking motives).	Panel data logistic analysis	Cross-country analysis of total OFDI, including post-communist and developing economies	Liberalisation of OFDI Privatisation, industrial restructuring and modernisation	It is suggested (yet not tested) that OFDI is enhanced by OFDI liberalisation, privatisation, industrial restructuring and modernisation. It is argued that post-communist economies are different from third world economies in terms of OFDI, hence research focused on the CEECs is needed.
Ginevičius and	OFDI and FDI patterns in	Traditional	Descriptive	Cross-country	Not included.	NA

Tvaronavičienė (2005)	Lithuania and Estonia	economic factors (market seeking motives)	analysis	comparative analysis of total OFDI from Lithuania and Estonia		
Kalotay (2005)	OFDI patterns and development related determinants of OFDI from Central and Eastern Europe, including government policies and the EU accession	The IDP	Descriptive analysis	Cross-country comparative analysis of total OFDI from Central and Eastern European countries	EU accession Government policies	It is hypothesised (yet not tested) that the EU enlargement fosters OFDI, provided that adequate governmental policies that encourage OFDI are put in place.
Kalotay (2008)	The determinants of OFDI by Russian transnationals	The general theory of FDI, including the eclectic paradigm, the Uppsala School, the IDP and institutional theory	Conceptual paper	Russian OFDI- both country and firm level data	The privatisation path ('insider privatisation') The level of home country competition Overall business environment Government policies (including state ownership and foreign policy)	It is suggested the need to extend the OLI by including home country institutional determinants to explain Russian OFDI. These institutional determinants should include state-ownership and cultural distance.
Blanke-Ławinczk (2009)	The drivers of successful firm internationalisation with a focus on Poland	Traditional economic factors (market seeking motives, efficiency seeking motives, resource seeking and strategic asset	Descriptive analysis	Total OFDI from Poland combined with industry and firm level data and analysis (including a case study)	The market-oriented transformation of the economy The prospect of EU accession	It is suggested (yet not tested) that Polish OFDI was enhanced by the market-oriented reforms of the economy and the prospect of EU accession.

		seeking motives.)				
Rugraff (2010)	The strengths and weaknesses of the OFDI paths of Central European countries	The IDP and traditional economic factors (market seeking motives, efficiency seeking motives etc.)	Descriptive analysis	Total OFDI and industry level data for the Czech Republic, Hungary, Poland and Slovenia	Not included.	NA

Appendix C.

EBRD indicators description

Indicator abbreviation	Indicator name	Description
TRA	Trade and foreign exchange liberalisation	**1** Widespread import and/or export controls or very limited legitimate access to foreign exchange. **2** Some liberalisation of import and/or export controls; almost full current account convertibility in principle, but with a foreign exchange regime that is not fully transparent (possibly with multiple exchange rates). **3** Removal of almost all quantitative and administrative import and export restrictions; almost full current account convertibility. **4** Removal of all quantitative and administrative import and export restrictions (apart from agriculture) and all significant export tariffs; insignificant direct involvement in exports and imports by ministries and state-owned trading companies; no major non-uniformity of customs duties for non-agricultural goods and services; full current account convertibility. **4+** Standards and performance norms of advanced industrial economies; removal of most tariff barriers; membership in the WTO.
LSP	Large scale privatisation	**1** Little private ownership. **2** Comprehensive scheme almost ready for implementation; some sales completed. **3** More than 25 per cent of large scale enterprises assets in private hands or in the process of being privatised (with the process having reached a stage at which the state effectively ceded its ownership rights but possible with major unresolved issues regarding corporate governance.

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		4 More than 50 per cent of state owned enterprise and farms assets in private ownership and significant progress with corporate governance of these enterprises. **4+** Standards and performance are typical of advanced industrial economies: more than 75 per cent of enterprise assets in private ownership with effective corporate governance.
ENT	Governance and enterprise restructuring	**1** Soft budget constraints (lax credit and subsidy policies weakening financial discipline at the enterprise level); few other reforms to promote corporate governance. **2** Moderately tight credit and subsidy policy, but weak enforcement of bankruptcy legislation and little action taken to strengthen competition and corporate governance. **3** Significant and sustained actions to harden budget constraints and to promote corporate governance effectively (for example, privatisation combined with tight credit and subsidy policies and/ or enforcement of bankruptcy legislation). **4** Substantial improvement in corporate governance and significant new investment and enterprise level, including minority holdings by financial investors. **4+** Standards and performance typical of advanced industrial economies: effective corporate control exercised through domestic financial institutions and markets, fostering market-driven restructuring.
COMP	Competition policy	**1** No competition legislation and institutions. **2** Competition policy and legislation set up; some reduction of entry restrictions or enforcement action on dominant firms. **3** Some enforcement actions to reduce abuse of market power and promote a competitive environment, including break-ups of dominant conglomerates; substantial reduction of entry restrictions. **4** Significant enforcement actions to reduce abuse of market power and to promote a competitive environment. **4+** Standards and performance typical of advanced industrial economies: effective enforcement of competition policy; unrestricted entry to most markets.

Source: EBRD (2010, 156-157).

Appendix D.

Correlation matrix

	LOFDIFLO	LGDPCAP	LRDGDP	LFDIINFL	LSP	SSP	TRA	REF	LPOP	LEXCHDOL	EUJOIN2	EUJOIN1	CIS
LOFDIFLO	1.00000												
LGDPCAP	.63687	1.00000											
LRDGDP	.47575	.54329	1.00000										
LFDIINFL	.72060	.38019	.25755	1.00000									
LSP	.41402	.37992	-.01067	.32776	1.00000	.							
SSP	.43607	.46585	.08004	.23336	.81571	1.00000							
TRA	.20753	.38096	-.14210	.13328	.79590	.80285	1.00000						
REF	.51047	.61573	.12663	.36113	.89480	.87646	.86120	1.00000					
LPOP	.41532	-.15002	.21398	.61327	-.13093	-.15604	-.35875	-.19774	1.00000				
LEXCHDOL	-.06537	-.05876	.04725	.09462	-.43611	-.48499	-.53387	-.43320	.31849	1.00000			
EUJOIN2	.08045	.06379	-.09807	.18565	.13387	-.03685	.09114	.08341	.07104	-.10474	1.00000		
EUJOIN1	.42319	.58255	.24670	.18091	.34709	.33748	.29337	.51149	-.18912	-.22537	.10776	1.00000	
CIS1	-.01563	-.50982	.02011	.03988	-.44061	-.46412	-.62397	-.58638	.52616	.31962	-.09514	-.27959	1.00000