Determinants of Greenfield Emerging Market Outward FDI into the UK

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Abstract

Purpose: The purpose of this paper is to examine the determinants of Greenfield Emerging Market (EM) Outward Foreign Direct Investment (OFDI) into the UK, a Developed Market (DM) host. Despite the increasing significance of EM OFDI, this particular theme of EM OFDI to a DM host has received relatively little attention from researchers. This paper seeks to address this shortfall.

Design/methodology/approach: Considering the distinctiveness of EM OFDI in its firm-specific characteristics, given circumstances and motivations, this paper applies adapted ‘Resource-based view (RBV)’ framework and institutional theory to build a theoretical framework. A range of hypotheses regarding ‘strategic-asset seeking’, ‘market-seeking’ and ‘institution-seeking’ motivations of EM OFDI, which reflect both ‘pull factors’ (advantages in hosts) and ‘push factors’ (disadvantages at home), were then developed. Using panel data for the years 2003-2012, the research questions were analysed using a sample of the then most important emerging market source countries which had undertaken Greenfield FDI into the UK.

Findings: The analysis results supported the hypotheses that strategic-asset seeking and institution-seeking motivations were important in determining EM OFDI to the UK, with the coefficients of relevant variables showing statistical significance and expected sign (i.e. positive). However, the hypothesis on market-seeking motivation of EM OFDI cannot be supported as the coefficient of the relevant variable, whilst showing the expected sign, had a statistically insignificant coefficient. Amongst the three control variables, the source countries’ exports and imports as a percentage of GDP was statistically significant and had the correct sign whilst, the UK’s share of intra-EU trade, whilst statistically significant, had the opposite sign to that expected. The third control variable, the exchange rate was not statistically significant, though it had the correct sign.

Originality/value: This paper provides an adjusted theoretical framework for the analysis of EM OFDI to DM with a novel application of institutional theory and RBV. It also qualifies and extends existing works on EM OFDI by including a wider range of EM source countries and DM hosts with empirical analysis results as well as theoretical suggestions. In addition, the paper offers up a range of policy implications for DM hosts.
Determinants of Greenfield Emerging Market Outward FDI into the UK

Introduction

This paper examines the determinants of locational decisions of Emerging Market (EM) Greenfield Foreign Direct Investment (FDI) into the UK. Since the end of the last century, EMs have increasingly participated in FDI due to the accelerated world globalisation and rapid economic development of those economies to the extent that their share of Outward FDI (OFDI) flows accounts for more than a third of world flows since 2009 (UNCTAD, 2015). The academic significance of this phenomenon has also been recognised. Mathews (2006) challenged Buckley (2002)'s argument that “the International Business (IB) field has yet to find its next ‘big question’ to guide research in the 21\textsuperscript{st} century” by suggesting ‘the increasing and significant trend of EM OFDI’ as ‘the next big question’ in the relevant field (p.20). In line with his argument, this paper aims at exploring this phenomenon further.

Although some pioneering studies on EM OFDI can be found by the late 1970s/early 1980s, such as Lecraw (1977) or Lall (1983), the number and significance of EM OFDI was minor relative to other forms of FDI until 1990s (Cuervo-Cazurra, 2012). Research interest in this trend renewed in 2000, coinciding with the emergence of some significant EM MNEs which showed competitiveness at the global level (\textit{ibid}). Moreover, the analysis of this phenomenon of EM OFDI has evolved greatly from that which those studies at the early stage found (Mathews, 2006; Gammeltoft, 2008; Padilla-Perez and Nogueira, 2016). More recent developments in the field of EM OFDI are very ‘different’ compared to the traditional OFDI flows from developed markets. Focusing on the ‘newness’ or ‘difference’, there have been discussions on (1) theoretical framework within which this new phenomenon can be explained in terms of whether new theories are needed or new applications of conventional theories are justified (e.g., Mathews, 2006; Luo and Tung, 2007; Peng \textit{et al.}, 2008;
Ramamurti and Avenue, 2008; Tolentino, 2012; He and Fallon, 2013), (2) the characteristics of EM MNEs which carry out OFDI in terms of their motivations, strategies, type of FDI (e.g., Makino et al., 2002; Mathews, 2006; Luo and Tung, 2007; Dunning et al., 2008; Gammeltoft, 2008; Ramamurti and Avenue, 2008; Yamakawa et al., 2008; Alon, 2010; Holtbrugge and Kreppel, 2012; Contractor, 2013; Dikova et al., 2016) and, related to (2), (3) both the endogenous and exogenous background which influence EM MNEs’ behaviour regarding OFDI decisions (Mathews, 2006; Luo and Tung, 2007; Buckley et al., 2008; Dunning et al., 2008; Yamakawa et al., 2008; Ning and Sutherland, 2012; Tolentino, 2012; Wang et al., 2012; Dikova et al., 2016; Padilla-Perez and Nogueira, 2016). More recently, some studies have started to consider the ‘post-investment’ stage of EM OFDI, such as EM MNEs’ performance in the host (Gubbi et al., 2010; Buckley, et al., 2014; Sanfilippo, 2015; Yuan and Pangarkar, 2015).

However, despite the fact that both the EM OFDI trend and respective scholarly interest have been growing, the phenomenon of EM OFDI to Developed Markets (DMs) has remained relatively ‘unreached’ within the IB and FDI research domain as argued by several scholars (e.g., Cuervo-Cazurra, 2012; Gammeltoft et al., 2012). It is made more difficult because many existing studies on this theme are mainly case studies on rather anecdotal cases summarising common characteristics or suggesting propositions/models (e.g., Luo and Tung 2007; Yamakawa et al., 2008) rather than testing models or propositions empirically (e.g., Alon, 2010). Furthermore, EM OFDI has often been dealt as a part of the studies on internationalisation of EM firms in general rather than as a major subject in itself (e.g. Luo and Tung 2007; Yamakawa et al., 2008; Alon, 2010). Studies focusing on EM OFDI to DM within the host country context, particularly regarding European DM host, are very few and largely survey oriented (e.g., CEPII-CIREM, 2010). Another significance of EM OFDI to DMs as a research subject is that this phenomenon demonstrates ‘distinctive characteristics’
from conventional FDIs. When the so-called ‘first wave’ of EM OFDI was observed as early as the 1960s, this phenomenon was rather marginal and only concentrated on certain regions – particularly Latin America (Goldstein, 2007). It was from the 1980s onward that EM OFDI started to demonstrate a more ‘globalised’ movement and only recently that those to DMs started to emerge (Gammeltoft, 2008).

Therefore, the purpose of this paper is to investigate the phenomenon of EM OFDI to DM, which may provide an additional insight to traditional FDI theories by considering their distinctiveness through empirical analysis. This paper is structured as follows: the next section constructs a theoretical framework for the study by providing discussions as to how to apply and adapt traditional theories for understanding EM OFDI to DMs to develop hypotheses within this theoretical framework. The third section builds a model to incorporate these hypotheses and proposes a range of variables for the panel analysis; the fourth section then examines the findings of the analysis. The final section provides a conclusion.

**Analytical Framework and Hypotheses development**

*Distinctiveness of EM OFDIs and Resource-Based View (RBV)*

FDI theory has been developed closely in line with the changes in the trend and characteristics of FDI in order to reflect a certain reality adjusted by this change (Aharoni, 2014). A similar approach may be required to develop a theoretical framework for understanding EM OFDI to DM host, as this new trend of FDI might demonstrate distinctive characteristics from DM FDI. In doing so, this paper applies RBV and institutional theory (i.e. New Institutional Economics, NIE).
RBV considers a firm to be ‘a bundle of resources and capabilities’ and a firm’s performance depends on its possession and efficient transfer of ‘valuable resources’ which are the ultimate source of the firm’s own competitive advantage (Barney, 1991; Oliver, 1997; Goldstein, 2007; Chang and Rhee, 2011; Cuervo-Cazurra and Genc, 2011). At the same time, RBV emphasises the strategic importance of the selection and deployment of resources in a dynamic and evolutionary way compared to traditional FDI theories which see Ownership advantage as rather the “static constraints” of the firm (Oliver, 1997; Moon and Roehl, 2001, p.198). Applying RBV theory to EM OFDI analysis in this context, EM OFDI can be understood as a strategy through which EM firms evaluate and access resources, i.e., selection and deployment of resources. In a similar context, Gammeltoft et al. (2012) also suggest that EM OFDI can be interpreted as EM firms’ strategic process of establishing “fit” between their resources and the environmental opportunities and threats given to EM firms.

To apply RBV to understand EM OFDI, consideration of any differences between ‘pre-existing’ resources and the given environment of EM firms compared to conventional DM firms is required for an appropriate adaptation. The most distinctive characteristic of EM OFDI is ‘Ownership disadvantage’, which contrasts to traditional understanding of FDI where the key FDI determinant is the benefit from exploiting ‘Ownership advantage’ by either maintaining a monopolistic position or internalising the FSA due to market imperfection (e.g. the Firm Specific Advantage (FSA) theory of Hymer, 1976; OLI paradigm of Dunning, 1988). The ‘Ownership disadvantage’ EM MNEs face arises mainly from lack of their own FSA to exploit in foreign markets due to their relatively brief experience of OFDI (Rugman and Verbeke, 2003; Ramamurti and Avenue, 2008; Aharoni, 2014). Here, ‘Ownership advantages’ refers to Hymer-type ‘Asset-based ownership advantages’, which enhance MNEs’ monopolistic benefits (Lopes, 2010). Although some studies argue that EM firms also have ‘Ownership advantages’ based on Dunning’s ‘Transaction-based ownership advantages’ or
home country advantages such as low labour cost (e.g. Buckley et al., 2008; Rugman, 2009), Dunning’s ‘Transaction ownership advantages’ arises from firms’ ability to coordinate and diversify international operation or exclusive access to inputs in the host country, often resulting from firms’ learning experience (Lopes, 2010). Thus, it can be argued that ‘Transaction ownership advantages’ in fact relates to the ‘L’ advantage of OLI paradigm (ibid; He and Fallon, 2013) and in this context EM firms’ ‘advantages’ related to home country conditions are a special type of ‘Country Specific Advantages (CSA)’ rather than FSA (Rugman, 2009). Thus, the argument that EM are often lack their own FSAs is still valid here and this issue is more likely the case in EM OFDI to DM as very few of these cases operate from “a position of global strength or from an assumption of dominance” (Contractor, 2013, p.311).

Ownership disadvantage can also arise from the context of FDI such as home market or intensity of competition (Moon and Roehl, 2001). This is particularly true for EM OFDI as many EM home economies are still in the developing stage, and consequently their home markets face inadequate development and competition (Langlois, 2013) whilst their home countries’ strategic-asset levels have often not reached any significant technological development or sophisticated business/marketing method development which fosters firms’ competitive advantage development (Tolentino, 2012). Moreover, due to the intensive globalisation trend in recent years, EM firms face intensified competition in their domestic markets (Contractor, 2013).

These different firm-specific characteristics and given circumstances from traditional DM OFDIs’ have also distinguished motivation of EM OFDI from DMs’. Based on the RBV approach, Moon and Roehl (2001) introduced an ‘imbalance concept’ to explain some ‘unconventional FDI’ motivated by ‘ownership disadvantages’ rather than ‘ownership advantages’. They explained that when firms face imbalances in the process of building up
their FSA, either caused by advantages or disadvantages, FDI could be one strategy to adjust the imbalance of resources (Penrose, 1959, as cited in Moon and Roehl, 2001). EM OFDI to DMs can be categorised as this ‘unconventional FDI’ where EM firms’ disadvantages, such as lack of key resources (i.e., FSA), home country constraints and intensified competition in their home countries influenced by globalisation, will cause imbalance among their assets/resources whilst deterring the firms from dealing with the imbalance effectively. In this way, these imbalances caused by disadvantages will ‘push’ them to go abroad.

Applying the RBV approach to strategy analysis, Grant (1991) describes the cycle of firms’ resource selection, from deployment capability assessment, through competitive advantage building and on to strategic choice such as FDI. This cycle continues as the strategy stage involves “identify[ing] resource gaps which need to be filled” and “invest[ing] in replenishing, augmenting and upgrading the firm’s resource base”, leading the cycle back to the resource selection stage (p.115). Thus, EM OFDI to DMs can be understood as EM firms’ strategic choice within Grant (1991)’s cycle, utilizing the last stage of filling the resource gap and augmenting their resource base as these firms lack pre-existing resources or competitive advantages. Some recent studies have developed this idea further focusing on EM OFDI cases within the adapted RBV framework from EMs’ perspective (e.g. Mathews, 2006; Goldstein, 2007). These studies viewed EM MNEs as ‘latecomers’ needing to integrate into a world market seen as a “pre-existing” place full of resources “to be tapped” (Mathews, 2006, p.9) and EM MNEs’ “foreign expansion as a means by which firms can appropriate rents in overseas markets not only by exploiting but also by exploring valuable resources” (Wang et al., 2012, p.462). This is particularly persuasive for the EM OFDIs to DMs case as DM hosts’ advanced level of resource and competitive advantage will work as pull factors. Here, the highly globalised world, which provides another distinctive context for the internationalisation of EM MNEs compared to their DM counterparts, plays a critical role.
(Mathews, 2006; Ramamurti and Avenue, 2008). For EM MNEs, intensified globalisation is exogenous at the initial stage of OFDI, which was not the case when DM OFDI began to emerge (Mathews, 2006; Ramamurti and Avenue, 2003; Aharoni, 2014). In addition to the ‘pull factors’ from DM host country, this intensified globalisation works as another kind of ‘pull factor’ of EM OFDI.

Based on the discussions so far, hypotheses will be developed to investigate the motivations of EM OFDI reflecting the push (i.e., ownership disadvantage) and pull factors (i.e., ownership advantage) from home and host countries. The first hypothesis is regarding ‘strategic-asset level seeking motivation’ of EM OFDI to DM. Although ‘strategic-asset seeking’ motivation, or other similar concepts such as ‘technology-sourcing’ motivations, have been addressed in some FDI studies (e.g., Dunning, 1996; Driffield and Love, 2007), this hypothesis considers ‘strategic-asset level’ rather than ‘specific’ or ‘tangible’ strategic-asset as this study only considers ‘Greenfield investments’. Yamakawa et al. (2008) suggest a similar view with their ‘innovation seeking EM OFDI’ concept, that “an organisational learning motive to access new capabilities” and to “tap into the knowledge bases” of the firms in the DM host countries was a plausible motivation for EM OFDI to DMs (p.68). Note also that this motivation for EM OFDI is more directly related to the issue of ownership disadvantage. In contrast to Dunning (1996)’s argument that conventional strategic-asset seeking FDIs are usually sequential investments, many initial EM OFDIs are motivated by search for strategic-assets or their level in the host. This is because EM MNEs, which in general lack their own FSA, need to turn their attention externally to develop ‘competitive advantage’ due to their home countries’ relatively poor strategic-asset level (Mathews, 2006; Tolentino, 2012). At the same time, the advanced strategic-asset level of the DM host is assumed to work as a pull factor. Summarising the discussions so far, this paper proposes the first hypothesis as following:
H1: ‘Strategic-asset level seeking’ motivation is a positive significant determinant of EM OFDI into the UK.

The second hypothesis is regarding ‘market seeking motivation of EM OFDI to DM’. This motivation differs from the market expansion motivation of traditional firms, as this motivation reflects both ‘push’ and ‘pull’ factors from EM home and the DM host. Facing market constraints at home such as under-developed market or intensified competition caused by globalisation pressure, EM MNEs see the highly integrated world market, which is often growing even more rapidly than their domestic economies, as a new opportunity to expand their business as an alternative to their home market (Holtbrugge and Kreppel, 2012; Contractor, 2013). Particularly, the ‘more developed market’ or the ‘more abundant market opportunities’ in DM hosts can attract EM OFDIs as pull factors. Luo and Tung (2007) also suggest niche or new kinds of market opportunities such as customers of ‘sunset’ industries or higher-end customers in DM hosts, which are limited within the EM home market but necessary for EM MNEs to develop ‘ownership advantage’ to compete in the global market as a ‘latecomer’, as a possible motivation behind EM OFDI to DMs. In this context, this paper proposes ‘market seeking motivation’ of EM OFDI to DM reflecting both market push and pull factors from home and the UK host as the second hypothesis:

H2: ‘Market seeking’ motivation is a positive significant determinant of EM OFDI into the UK.

Distinctiveness of EM OFDIs and New Institutional Economics (NIE)

Institutions have a great significance in understanding EM OFDI. Firstly, EMs have recently experienced radical institutional changes through policies as a part of the globalisation and liberalisation process (World Bank, 2005; Todaro and Smith, 2009); secondly, EMs’ weak
home institutions and poorly developed market, legal and governmental institutional structures are the key conditions which defines EM (Luo and Tung, 2007; Khanna and Palepu, 2010; Puffer et al., 2016; Rottig, 2016); and lastly, institutional theory has great significance for understanding EM OFDI to DMs when considering the substantial institutional difference between these two markets. The ‘distance’ or ‘difference’ between home and host countries of MNEs is not completely new in FDI theories (e.g. Uppsala model’s “psychic distance”). It is not unreasonable to assume that firms investing in foreign countries will face difficulties such as unfamiliar institutional profile including both formal rules and informal culture, and thus, the greater the gap or difference between home and host countries the greater the challenge is for them to build legitimacy in the host market. Considering these arguments and that many EM MNEs are not in the ‘mature’ stage where firms have enough experience and resources to deploy risky and adventurous FDI strategies, EM MNEs’ FDI decision to DM hosts, which is evidently unfamiliar and ‘foreign’ to these firms, is an unexpected phenomenon. This raises questions regarding ‘why’ this radical decision occurs, and institutional theory can render useful insights for exploring this question further.

Here, particularly, New Institutional Economics (NIE) is applicable. This theory argues that “underlying costs of transacting” occurs depending on “the existing structure of rights and the character of their enforcement” which define “the existing wealth-maximising opportunities of the players” (North, 1990, p.47), and in this way, institutions can work as constraints or advantages affecting the performance of the players in the economy such as firms. In developed countries, “effective judicial systems” allow one to have “some confidence that the merits of a case rather than private payoffs will influence outcomes” (ibid, p.59). In contrast, “weak, non-existent, or dysfunctional institutions” and ineffective and/or uncertain enforcement system such as uncertainty of contracts, insecure property rights, inefficient business procedures, or other political instability, corruption and bribes in developing
countries including EMs all raise transaction costs in these countries deterring the profit-
maximising firms from having long-term horizons for growth (ibid; Luo and Tung, 2007, p.486; Langlois, 2013, p.18; Puffer et al, 2016).

Moreover, EMs have recently experienced radical globalisation/liberalisation processes. Whilst it takes time for their home institutional conditions to adapt to these processes due to the natural ‘built-in rigidity’ of institutions (North, 2005), EM firms are exposed to global market competition. Therefore, it is likely that there is a ‘misalignment’ or ‘institutional void’ between EM countries’ institutional conditions and the business requirement of EM firms facing intensive competition caused by globalisation (Witt and Lewin, 2007; Puffer et al, 2016; Rottig, 2016). Here, a possible EM firms’ response to this misalignment is a “partial or complete departure from the business system” as a strategy for “how to play the game”, when the rules of the game are changing and not completely known, as well as not constructive for their long-term growth (Witt and Lewin, 2007, p.10; Peng et al., 2008, p. 924). Moon and Roehl (2001) also saw some institutional disadvantage, such as political instability, as one type of ‘ownership disadvantage’ which motivates unconventional FDI such as EM OFDI. In this way, EM firms’ home county institutional constraints work as push factors behind their FDI decision.

EM MNEs’, therefore, with ‘escapism’ motivation will seek host countries which can offer a better institutional environment. The assumption regarding the ‘escapism’ motivation of EM OFDI, therefore, becomes more plausible in the case of EM OFDI into DMs as there is a relatively more advanced institutional environment in the hosts, which agrees with EM firms’ business requirements. This ‘pull factor’ aspect, the relatively superior institutional environment in DM hosts as a source of attraction to EM OFDI, can be understood from EM firms’ strategic approaches to resources. Considering ‘recursive’ behaviour of EM OFDIs, EM firms might see experiences in an efficient and transparent environment in DM hosts,
which is what Economic historians describe as a ‘missing market’ in EM countries (Langlois, 2013, p.8), as a ‘source of advantage’ which they can leverage back home or in other foreign markets by reducing their vulnerability and build up competency (Mathews, 2006; Witt and Lewin, 2007). Barney and Hansen (1994) also suggest that “trustworthiness, as perceived by market intermediaries, is a critical source of competitive advantage” (Luo and Tung, 2007, p.494). In this way, institutional constraints at EM home (i.e. institutional push factor) and advanced institutional environment in DM host (i.e. institutional pull factor) can work as ‘institution seeking motivation’ of EM OFDI. Thus, the last hypothesis is developed as following:

$H_3$: ‘Institution seeking’ motivation is a positive significant determinant of EM OFDI into the UK.

Figure 1 summarises and demonstrates the analytical framework for hypothesis development based on ‘adapted RBV from EMs’ perspective’ supplemented with the application of NIE theories. ‘The determinants of EM OFDI to the UK’ are assumed to be complex motivations influenced by both push factors from EM home countries, lack of necessary resources and constraints in their various forms, and pull factors from DM host countries, in terms of relatively more abundant necessary resources and better developed institutional context. In addition, the globalised world also plays a critical role as an exogenous condition for EM firms by encouraging them to go out to access necessary resources and environment through OFDI to DMs.

**Figure 1. Theoretical Framework for hypothesis development**
Model (function and variables) and data (proxies and sources)

To test these hypotheses, this paper carried out econometric analysis with a panel of 10 EM FDI source countries (Brazil, China, Czech Republic, India, Malaysia, Russia, South Africa, Turkey, UAE and Ukraine), which have invested consistently in terms of FDI in the UK between 2003 to 2012. As there are no clear criteria for defining an EM (Khanna and Palepu, 2010), in order to set a specific boundary for the definition of EMs this paper considered the generally agreed characteristics of EMs – that they are ‘new’ and significant enough to be noticed, but at the same time are not completely ‘emerged’ due to home country constraints (e.g., Luo and Tung, 2007; Khanna and Palepu, 2010; Cuervo-Cazurra, 2012; Aharoni, 2014). Based on these characteristics this paper selected EM countries which are ‘newly joining’ to this EM OFDI group such as BRICS and transition economies excluding some mature EMs (mainly New Industrialised Countries). At the same time, this study also included ‘returning Latinas’ as they demonstrate characteristics distinctive from those involved in the early stage of EM OFDI, i.e., 1970-80s, within the same region (Goldstein, 2007; Gammeltoft, 2008).

Denoting the source country by $i$ and the year by $t$, the following is the equation of the panel analysis model:

$$ FDI_{it} = \alpha_i + \beta_1 Strat_{it} + \beta_2 Market_{it} + \beta_3 Inst_{it} + \beta_4 Ex_{it} + \beta_5 UKregion_{it} + \beta_6 Trade_{it} + \epsilon_{it} $$
where the dependent variable $FDI_{it}$ denotes inward FDI from EM to the UK, and $Strat_{it}$, $Market_{it}$ and $Inst_{it}$ are explanatory variables representing the three motivations assumed in the hypotheses. $Exit_{it}$, $UKregion_{it}$ and $Trade_{it}$ are three control variables (as defined in Table 1). Independent variables were measured prior to the investment decision as this approach helps in dealing with the endogeneity problem in examining macroeconomic flows (Baltagi, 1995; Benacek et al., 2000). The following sub-sections will discuss in more detail how the variables were constructed and how the data was sourced.

**Dependent variable**

The proxy for the dependent variable is ‘the number of Greenfield IFDI projects’. The project number was chosen because it reflects “the reality of FDI” such as physical assets and job creation, and thus, can be a useful proxy to understand the drivers of FDIs in a strategic manner (Ernst and Young, 2011, p.30). The most common possible shortcomings of project numbers as a variable are the possibility that it may lead to under-reporting of the real number and that the investment size may vary greatly between projects (e.g., Hill and Munday, 1992; Fallon and Cook, 2010). However, some alternatives, such as job number to reflect the project size, also have a similar problem relating to ambiguity in the figure (e.g., new vs. safeguarded jobs) (Hill and Munday, 1992), whilst some empirical studies suggest that project number has greater explanatory power than number of jobs or other alternatives such as capital expenditure in FDI studies (Fallon and Cook, 2010). Moreover, the data were sourced from the fDi Intelligence Database of the Financial Times which tracks approximately 80% and 95% of all small and major global Greenfield FDI projects, and therefore, reduces the ‘under-reported number’ problem of the proxy (Alon, 2010). Including only ‘Greenfield FDIs’ in the model was partly due to data availability and does limit the data set, but this can bring some advantages, particularly regarding another major issue of the difference between projects in their sizes. EM OFDI carried out by State-Owned Enterprises (SOEs) and
Sovereign Wealth Funds (SWFs), which are generally very large in size owing to strong government support (e.g. the average project value of Chinese OFDI by SOEs is $198 million compared to $47 million for that of private firms, *ibid*, p.4), are often through M&As or other strategic alliances (Lunding, 2006; Dunning *et al.*, 2008; Rogen and Hanemann, 2009; Alon, 2010; Holtbrugge and Kreppel, 2012). Thus, excluding these cases alleviates concern regarding large differences in investment size between projects. In addition, by including only Greenfield investments, these types of EM OFDI with strong links to their home government – the motivation of which is often influenced by political rather than corporate benefit (Luo and Tung, 2007) - can be excluded. It needs to be clear that this paper did not intentionally exclude FDIs made through SOEs or SWFs as the details of data regarding the type of source firms is not known, but argues that the data set consisting of only ‘Greenfield’ projects’ can be justified as still valid in its investigation of the determinants of EM OFDIs.

**Explanatory variable**

The $Strat_{it}$ variable represents the ‘strategic-asset level’ seeking motivation of EM OFDI. There is no single variable "best suited to capture strategic-asset seeking FDI" in empirical studies (Alon, 2010, p.11). For the proxy of this variable, ‘the number of patents’, ‘the number of science articles’ (e.g., Berry *et al.*, 2010) or ‘R&D expenditure’ (e.g., Alon, 2010; Fallon and Cook, 2010) have been suggested. This paper chose ‘R&D expenditure’ of the host, the UK, for the proxy as this data represents “an immobile, host country advantage” (Alon, 2010, p.11); and has a lower correlation with other FDI determinant indicators than the alternatives (*ibid*). Here, $Strat_{it}$ variable is unilateral by incorporating the host side’s data only. ‘R&D expenditure’ which includes data on both the public and the private sectors is not an appropriate measure of EMs’ ‘lack of FSA’ as EMs’ R&D expenditure is often inflated by their governments’ recently-growing spending in this area. In addition, EM R&D data does
not necessarily reflect the quality of the “capacity to create knowledge and to innovate” which still differs greatly between EMs and DMs (Berry et al., 2010, p.1468; Tolentino, 2012). The expected sign of this variable is positive.

The Market\textsubscript{it} variable measures ‘market seeking motivation’ of the EM OFDI. Either absolute Gross Domestic Product (GDP) or per-capita GDP has been most widely suggested for the proxy of the market, although these two measure different aspects of the market. The latter reflects the income level or overall market demand, while the former reflects the size of the whole economy focusing on population (Chakrabarti, 2001; Alon, 2010). Therefore, this paper chose per-capita GDP over absolute GDP for the proxy, as the per-capita GDP of a DM host will be an appropriate proxy for ‘market potential’, which EM OFDIs are assumed to seek in a DM host, whilst relatively low per-capita GDP of EMs can also be a proxy for ‘underdeveloped market’ or ‘limited market demand’ in these countries (Chakrabarti, 2001; Bénassy-Quéré et al., 2007; Holtbrugge and Kreppel, 2012). In this sense, this paper incorporated per-capita GDP of both host and home into one proxy, ‘per-capita GDP gap’, and is calculated as the absolute difference in per-capita GDP of the UK, and source firms’ home countries to reflect both pull and push factors from the host and the home. The sign of this variable is expected to be positive.

Finally, the Inst\textsubscript{it} variable is a measure of institution seeking motivation. This variable is also developed in its ‘bilateral’ form, incorporating both ‘push’ and ‘pull’ factors to reflect the difference in institutions in EM home and DM host markets. For this, North et al. (2009)’s ‘open access’ and ‘natural state’ concepts, which describe the interrelationship between institutional arrangement and economic development, can provide a useful insight. Following these, a country’s economic development requires a transition from ‘natural state’ to ‘open access’ system which involves a set of changes ensuring “impersonal political rights and legal support”, “open entry and competition in many markets, free movement of goods and
individuals over space and time, the ability to create organisations to pursue economic opportunities, protection of property rights, and prohibitions on the use of violence to obtain resources and goods” (North et al., 2009, p.2). Applying this concept, the proxy of this variable can be developed to measure the institutional difference between ‘open access’ (DM hosts) and ‘natural state’ (EM homes).

To measure this difference, ‘Economic freedom’, “the degree to which a market economy is in place, where the central components are voluntary exchange, free competition, and protection of persons and property” is introduced as it reflects the key difference of ‘open access’ from ‘natural state’ ensuring individuals’ fair market participation (Gwartney and Lawson 2002, p.5, as cited in Berggren, 2003). The index for Economic Freedom has been developed by both the Fraser Institute and The Heritage Foundation. Whilst these indices are similar in their overall implications, suggesting that choosing one over the other would not bring critical differences, this paper chose the latter due to the recent data availability (Berggren, 2003). The index of Economic Freedom of The Heritage Foundation is available for 185 countries and the Index covers the following: 1) Rule of law (property rights, freedom from corruption); 2) Limited Government (fiscal freedom, government spending); 3) Regulatory Efficiency (business, labour and monetary freedom); and 4) Open Markets (trade, investment and financial freedom). A grade from 0 to 100 is calculated, where 100 represents the maximum score, and it is assigned to a country for each area listed above. The average score of these grades is the ‘Index of Economic Freedom’ of a country. The ‘absolute difference’ in the index scores of the UK, and the source countries is used as a proxy for $Inst_{it}$ variable incorporating both institutional push and pull factors from EM home and the host UK. The expected sign of the variable is positive.
Control variables

To complete the model, a number of control variables are used. The first control variable, $Ex_{it}$, is that of ‘exchange rate fluctuation’. Seeing FDI as a “diversification of real assets by MNEs”, home country’s currency appreciation to host country’s currency may lead MNEs to invest in the ‘relatively cheaper’ host country whilst the opposite case may lead MNEs to postpone their foreign investment (Faeth, 2009, p.182). For the proxy, the ratio of official exchange rate (local currency units relative to the US dollar) of the source country to sterling is used. It is expected to be positively related to the dependent variable.

Secondly, a host country’s “membership of a free-trade area, such as its proximity to a large market”, e.g. EU, can be a possible FDI determinant as it will reduce overall transaction costs for trade with those member countries when investment is made in the host country (Benacek et al., 2000, p.5; Bevan and Estrin, 2004). Considering that the UK is a member of the EU, $UKregion_{it}$ is introduced as a control variable for its EU membership. For the proxy, this paper chose the UK’s share of total intra-EU trade, which reflects how actively the UK is involved in the EU market. The sign of the coefficient is expected to be positive.

The last control variable is $Trade_{it}$, representing the degree of trade involvement of the EM source countries. A number of studies on EM OFDI suggest that EM source countries’ experience of internationalisation through trade involvement in both exports and imports, particularly the host countries, may encourage their OFDI (e.g., Mathews, 2006; Alon, 2010; Holtbrugge and Kreppel, 2012). Thus, $Trade_{it}$ is included as a control for EM source countries’ trade experience. The proxy is measured as the sum of export and import as ‘the percentage of GDP’ and expected to carry a positive sign. Table 1 summarises the variables, their proxies, the expected signs and data sources.

Table 1. Summary of variables
<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement</th>
<th>Sign</th>
<th>Function</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI</td>
<td>Number of Greenfield FDI project into the UK</td>
<td>n/a</td>
<td>Dependent Variable</td>
<td>fDi intelligence</td>
</tr>
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<td>Strat</td>
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<td>+</td>
<td>Strategic-asset seeking motivation</td>
<td>World Bank Group indicator</td>
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<td>Market</td>
<td>Absolute difference between per-capita GDP figures of EM sources and the UK</td>
<td>+</td>
<td>Market seeking motivation</td>
<td>World Bank Group indicator</td>
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<tr>
<td>Inst</td>
<td>Absolute difference in the ‘Index of Economic Freedom’ scores of the source countries and the UK</td>
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<td>The ratio of official exchange rate (local currency units relative to the US dollar) of the source countries to sterling</td>
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<td>Control for exchange rate fluctuation</td>
<td>World Bank Group indicator</td>
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<tr>
<td>UKregion</td>
<td>The UK’s share of total intra-EU trade</td>
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<td>Control for membership of free trade agreement</td>
<td>World Bank Group indicator</td>
</tr>
<tr>
<td>Trade</td>
<td>Source countries’ exports and imports (% of GDP)</td>
<td>+</td>
<td>Control for internalisation experience of the source countries</td>
<td>World Bank Group indicator</td>
</tr>
</tbody>
</table>

**Empirical Results**

Panel analysis was carried out to estimate the equation specified earlier. Although the Hausman specification test results show that the chi-square score is small enough not to reject the null hypothesis, implying that random effects may be preferred over fixed effects, the results at the same time warn that the data fails to meet the asymptotic assumptions, probably due to the relatively small data size in this paper (Park, 2011). Therefore, the fixed effect model was used and the F-test results support a significant fixed group effect in the model.
logarithm of FDI project number was used as this helps transform a highly skewed variable into one that is more approximately normal (Benoit, 2011). Using the logarithm of FDI causes a drop in the number of observations with a potential selection bias, \( \ln(a + FDI) \) was used instead of \( \ln(FDI) \) following most commonly used practice (Bénassy-Quéré et al., 2007).

Table 2 summarises the analysis results.

Table 2. Determinants of Greenfield EM OFDIs into the UK

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>FDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strat</td>
<td>3.73**</td>
</tr>
<tr>
<td></td>
<td>(2.17)</td>
</tr>
<tr>
<td>Market</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.86)</td>
</tr>
<tr>
<td>Inst</td>
<td>0.03*</td>
</tr>
<tr>
<td></td>
<td>(1.75)</td>
</tr>
<tr>
<td>Ex</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>(0.33)</td>
</tr>
<tr>
<td>UKregion</td>
<td>-0.08**</td>
</tr>
<tr>
<td></td>
<td>(-2.55)</td>
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<tr>
<td>Trade</td>
<td>0.02***</td>
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<td></td>
<td>(2.70)</td>
</tr>
</tbody>
</table>

Number of obs 100
F-test (model) 5.38***
Effect Test 12.55***

Note: The parentheses contain the t-statistics
* *, **, *** Significance at the 10% level, 5% level and 1% level respectively

All coefficients of the explanatory variables showed the expected signs although their significances vary. Firstly, the positive and statistically significant coefficient of \( Strat_{it} \), the R&D expenditure level of the UK, supports the hypothesis that the strategic-asset level of the UK is an important determinant of EM OFDI into the UK. In particular, the large coefficient of this variable (almost a 4% increase in FDI project numbers for every 1% increase in UK R&D spending as % of GDP), with corresponding high statistical significance (at the 95% confidence interval) implies the importance of this motivation of EM OFDI into the UK. This is also supported by other supplementary data on the UK such as recent ‘UK attractiveness survey’ reports from Ernst and Young which have shown that ‘technology’ has been one of the top 3 attractions of the UK for foreign investors in recent years (Ernst and Young, 2011, 2012, 2013). In addition, in Executive Opinion Survey from World Economic Forum, the UK has always ranked highly in the opinion of the respondent executives regarding the country’s innovative competitiveness such as ‘Quality of scientific research institutions’ and ‘University-industry collaboration in R&D’ with average scores of almost 6 (5.91) and 5.25 out of 7 points respectively, which have been increasing in general over time (World Economic Forum, from 2003 to 2012). These data further imply that although the proxy, ‘R&D expenditure’ only measures ‘quantitative’ terms, the UK’s R&D expenditure increase likely accompanies the quality improvement, supplementing the panel analysis results of this paper on ‘strategic-asset seeking’ motivation of EM OFDIs to the UK.

Secondly, although the coefficient of \( Market_{it} \), variable, the per-capita GDP gap between the UK and the EM source countries, shows the expected sign (i.e. positive, assuming that the high market potential of the UK and the low overall market demand in the EMs’ home market respectively have an influence as pull factor of the host and push factor for the home for EM
OFDIs into the UK), its value is small (i.e. 0.001) and moreover, is statistically insignificant. Therefore, the hypothesis regarding ‘market seeking motivation’ cannot be supported. Possible reasons for this result can be the theoretical ambiguity in the impact of per-capita GDP on FDI, as “high GDP per capita reflects both high purchasing power of consumers and high real wages” (Bénassy-Quéré et al., 2007, p.771). Nevertheless, this variable still plays an important role in this model by preventing the ‘institutional variable’ from being overestimated in its influence on the determinant of FDI. Omitting this variable could lead to spurious results such that “a significant coefficient of the institutional variable could in fact cover the hidden, positive impact of GDP per capita” due to the potentially high correlation between institutions and per-capita (ibid; Faeth, 2009). Considering these discussions, taking out this variable from this paper’s model due to its statistical insignificance may cause other problems.

Finally, the positive and statistically significant coefficient of \( Inst_{it} \) variable supports the hypothesis regarding institution seeking motivation of the EM OFDIs into the UK in that the institutional constraints of EM home countries and the ‘better-developed institutions’ in the UK work as push and pull factors respectively. This paper’s finding empirically supports ‘escapism’ motivation of EM OFDI which has been often conceptually suggested rather than tested empirically in other studies (e.g., Yamakawa et al, 2008; Ning and Sutherland, 2012). At the same time, the UK’s “stability and transparency of the political, legal and regulatory environment” has consistently been another one of the top 3 attractions of the UK to foreign investors for recent years, supporting the assumption regarding the UK’s institutions as pull factors (Ernst and Young, 2011, 2012, 2013).

Moreover, as this variable denotes ‘institutional difference’ between EM sources and the UK, this result provides a new measure of the ‘institutional difference’ in FDI studies. The positive sign of this variable implies that ‘a very different institutional environment of the UK’
from those of their home countries affect EMs’ OFDIs into the UK was viewed positively, challenging the conventional idea of ‘institutional difference’ as a negative factor in FDI studies. In fact, some studies suggested that ‘difference’ between home and host can be a useful source of unique and diverse knowledge (Kogut 1983; Rosenkopf and Almeida 2003) and therefore, can be an attractive point in locational decisions at the pre-investment stage (e.g., Dunning, 1988; Parkhe, 1991; Shenkar, 2001). Note that this study’s main purpose is not investigation of the effect of ‘institutional distance’ or ‘difference’ per se. However, this study’s empirical result of positive effect of ‘difference’ between host and home countries on FDI decisions can provide additional empirical support for the above studies, whilst also providing implications for theoretical development regarding the non-linear effect of the institutional difference on FDI at different phases of a firm’s investment.

In contrast to the explanatory variables, the results of the control variables demonstrate a mixed picture. Firstly, the coefficient of the exchange rate variable, $E_{it}$, shows the correct sign but is not statistically significant, whilst possessing a very low value. Although this variable has been widely used in the FDI analyses, there is no agreement as to how exchange rates are related to FDI (Sayek, 2009) and the empirical results have also been inconsistent (Chakrabarti, 2001). This may be due to the mixed theoretical assumptions as to the effect of the exchange rate on FDI. Whilst the exchange rate can be interpreted as a ‘relative price’ of the home currency to the host currency, which determines the prices of the immobile factors (Cost effect), ‘a poor/strong currency of a host country’ can be interpreted as an indicator of weak/great competitiveness of the host (Revenue effect) (Chakrabarti, 2003, p.163). Following this theory, the direction of exchange rate effect on FDI is not always consistent but depends on which of the two effects dominates.

Secondly, the coefficient of $UK_{region_{it}}$ variable is statistically significant but shows the opposite sign to that expected. The direct interpretation of the results is that the greater UK
share of the intra EU trade results in EM OFDI into the UK declining. This is a somewhat surprising result, but it may be related to the recent economic crisis in the Eurozone which occurred during the period of the data set. In fact, Ernst and Young note that “the UK’s status as an influential member of the EU but outside the euro makes” was regarded as an attractive point by 64% of all respondents (Ernst and Young, 2012, p.30). Their 2013 report also suggested that the UK is perceived as a less risky place to invest compared to other stressed euro states (Ernst and Young, 2013, p.16). Considering these results, it may be that the high involvement of the UK in the EU economy, where the latter is suffering from a sustained economic crisis may have been regarded as risky and thus had a negative effect on EM OFDI decisions.

Lastly, the coefficient of the \( Trade_{it} \) variable shows a statistically significant and positive coefficient as expected. Considering that EMs are still mainly focused on the manufacturing industry where trade is an important route to internationalisation (Alon, 2010), this result implies EM firms’ internationalisation experience through trade has a critical influence on their OFDI decisions.

**Conclusion**

This paper examined the determinants behind the locational decision of EM FDI into the UK using panel analysis incorporating the major EM source countries investing in the UK during the period 2003-2012. With ‘adapted RBV approach from EMs’ perspective’ being fundamental theoretical framework, NIE provided an additional insight for hypothesis development. In addition to incorporating the ‘strategic-asset level seeking’ motivation in the first hypothesis, this paper also proposed ‘market’ and ‘institution’ seeking motivations within the hypotheses, by broadening the concept of ‘resource’ to ‘market’ or ‘better business
The ‘market seeking’ motivation here is more about seeking opportunities to access new kinds of market which are limited at home and are relatively more abundant in the DM host. Furthermore, applying institutional theory within the ‘adapted RBV’ framework, this paper developed a hypothesis of ‘institution seeking’ motivation for EM OFDI was assuming that the institutional constraints EM firms face at home work as a push factor whilst ‘market supportive institutions’ in the DM host may attract EM OFDIs as a pull factor. The results of the analysis provide supports for all the hypotheses with its correct expected sign and a statistically significant coefficient except for the ‘market seeking motivation’ variable.

This paper has several implications for IB and FDI studies. Firstly, this study can extend the understanding of FDI studies, by elaborating the theme of EM OFDI to DM - still a relatively ‘unreached’ subject in IB or FDI studies. Studies which focus solely on the subject of EM OFDI to DM are rare and particularly those on EM OFDI in European DM host are scant apart from a few surveys (e.g., CEPII-CIREM). Furthermore, although including ‘Greenfield investment’ data only in the panel analysis was this study’s limitation, at the same time, this type of investment as a mode of internationalisation of EM firms is an understudied theme compared to other modes of entry such as M&A.

Secondly, this paper’s ‘fresh theoretical interpretations’ of an existing theory in order to understand EM OFDI to DM will help not only adjust traditional FDI theories to develop an analytical framework for studies on EM OFDI, but also extend FDI theories in general by considering ‘unconventional types of FDI’ which are motivated by ‘disadvantages’ (push factor) as well as ‘advantages’ (pull factor). For the theoretical framework, this study further developed the approach of an adapted RBV framework from the EMs’ (latecomers’) perspective by applying a wide range of RBV studies and theories, such as ‘imbalance theory’ (Moon and Roehl, 2001) and Grant (1991)’s resource-based approach for strategy analysis, whilst supplementing this framework with an innovative application of institutional theory.
within it. Another contribution from this study to the FDI area comes from its ‘empiricism’, by both developing and testing hypotheses with panel analysis. This study provided empirical support to confirm and strengthen some suggestions from previous studies remaining to be tested through its analysis results and findings. Moreover, although this paper has limits in terms of the relatively small size of the data set, more data of both EM sources and the time periods is also likely to become available enabling the market to be further tested for robustness (UNCTAD, 2015). Therefore, the potential of the model and the analysis result to be further refined is substantial.

Lastly, in addition to its academic contribution, this paper also has policy implications from the host side perspective. Understanding the determinants of EM OFDI, an increasingly important source of FDI, can help host governments to set up and implement appropriate policies to attract FDI from these markets. For example, the analysis strongly suggested that one of the major attractions for EM Greenfield firms to invest in the UK is the ‘strategic-asset level’ or ‘innovation level’ of the UK. Therefore, the UK government needs to focus on enhancing the quality and competitiveness of its Higher Education and other technology/research sectors as well as their collaboration with industry, whilst investing in more fundamental areas such as early education and mathematics/science education. These will be “crucial to continue fostering innovation in the country” in order to maintain its competitiveness at the ‘strategic-asset’ and ‘innovation’ level (World Economic Forum, 2014, p.22). Another policy implication can come from regarding the UK within the EU context. The analysis results of the ‘UKregionit’ variable, the proxy of the UK’s involvement in EU market, demonstrated a statistically significant negative sign, which was contradictory to the original assumption. This study explained this as possibly the case that the UK’s intensive involvement in the EU market, which has been stressed in recent years, is regarded as risky, thus having negative influence on EM source countries’ investment decision into the UK.

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However, at the same time, the attractiveness survey results from Ernst and Young suggested that although maintaining some distance from the stressed Eurozone through its currency being independent from Euro was regarded as attractive by investors, the attractiveness still comes from “the UK’s status as an influential member of the EU but outside the euro (zone)” (Ernst and Young, 2012, p.30; Ernst and Young, 2013). Therefore, the UK government may need to re-think the matter of leaving the EU whilst maintaining a certain degree of independence from the stressed Euro currency.

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Figure 1. Theoretical Framework for hypothesis development

Adjusted RBV and Institutional theory

Globalised World
- Resource access direction

EM Home
- Lack of FSA
- Lack of market
- Poor institutions

DM Host
- Strategic Asset
- Better market
- Better institutions

H1, H2, H3: Hypotheses on EM OFDI into the UK

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Table 1. Summary of variables

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<td>Trade</td>
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</tbody>
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Number of obs: 100  
F-test (model): 5.38***  
Effect Test: 12.55***

Note: The parentheses contain the t-statistics
* , ** , *** Significance at the 10% level, 5% level and 1% level respectively
<table>
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<th>List of revisions</th>
<th>Where appears in the paper</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Abstract needs to be more informative. In the ‘findings’ section of the abstract, briefly summarise what of note the authors found at the variable level</td>
<td>Abstract</td>
<td>Following reviewers’ comment, the ‘Findings’ section has been supplemented with more information variables.</td>
</tr>
<tr>
<td>2) Discuss the economic importance of the coefficient estimates along with statistical significance</td>
<td>p.21-23</td>
<td>Similarly, the ‘Empirical Results’ section has been supplemented with more explanation and discussion regarding the economic importance of the coefficient estimates.</td>
</tr>
<tr>
<td>3) Update for recent literature</td>
<td>p.2-3, p.6, p.11</td>
<td>Updated recent literature where appropriate – i.e. summary of literature review in introduction and discussion on hypothesis regarding institutional influence on EM OFDI</td>
</tr>
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