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Foreign market selection of emerging multinational corporations: evidence from South African and Egyptian corporations

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Abstract

As literature remains sparse regarding emerging African multinational corporations (EAMNCs), this article focuses on examining the key pull factors (i.e. host country macroeconomic specifications) influencing the foreign market selection of South African and Egyptian multinational corporations as a case study of EAMNCs. Based on estimation of Random Effect and Negative Binomial models, it has been found that the market size, resources endowment and proximity between home and host country are significant pull drivers of both Egyptian and South African MNCs. While not affecting Egyptian MNCs, assets availability, trade openness, the service sector quality, export to host country and the official exchange rate of the receiving destination and quality of institutions have an influential impact on foreign market selection of the South African investors. Inflation neither affects the attention of Egyptian firms nor South Africans to choose a certain market to invest in.

Key words: South African MNCs, Egyptian MNCs, emerging African MNCs, emerging MNCs, pull factor determinants of OFDI

JEL codes: P45; F21; F23

1 INTRODUCTION

From 1994 to 2011, emerging multinational corporations (EMNCs)¹ have managed to expand their foreign investments outstandingly. For instance, the top

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¹An EMNC can generally be described as a firm that is based in an emerging market and controls, through only foreign direct investment or equity modes, value added activities in at least two countries (Arnold & Quelch, 1998; Hoskisson, Eden, Lau & Wright, 2000; Aybar & Thirunavukkarasu, 2005; Constanza, 2009; Cortesi & Plantoni, 2011; Sandberg, 2012). As per the literature review, only 20 countries are commonly counted as emerging by various international organisations. These countries include: Argentina, Brazil, the Czech Republic,

17 non-financial EMNCs, listed by the United Nations Conference for Trade and Development (UNCTAD), have augmented their foreign assets, sales and employment by 52, 55 and 8 fold respectively. Moreover, there has been a marked growth of emerging markets' (EMs') outward foreign direct investment (OFDI) in recent decades. This investment accounted for nearly 18 percent of world OFDI flow in 2012, starting from less than 1 percent in 1990.

Apparently, most of the previous research relevant to EMNCs, in particular empirical research, has been focused on firms based mainly in Asia, followed by Latin America, with special focus on China, India and Brazil (Banga, 2005; Aminian, Fung & Lin, 2007; Masron & Shahbudin, 2010; Poncet, 2009; Beule, Buleke & Zhang, 2014). As such, limited research has been conducted to investigate the unique attributes of MNCs based in Africa, as well as testing the key drivers of such group of firms.

In an attempt to address this gap, this article aims to examine the key pull drivers of EAMNCs, with application to Egyptian and South African MNCs. Despite being identified as an emerging African market by this article, Morocco is excluded from the analysis due to data limitation considerations. In this vein, it is worth mentioning that South Africa leads the emerging African markets with respect to the annual average of OFDI flow from 1990 to 2012. South African firms contribute to more than \$1 billion of OFDI flow annually. Moreover, South Africa was found to be the only African country recognised in the UNCTAD lists of top EMNCs for the period 1995 to 2011. Egypt comes next with an annual average of \$267 million OFDI flow.

In view of the above, this article is organised into four sections. The first section focuses on the overall performance of South African and Egyptian MNCs. Foreign market selection of these MNCs will be discussed in the second section. The third section examines the theoretical framework and literature review of pull factor determinants of overseas investment of EMNCs. The fourth and final section considers the key pull factor drivers of Egyptian and South African MNCs.

Before proceeding to discuss the aforementioned research questions, it is quite important to underscore two main issues. First, the terms MNCs and OFDI are often used interchangeably and most studies (Narula & Dunning, 2000; Aykut & Goldstein, 2006; Salehizadeh, 2007; Sauvart, Pradhan, Chatterjee & Harely, 2010) use OFDI statistics to quantitatively analyse activities of EMNCs. Also, UNCTAD (2009) defines both outward foreign direct investment and multinational corporations in a fairly similar way, so much so that both terms may, to a certain degree, be considered synonymous.

Second, data limitation is particularly evident in the available statistics of the geographical structure of outbound investments possessed by Egypt and South African MNCs. To address this issue, this article advocates using multiple data sources to ensure the best possible coherence in addressing the aforementioned

Chile, China, Colombia, Egypt, Hungary, India, Indonesia, Malaysia, Mexico, Morocco, Peru, the Philippines, Poland, Russia, South Africa, Thailand and Turkey. Accordingly, for the purpose of this article, the term EMNCs hereafter refers to MNCs based in one of the above-mentioned 20 countries.

research questions. That is why the time span of the analysis might differ from one section to another and even from one point to another in the same section depending on the data source.

2 SOUTH AFRICAN AND EGYPTIAN MULTI-NATIONAL CORPORATIONS OVERVIEW

Generally, overall statistics indicate that both South African and Egyptian MNCs have grown during the period from 1990 to 2012. However, both groups of firms differ from one another, particularly with regard to the magnitude of their outbound investments and the growth rate of such investments. As shown in Figure 1, during the 1990 to 2012 period, Egyptian overseas investment experienced great leaps, compared to the corresponding South African investment. While the South African OFDI stock had grown nearly 5.5 fold, the corresponding Egyptian investment had scaled up 38 fold during the period from 1990 to 2012, which could be largely attributed to the small magnitude of Egyptian baseline investment in 1990. Despite its roaring growth, Egyptian MNCs still lag behind their South African peers, regarding the magnitude of their outbound investment. South African FDI outflow (\$4.4 billion) was 20 times higher than that of Egypt (\$0.21billion) in 2012. Similarly, South African OFDI stock (\$82.4 billion) was 13 fold higher than that of Egypt (\$6.3 billion) in 2012.

In conjunction with the above, it was found that South African MNCs were first in line with regard to the total number of greenfield investment projects² established abroad during the period from 2003 to 2014. According to the FDI Intelligence Corporation, South Africa was involved in a total of 785 greenfield investment projects during the total period, compared to 161 for Egypt. Moreover, Figure 2 shows that the number of greenfield investment projects involved in by South Africa grew from 2003 to 2014, while slight regress was registered in the corresponding Egyptian projects during the same time span (FDI Intelligence Corporation, 2015).

Compared to their emerging peers, the figures support the assumption that both groups of firms significantly lost ground on the EMNCs' landscape during 1995 to 2011. South Africa now owns nearly four percent of the total OFDI stock held by EMNCs, which represents less than one quarter of its share at the beginning of the nineties. Egypt's share of total OFDI flow and stock owned by emerging economies had not surpassed one percent over the entire period from 1990 to 2012. The same conclusion is further supported by the fact that the OFDI Performance Index (OFDIPI)³ of both South Africa and Egypt is often

² Greenfield investments relate to capital used for the purchase of fixed assets, materials, goods and services, as well as to hire labour in the host country. While the mergers and acquisitions are commonly perceived as a form of ownership transfer, greenfield investments contribute directly to capital formation and therefore add to the productive capacity of the host country (UNCTAD, 2009).

³ OFDIPI captures a country's relative success in investing in the global economy via FDI. If a country's share of global OFDI matches its relative share in global GDP, the country's

less than unity. Consequently, each country's share of world OFDI is less than its relative share of world GDP, indicating that they are still playing a smaller role in the global OFDI landscape than warranted by their economies. Figure 3 represents the development in the OFDIPI of Egypt and South Africa from 1990 - 2013.

When discussing the performance of South African and Egyptian MNCs, it remains important to address the difference between the two groups, as well as between them and EMNCs, with respect to the type of foreign investment, or the preferred entry mode. From 2003 to 2012, it was noted that the flow of greenfield investment involved in by South African firms was approximately 2.6 times higher than their outbound mergers and acquisitions (M&As). On the contrary, Egyptian MNCs show slight preference to M&As over greenfield investments, as the average annual flow of their M&As is 1.2 times higher than their outbound greenfield investments, as shown in Figure 4.

With reference to the preferred type of investment of EMNCs, UNCTAD statistics clearly show that, in terms of the magnitude of investment globally, M&As are generally preferred to EMNCs over greenfield investments. This group of corporations has succeeded in dominating nearly one third of the world's M&As operations; twice as much as their corresponding share in the world's greenfield investments in 2012⁴.

3 FOREIGN MARKETS OF SOUTH AFRICAN AND EGYPTIAN MULTINATIONAL CORPORATIONS

Limited data are available regarding the geographical breakdown of foreign activities of Egyptian and South African MNCs. Nevertheless, available records registered by the FDI Intelligence Corporation give an indication that South African and Egyptian firms show overall preference to set their greenfield investment projects in nearby markets. In 2014, Africa was the most preferred destination for Egyptian and South African outbound greenfield investment projects. Africa hosts around 67 and 63 percent of greenfield investment projects involved in by Egyptian and South African MNCs respectively. Apart from Africa, both groups of firms differ regarding the second preferred investment destination. While Asia comes in at second spot for Egyptian firms, Europe is much more important to South African investors, as shown in Figure 5. Moreover, it is noticed that South African MNCs had managed to set up some new projects in

OFDIPI is equal to one. A value greater than one indicates a larger share of OFDI relative to GDP; a value less than one indicates a smaller share of OFDI relative to GDP.

⁴According to the insight of host country specifications-related theories, M&As may be preferred over greenfield investments as they substantially expand the access of firms to resources that are not available in their home countries. This is perceived as a key trigger for EMNCs to initiate their internationalisation processes (Johanson & Mattsson, 1988; Moon & Roehl, 2001; Mathews, 2006).

North and Latin America and Oceania in 2014, as opposed to their Egyptian peers.

Over the period from 2003 to 2014, the structure of foreign markets hosting South African and Egyptian greenfield investment projects witnessed dramatic changes in favour of Africa. While being the second top destination for Egyptian firms in 2003, Africa had overtaken Asia to now be in the forefront in 2014, as seen in Figure 6. Likewise, Africa's share of South African greenfield investment projects scaled up significantly from 38 to 62 percent over the same period. Except for 2007, Africa was ranked as the first investment destination for South African firms, as shown in Figure 7.

Associated and in line with the above, in 2014 it was found that the majority of South African and Egyptian greenfield investment projects are located in developing markets⁵. In 2014, developing markets had hosted around 72 percent and 89 percent of such investments respectively. Equally important, the significance of this group of markets tends to expand, particularly for Egyptian firms over the period 2003 to 2014. The amount of the increase in developing markets' share of the Egyptian greenfield investment projects is twice as much as the corresponding improvement in its share of the South African investments (see Figure 8).

Contrary to the aforementioned perspective favouring Africa, the quarterly bulletins published by the South African Reserve Bank tell a different story. Europe was found to be the most important investment destination for South African OFDI stock, as it held around 38 percent of such investment in 2013. In the second spot was Asia (35.5 percent), followed by Africa (17.2 percent). Oceania trailed the geographical structure of the South African overseas investment (2.9 percent), headed by Latin and North America (7.7 percent) in 2013. However, it is worth mentioning that the attractiveness of Africa as an investment destination, compared to others, had grown at the expense of Europe, over the period 2000 to 2013. Africa's share had doubled 3 fold over the same period. Likewise, but to a greater extent, Asia's share in 2013 increased 51 fold against its corresponding level in 2000. In turn, Europe is significantly losing ground as a preferred investment destination for South African corporations. Figure 9 demonstrates changes in the structure of foreign markets of South African OFDI.

In this regard, it might be appropriate to address the similarity between the foreign market structure of South African and Egyptian MNCs and the corresponding structure of emerging markets-based MNCs. In 2010, the World Bank Report (2011) estimated that developing economies were receiving almost 54 percent of total outbound investment engaged in by emerging markets-based MNCs valued at \$550 billion. Meanwhile, it is noted that from 2003 to 2010, emerging markets-based MNCs tended to multiply their investments in developed markets three times faster than their own investment in developing markets. Accordingly, the relevance of developed economies, as a preferred investment destination, tends to increase considerably over time, as opposed to

⁵UNCTAD classification of developing and developed countries is adopted by this article.

what is registered for Egypt and South Africa (World Bank, 2011)⁶.

4 THEORETICAL FRAMEWORK AND LITERATURE REVIEW

The main focus of this section will be on the pull factors of emerging markets-based MNCs.

4.1 Theoretical framework:

As emerging multinational corporations (EMNCs) tend to increase their global presence, various theories and frameworks have been put forward for identifying and evaluating the significance of pull factors influencing their unfolding evolution. One of the most vibrant theories commonly used by literature in this regard is the Investment-Development Path (IDP) (Dunning, 1997; Buckley & Castro, 1998; Narula & Dunning, 2000; Fonseca, Mendonça & Passos, 2007; Mortensen, 2009; Narula & Guimon, 2010). The IDP, presented by Dunning in 1981, is perceived as a dynamic approach within the framework of the Eclectic Paradigm Model, also known as the Ownership, Location and Internationalization (OLI) Model⁷, promoted by Dunning in 1976 (Buckley & Castro, 1998).

Based on the framework of the IDP, it is argued that there are two groups of pull factors influencing the OFDI, namely asset-exploitation and asset-augmentation. Asset-exploitation factors include resources-, market- and efficiency-seeking. The second group (i.e. asset augmentation) relates to the desire of a firm to increase its assets. Moreover, it is worth mentioning that IDP recognises the impact of home country government policies on both outward and inward foreign direct investment (FDI) flows. Given the motive for outbound investment, literature identifies four different types of OFDI, namely resource seeking, market

⁶ As per the literature review, most theories relevant to explaining the evolution of EMNCs predict that firms will probably favour working in nearby markets owing to what is referred to as the psychological proximity factors. These factors refer to similarities in culture, language, traditions and political systems. Having explored neighbouring markets, firms can then proceed to invest in distant markets after acquiring the necessary competitive advantages. These advantages are pivotal for neutralising the threats resulting from investing in culturally and socially different markets (Johanson & Vahlne, 1977; Wai & Yeung, 2002; Aspelund, 2010; Laghzaoui, 2013).

⁷ According to the OLI Model, multinationality is attributed to three main advantages, namely ownership, location and internalisation (Dunning, 1995). Ownership advantages are perceived to be the main engine for becoming involved in overseas' value-added activities. Thus, a firm must possess certain advantages to be able to compete in the international arena. Dunning distinguishes between three ownership advantages: a) Those resulting from owning particular income generating assets; b) Those enjoyed by foreign affiliates relative to the headquarters; and c) Those resulting from the geographical dispersion. Location advantages relate to the market choice or the decision where a firm is going to locate its foreign activities. This group of advantages includes, inter alia, market size and the availability of cheap production factors. Internalisation advantages capture the different modalities (penetration modes) through which firms may arrange the creation and the exploitation of their core competencies based on the location advantages of different markets.

seeking, efficiency seeking, and strategic asset-seeking.

Owing to its dynamic nature, the IDP focuses on investigating how the significance of pull factors could change over time, depending on the rate of economic development of the home country. As exhibited by Table 4.2, the IDP identifies five stages of development, starting with a country as net FDI receiver, and ending in the maturity stage in which a country can attain noticeably high levels of both FDI flows, inward and outward (Narula & Dunning, 2000).

Resources-seeking motives are quite important in what is referred to as first-stage IDP countries. Such countries usually do not hold any location advantages, except for an abundance of natural resources. As each country develops and progresses on the IDP, the significance of the resources-seeking motive diminishes, since the marginal extraction cost tends to increase over time. Subsequently, new motives emerge, such as market- and efficiency-seeking motives, while economic development is improving. Market-seeking motives are significant where the local market offers tangible opportunities for achieving economies of scale. This occurs in countries existing in the last part of stage 1 and the beginning of stage 2 of the IDP.

Efficiency-seeking motives are relevant in countries existing in the latter part of stage 2 and the beginning of stage 3 of the IDP. In addition to the three aforementioned motives, firms might need to augment their existing assets through acquiring certain resources, such as patents and trade-marks. This type of motive – strategic asset-seeking – is expected to occur in countries existing at the end of stage 3 and in the subsequent stages of the IDP. Narula and Dunning (2000) mention that both efficiency- and strategic asset-seeking motives are similar in the respect that they require a certain threshold of location advantages and both tend to be inspired by the process of globalisation. Table 1 in the Annexure summarises the main attributes of different stages of the IDP.

In relation to location advantages highlighted by the IDP, Cuervo-Cazurra, Holan and Sanz (2014) argue that these advantages are expected to develop through the interaction of two types of what is called “co-evolutionary processes”, namely: emergent and guided. Within the emergent co-evolutionary process, location advantage is created through agglomeration dynamics in both factor and product markets. On the contrary, the guided co-evolution of location advantage is created via the process of infrastructure and institutions development. From another perspective, Alcácer, Cantwell and Piscitello (2016) assume that advances in communication and transportation technologies during the age of information have significantly changed the nature of competitive advantage of places.

Along with the IDP, various theories and frameworks have been developed by literature to interpret the evolution of EMNCs from the perspective of host country advantages. The Imbalance and Springboard Theory views OFDI as the launch pad or springboard of MNCs coming from emerging countries. OFDI is therefore quite pivotal to a company lacking competitive advantage as it enables firms to possess strategic assets, highly developed technology, know-how, trade-marks, and competencies. Accordingly, competitive advantage can be an outcome of the involvement in the multinationality process, rather than being a

prerequisite for initiating this process (Moon & Roehl, 2001; Luo & Tung, 2007; Balcer and Bruschi, 2010). This perspective is supported by the research run by Awate, Larsen and Mudambi (2015). They found that headquarters of emerging economy multinational corporations get an access to the most updated technology through acquiring subsidiaries in advanced economies. The internationalisation process is therefore triggered by innovation catch up motive.

Mathews (2006) explains the expansion of EMNCs by way of three factors: linkage, leverage and learning, or what he refers to as the Linkage, Leverage and Learning Theory. *Linkage* is conceived by EMNCs as a primary tool for mitigating risk and uncertainty in the international markets and for acquiring resources that are unavailable in the domestic market. Firms can construct various types of linkages with incumbent firms operating in the targeted foreign markets. These linkages can be established in various forms, such as strategic alliances, joint ventures, and engagement in global value chains. *Leverage* reflects the accessibility of external resources, as a direct result of establishing linkages between emerging firms and their foreign partners. Generally, firms are expected to target the most easily imitated and transferable foreign resources. *Learning* is the end result of repeating the application of the linkage and leveraging process.

Adopting a similar perspective, the Network Model assumes that firms tend to offset the unavailability of resources through building forward and backward networks with foreign firms that hold tangible experience in the targeted foreign markets. A network is simply defined as a set of inter-organisational relations, causing a firm to become dependent on its counterpart. It should be taken into consideration that building such relations or networks is effort and time consuming, which constrains a firm's ability to easily interchange its counterparts (Johanson & Mattsson, 1988). In the same vein, Pananond and Giroud (2016) argue that the internationalization of emerging MNCs is driven by dynamic evolution in their industry networks.

Meyer and Peng (2016) underline the significance of what they called "the institution- based view" (IBV) in the emerging economy multinational corporations research. According to their perspective, institutions could vary not only by geographic entities (home versus host country) but also across organizational fields, including among others: type of ownership, business groups and network relations. Difference in the institutional setting from one country to another could easily affect the cost of doing business abroad, and thus the locational choices of emerging economy multinational corporations. Along with the political aspect of institution, Cuervo-Cazurra (2016) expand this concept to include also economic (i.e. pro-market reforms and policies) and social (i.e. social violence) aspects. These aspects are expected to have tangible impact on the internationalisation process of MNCs originated in emerging economies.

In addition to the above, foreign market advantages are assumed by the Born Global Theory to be one of the main drivers of the early global orientation of EMNCs. Foreign market advantages include favourable governmental regulations, availability of foreign market information, market competition, export promotion programmes and profit opportunities. It should be underscored that

this theory does not exclude the impact of firm advantages on the evolution of born global firms (Rasmussen & Madsen, 2002).

From another perspective, the Uppsala Model⁸ assumes that a lack of foreign market knowledge can hinder firms from expanding their economic activities beyond the boundaries of their national economy. It therefore predicts that firms are likely to begin their foreign activities through low market commitment modes (such as export) due to a lack of market knowledge. Later, and as companies acquire increasing levels of market knowledge through involvement in exports, they will commit more resources to their activities abroad (such as OFDI) (Johanson & Vahlne, 1977). Moreover, it is foreseen that firms may favour working in neighbouring markets owing to the psychological proximity factors, including culture, language, traditions and political systems. Such similarity is likely to mitigate the uncertainties related to investing abroad (Johanson & Vahlne, 1977).

4.2 Literature review:

Previous studies have tested a wide range of host country determinants to answer why EMNCs tend to invest abroad (UNCTAD, 2006; Buckley, Clegg, Cross, Liu, Voss & Zheng, 2007; Alon, 2010; Kalotay & Sulstarova, 2010; De Beule, 2010; De Beule & Den Bulcke, 2012; Nunnenkamp, Maximiliano, Vadlamannati, & Waldkirch, 2012; Amal & Tomio, 2012; Trinca, 2013; Mughal, 2013; Elshamy, 2015; Luiz, Stringfellow & Jefthas, 2017). From a macroeconomic perspective, studies examine the impact of nearly seven host country specifications on the OFDI. These include market size (current and potential supply as well as demand), natural resources and assets endowment, similarity between home and host countries, integration into the global economy, economic relation between home and host countries and the quality of institutions. In conjunction with the above, nearly 44 variables have been used by the reviewed studies to test the relation between pull factors and OFDI flow from emerging and developing countries.

Examining key pull factor drivers of the Chinese and Indian OFDI is found to be one of the main research questions addressed by previous research. Alon (2010) examined eleven determinants, including nominal GDP, annual growth rate of nominal GDP, nominal GDP per capita, exports of agriculture, metals

⁸The core idea of the model of “Knowledge Development and Increasing Foreign Market Commitments”, widely known as the Uppsala model, is that the firm’s market knowledge base considerably influences the pace and the pattern of its multinationality or foreign expansion process. Learning by doing is, according to this framework, the only mechanism to acquire market knowledge. Therefore, firms have to work in the domestic market for a certain period of time until acquiring the necessary knowledge. They can move thereafter to work in international markets. As such, foreign market commitments (i.e. the magnitude of resources committed towards owning or controlling economic activities overseas) tends to incrementally increase as firms develop and acquire new business knowledge. Nevertheless, Johanson & Vahlne (1977) admit that certain firms may experience a prompt multinationality process and do not necessarily follow the process referred to above. Large firms may experience leapfrogging in their multinationalisation process due to extensive resources and market knowledge.

and fuels, research and development (R&D) expenditure, hosting Chinese expats, bilateral import and export flows, geographical distance, economic openness and exchange rate. Of the eleven studied factors, only five are likely to influence the decision of Chinese firms to locate their investment in a specific market, namely the GDP and the GDP per capita, exports of agriculture, metals and fuels, economic openness and geographical distance between Beijing and the host capital.

Addressing the same research question, Buckley, Clegg, Cross, Liu, Voss and Zheng (2007) conclude that the GDP, cultural proximity, political risks, bilateral export, inflation and policy liberalisation are the key drivers of Chinese OFDI from the perspective of the host country, while neither the natural endowment (captured by ratio of ores and metal exports to total merchandise export) nor the availability of strategic assets (measured by total patents applicants) affect the foreign market structure of Chinese outbound investment. Also, geographical distance and openness to IFDI of the host country do not have a significant impact on Chinese investments.

In conjunction with the above, De Beule (2010) examines the role of market size, natural resources endowment, strategic assets, institutional and economic environment and geographical distance on attracting the cross-border M&As of India and China. Market determinant is captured by nominal GDP, nominal GDP per capita, economic openness and membership in economic groupings. Natural resources endowment is encapsulated by ores and metal exports as a percentage of total merchandise export, while the significance of strategic assets is examined by three proxies, namely number of patents to GDP, expenditure on R&D to GDP, and tertiary school enrolment. To assess quality of the institutional environment, three variables are used: political stability, rule of law, and control of corruption. The official exchange rate is used as proxy for the economic environment. Except for GDP per capita, all variables are found to have significant influence.

Similarly, De Beule and Den Bulcke (2012) focus on testing the impact of economic and institutional differences between home and host countries on the cross-border greenfield investment projects owned by Indian and Chinese firms. Similarity in GDP, political stability, rule of law, and control of corruption have been proven to be key locational determinants. Comparable significant influence is exercised by availability of oil, ores and metals, patents and trade-marks. Also, trade openness and geographical distance could clearly affect foreign market selection of Indian and Chinese investors where greenfield investment projects are concerned.

Mughal (2013) shows that both the Indian Diaspora community and Indian exports to the host country are positively associated with the Indian overseas investment, while imports do not have such impact. Despite not influencing the overall Indian OFDI, geographical distance between New Delhi and the host capital, and the bilateral investment treaties both have a significant impact on Indian investment in specific regions. Furthermore, language and market size as well as inflation have a positive impact on Indian investment abroad.

Nunnenkamp, Maximiliano, Vadlamannati, and Waldkirch (2012) acknowl-

edge that India's OFDI is neither affected by resources-seeking motives (natural resources rent as percentage of GDP) nor strategic assets (total patents/population). On the contrary, market-related factors (nominal GDP and GDP growth rate) are likely to dominate the foreign location choices of Indian investors. Similar to the findings concluded by Mughal (2013), Indian diaspora is found to encourage the flow of investment from India to countries they live in. Finally, they have proven that Indian investors are resilient to the weak institutions and economic instability prevailing in host countries. Elshamy (2015) found that market size (measured by GDP), inflation, natural resources (measured by ores and metal exports to merchandise export) ownership endowment (total patents applications) and political risk significantly affect the Chinese investment located in Egypt.

Apart from analysing locational determinants of Chinese and Indian outbound investment, Kalotay and Sulstarova (2010) test seven variables, namely: nominal GDP, the ratio of ores and metal exports to merchandise export, the ratio of service sector to GDP, geographical distance, exchange rate, number of patents and membership in Commonwealth of Independent States (CIS). Only four variables, GDP, the ratio of ores and metal exports to merchandise export, the ratio of service sector to GDP and CIS membership are proven to have an influence on Russian investment abroad.

In line with the above, Trinca (2013) found that foreign market selection of Russian MNCs is clearly influenced by the geographical and political proximity of the host country to Russia (captured by geographical distance, sharing common borders, being a member of the former Union of Soviet Socialist Republics) and by adopting favourable fiscal policies in the host country (tax haven). On the contrary, difference in economic development (difference in GDP) does not influence Russian outbound investment. Trinca also notes that significance of the studied variables varies among sectors.

From another perspective, Amal and Tomio (2012) investigate three sets of variables to define the key location determinants of Brazilian outbound investment. The first set encompasses nominal GDP, nominal GDP per capita, inflation, trade openness and real exchange rate. Except for the nominal GDP per capita, all variables are proven to have a significant impact on Brazilian OFDI. The second set of variables includes culture distance and geographical distance, which are found to be key drivers of Brazilian firms when choosing a certain market to invest in. The third and last set of variables is captured by control of corruption, government effectiveness, political stability and absence of violence and terrorism, rule of law, regulatory quality, and voice and accountability. Unlike political stability and regulatory quality, other institutional variables are found to be significant determinants of Brazilian OFDI.

Examining the case study of one of the South African MNCs, Luiz, Stringfellow and Jeffhas (2017) illustrate, based on a qualitative analysis, that institutional framework of host country could significantly impact the foreign market selection of African corporations. At the inception of the internationalisation process, companies may prefer to invest in institutional environments similar to home market to mitigate risks associated with investing abroad. They term this

preference as institutional complementarity strategy. Over time and through building their own capabilities, companies could expand their locational choices to do business in environments of institutional uncertainty, or what is labelled as institutional substitution strategy. Table 2 summarises different variables tested by previous research to examine the influence of pull factors on the OFDI coming from emerging and developing economies.

5 PULL DRIVERS OF EGYPTIAN AND SOUTH AFRICAN MNCs

This section examines the influence of host country macroeconomic specification on the OFDI from emerging African markets, as applicable to South Africa and Egypt.

5.1 Methodology and data sources:

Due to data limitation, two separate annual datasets are compiled by this article to address its key research question, namely to test the main pull factors of South African and Egyptian multinational corporations. The first dataset is drawn from the FDI Intelligence Corporation database. It only tracks the annual number of greenfield investment projects launched by South African and Egyptian companies during the period 2003 to 2014. Accordingly, this dataset does not include any information regarding other forms of OFDI involvement by South African and Egyptian firms, particularly with respect to M&As. As such, the dependent variable will be constructed through the annual number of greenfield investment projects rather than the value thereof⁹.

The second dataset is compiled from the quarterly bulletins published by the South African Reserve Bank and contains data of the annual stock of South African OFDI by some selected countries. As such, the dependent variable is the annual volume of South African OFDI stock per country¹⁰. It is not possible to compile a similar dataset for the stock of Egyptian OFDI based on the national

⁹The first dataset comprises 12 years (2003-2014), and 58 countries receiving South African greenfield projects, and 28 countries hosting Egyptian greenfield projects, for which it is possible to gather all the data needed to estimate the model. It is worth mentioning that the number of countries included in the analysis of each of the South African and Egyptian greenfield investments represents about 58 percent of the number of countries registered by the FDI Intelligence Corporation database as a destination for such investment coming from each country during the time span of this article. 100 countries have received South African greenfield investment projects compared to 49 countries hosting the corresponding Egyptian investment. In order to track the difference between the Egyptian and South African firms, a separate regression is run for each group in order to compare results. Therefore, the dataset drawn from the FDI Intelligence Corporation database will be divided into two subsets.

¹⁰The second dataset comprises 12 years (2001-2013), and 17 countries, for which there is published annual data regarding the annual volume of OFDI stock possessed by South Africa in each of them. Those countries are found to host nearly half of the total stock of South African OFDI registered by the South African Reserve Bank in 2013.

data sources¹¹.

Regarding the methodology, and given the nature of datasets compiled by this article, panel data models will be employed to assess host country macro-economic drivers of Egyptian and South African MNCs. More specifically, this article fits different panel data models to account for the difference between the two compiled datasets, regarding the dependent variable. Concerning the independent variables, there could be a large number of macroeconomic variables affecting OFDI, as is evident from the literature review. However, and based on the availability of data, this article focuses on examining the impact of 10 independent variables on the South African and Egyptian overseas investments.

Based on the literature review (Buckley, Clegg, Cross, Liu, Voss & Zheng, 2007; Alon, 2010; Kalotay & Sulstarova, 2010; De Beule, 2010; De Beule & Den Bulcke, 2012), the panel data models are specified as follows:

$$\begin{aligned} \text{OFDI}_{mjit} = & \beta_{0it} + \beta_1(\text{market-seeking})_{it} + \beta_2(\text{resources-seeking})_{it} + \beta_3(\text{asset-seeking})_{it} \\ & + \beta_4(\text{integration into the global economy})_{it} + \beta_4(\text{bilateral relation})_{it} \\ & + \beta_6(\text{institutions})_{it} + \beta_7(\text{similarity})_{it} + \beta_8(\text{other drivers})_{it} + \mu_{it} \end{aligned}$$

Where:

m stands for the dataset used in the model estimation: the first dataset model and the second dataset model.

j = the home country:

- Egypt and South Africa in the first dataset model.
- South Africa in the second dataset model.

i = the host country.

t = the time period:

- 2003-2014 in the first dataset model.
- 2001-2013 in the second dataset model.

μ = error term

OFDI denotes:

- The number of greenfield projects involvement by Egypt or South Africa in the first dataset model.
- South African OFDI stock in the second dataset model.

Market-seeking driver includes the nominal gross domestic product.

Resources-seeking driver encompasses natural resources rent as percentage to GDP.

Asset-seeking driver includes the total number of trade-marks application.

Integration into the global economy driver comprises trade openness.

Bilateral relation between host and home countries is captured by home country exports to the host country.

Institution is reflected by the rule of law index.

Similarity between host and home countries is captured by the geographical distance.

¹¹This is because none of the relevant Egyptian authorities publish a detailed record of the Egyptian MNCs.

Other drivers include the service sector value added in GDP, inflation and the official exchange rate.

Each of the independent variables will be discussed in details as follows:

a) Market-seeking driver:

The Investment Development Path theory does expect that the host country's level of development plays a significant role in determining the magnitude as well as the targets of its IFDI (as mentioned in Section 4.1). Associated with its theoretical importance, the size of the economy is proven to be one of the key dominant locational determinants of OFDI that is recognised by previous research (Buckley, Clegg, Cross, Liu, Voss & Zheng, 2007; Alon, 2010; Kalotay & Sulstarova, 2010; De Beule, 2010; De Beule & Den Bulcke, 2012). In conjunction with the above, UNCTAD's global survey of developing and transition economies-based MNCs concludes that 51 percent of the surveyed corporations have referred to market seeking as the most important motive for OFDI in most industries (UNCTAD: 2006). Most previous studies use the nominal GDP as an approximation for the actual economy size.

Hypothesis a.1 affirms that: OFDI flow from Egypt and South Africa is positively associated with the nominal GDP of the host country.

b) Resources-seeking driver:

Availability of natural resources could be one of the main pull factor drivers of OFDI, particularly in least developing countries, as assumed by Dunning in the IDP Theory (Narula & Dunning, 2000). Most previous studies conclude that OFDI is likely to target countries with high natural resources endowment (Alon, 2010; Kalotay & Sulstarova, 2010; De Beule, 2010; De Beule & Den Bulcke, 2012; Elshamy, 2015). Four variables in the literature have been used to capture the resources endowment, namely ratio of ores and metal exports to merchandise export, volume of agriculture, metals and fuels export, oil exports to merchandise export and natural resources rent as a percentage of GDP. Owing to data availability, this article will use natural resources rent as a percentage of GDP to capture resources endowment.

Hypothesis b.1 affirms that: OFDI flow from Egypt and South Africa is positively associated with the natural resources endowment of the host country.

c) Asset-seeking driver:

As emerging multinational corporations might lack competitive advantages, availability of strategic assets such as highly developed technology, know-how and trade-marks could be perceived as a main driver to attract such firms to set their investment in markets having availability of the required assets (Luo & Tung, 2007). In conjunction with the above, De Beule (2010) and De Beule and Den Bulcke (2012) have statistically proven the positive impact of host country assets on attracting both cross-border mergers and acquisitions and greenfields of India and China. Of the different variables used to examine the influence of asset-seeking motive, this article employs the total number of trade-marks.

Hypothesis c.1 affirms that: OFDI flow from Egypt and South Africa is positively associated with the host country's strategic asset.

d) Integration into the global economy driver:

There is empirical evidence that integration of the host country into the global economy is likely to fuel inward FDI (De Beule, 2010; Amal & Tomio, 2012; De Beule & Den Bulcke, 2012). The main reason for such positive correlation is the assumption that the majority of FDI projects are likely to target tradable sectors. Integration into the global economy should therefore be perceived as a significant determinant of FDI location decisions (Alon, 2010). As per literature, the variable trade openness is introduced to capture the degree of economic integration of the host country into the world economy. Trade openness is measured as the ratio of exports and imports over host country GDP.

Hypothesis d.1 affirms that: OFDI flow from Egypt and South Africa is positively associated with the host country's integration into the global economy.

e) Bilateral relation between the home and host country drivers:

In line with what is assumed by the Uppsala Model, Mughal, (2013) concludes that Indian exports are positively associated with Indian overseas investments. The same finding is proven by the research done by Buckley, Clegg, Cross, Liu, Voss and Zheng (2007) regarding the locational determinants of Chinese OFDI. Accordingly, home country export to the host country will be introduced to account for the bilateral relation between home and host country.

Hypothesis e.1 affirms that: OFDI flow from Egypt and South Africa is positively associated with their export flow to the host country.

f) Quality of institutions:

Along with the classical factor endowment of the host country, institutions tend to be one of the main determinants of the locational decision of outbound investments of EMNCs. Institutions, particularly economic ones, profoundly affect business through various channels, including, among others, transaction cost, information availability as well as uncertainty. Transaction cost and uncertainty tend to decline as the institutions organising the economy are being developed (Bevan, Estrin & Meyer, 2004). Previous research has proven the significant impact of institutions of the host country on the market selection of OFDI (Buckley, Clegg, Cross, Liu, Voss & Zheng, 2007; Amal & Tomio, 2012). Of the different indicators used by literature, the quality of institutions will be captured by the rule of law indicator.

Hypothesis f.1 affirms that: OFDI flow from Egypt and South Africa is positively associated with prevalence of rule of law in the host country.

g) Proximity between home and host country driver:

Supporting the foreign market selection pattern perceived by the Uppsala Model, previous research finds that firms often prefer to invest in neighboring countries due to the proximity between home and host country consideration (Buckley, Clegg, Cross, Liu, Voss & Zheng, 2007; Alon, 2010; Amal & Tomio, 2012). One of the widely common measures of the proximity between host and home countries is the geographical distance between the two markets, which is proven by various research to have a significant negative impact on the OFDI, as shown by Table 4.3.

Hypothesis g.1 affirms that: OFDI flow from Egypt and South Africa is negatively associated with the geographical distance to the host country.

h) Other drivers:

In addition to the above-mentioned drivers, this article intends to test the following determinants:

Inflation:

Higher inflation rate could be perceived by foreign investors as a sign of business climate instability, particularly if the inflation rate is volatile and unpredictable. Setting up investment in such an unstable environment might therefore become more risky. As such, higher inflation rate could result in drawing of IFDI (Amal & Tomio, 2012). Buckley, Clegg, Cross, Liu, Voss and Zheng (2007) attribute the negative association between inflation and IFDI to the fact that inflation makes long-term planning quite problematic, particularly when it comes to price setting and profit expectation. Conflicting findings have been concluded by previous research regarding the direction of relation between the two variables. While Elshamy (2015) has proven the negative association between the two variables, others have found the opposite (Amal & Tomio, 2012, Buckley, Clegg, Cross, Liu, Voss & Zheng, 2007; Mughal, 2013).

Hypothesis h.1 affirms that: OFDI flow from Egypt and South Africa is negatively associated with the host country inflation rate.

Exchange rate:

Amal and Tomio (2012) argue that host country exchange rate might have two different effects on IFDI, depending on the nature of the FDI. In the case of efficiency-seeking investment, an economy with appreciated domestic currency might become more attractive in order to reduce production costs. On the contrary, investors willing to conduct market-seeking projects may rather invest overseas where the domestic currency is depreciated, as such projects could yield higher profits. De Beule (2010) has proven that exchange rate has two different impacts on the cross-border acquisitions of India and China. The official exchange rate is used to test the impact of fluctuation in the host country's currency on the outward investments of Egypt and South Africa.

Hypothesis h.2 affirms that: efficiency-seeking OFDI flow from Egypt and South Africa is positively associated with the host country exchange rate.

Hypothesis h.3 affirms that: market-seeking OFDI flow from Egypt and South Africa is negatively associated with the host country exchange rate.

Quality of services:

Kalotay and Sulstarova (2010) have proven that the quality of services in the host country is a significant driver of the Russian OFDI. The significance of such motive increases in downstream markets. As shown in the literature review, the service sector value added as a percentage of GDP will be employed by this article to assess the influence of service sector quality on the Egyptian and South African outbound investment.

Hypothesis h.4 affirms that: OFDI flow from Egypt and South Africa is positively associated with the quality of the host country service sector.

Table 3 outlines the different variables used by this article (dependent as well as independent). In line with literature, different independent variables, where applicable, are measured in nominal terms as inflation is introduced in the analysis. Moreover, all variables are log transformed, with the exception of two variables: rule of law and the number of greenfield investment projects, due to excessive negative values in the first variable and zero inflation in the second variable.

To wrap up, the final equation of the panel data models adopted by this article is given as follows:

$$\begin{aligned} OFDI_{mjit} = & \beta_{0it} + \beta_1(GDP)_{it} + \beta_2(NAT)_{it} + \beta_3(TMAR)_{it} + \beta_4(OPN)_{it} + \\ & \beta_5(EX)_{it} + \beta_6(RL)_{it} + \beta_7(GD)_{it} + \beta_8(INF)_{it} + \beta_8(EXCH)_{it} \\ & + \beta_8(SGDP)_{it} + \mu_{it} \end{aligned}$$

5.2 Empirical results:

As mentioned previously, this article fits different panel data models to account for the difference between the compiled two datasets, with regard to the dependent variables. As to fitting the model of South African OFDI stock, the variance inflation factor (VIF) is estimated to detect existence of multicollinearity among the aforementioned 10 independent variables. As their tolerance indices are less than 0.1 (i.e. equivalent VIF values are greater than 10)¹², there might be a strong linear correlation among GDP, GD, RL, EX and TMAR, as shown in Table 4.

One of two strategies is used to address this problem as evident in literature. First, the Principle Component Analysis is deemed to be helpful to determine the principle variables (Niti & Vandana, 2013). Second, one could run more than one model to split the highly correlated variables (Amal & Tomio, 2012). This article advocates adopting the second strategy to avoid losing information as a result of dropping some of the independent variables. The importance of this strategy is increased by the fact that literature remains relatively sparse and in need of further development regarding the area of emerging African markets-based MNCs.

The pairwise correlation coefficients are thereby calculated to trace the nature of correlation among the five mentioned variables. Based on the finding

¹²According to Williams (2015), one should worry about the problem of multicollinearity only if any of the VIF values exceed 10 (or equivalently, tolerances of .10 or less).

exhibited in Table 5, three models, denoted hereafter as Model 1.a, Model 1.b and Model 1.c, are therefore run separately to test the significance of each group of variables on the South African OFDI stock. Re-estimation of the VIF for the three proposed models indicates that the multicollinearity problem is sorted out correctly (i.e. the tolerance indices of all variables used in the three models are greater than 0.1), as shown in Tables 6, 7 and 8.

Stationarity of all used data series has been tested. It was found that the series of different variables were of level 1 (i.e. non-stationary); see table 9. Furthermore, the LM test for autocorrelation rejected the null hypothesis of no autocorrelation at any conventional significance level for all the three models. In such case, this study proceeds to specify a Generalized Least Square (GLS) model with AR (1) and correlated disturbance to adjust for the existence of both problems, namely non-stationarity and serial autocorrelation.

Regarding the estimation of GLS models, it is worth mentioning that the Fixed Effect (FE) model does not fit by default with some of the selected time invariant independent variables, such as geographical distance. The FE model assumes that time invariant characteristics of panels (i.e. countries) may not influence the predictor variable. As the FE model is not an appropriate estimation method, this article has to choose one of two methods, namely the Random Effect (RE) and Pooled Ordinary Least Squares (POLS) models.

It has been found by previous literature that the RE model is the most common estimation technique (Buckley, Clegg, Cross, Liu, Voss & Zheng, 2007; Amal & Tomio, 2012). In addition to the above, and to assure the appropriateness of the RE model, the Breusch-Pagan Lagrange Multiplier test of random effect is conducted. As $\text{prob} > \text{Chibar2}$ indices for the three Models (i.e. 1.a, 1.b and 1.c) are less than 5 percent, it is likely to reject the null hypothesis and thus validating the significance of the RE model, as reflected by Box 1. This conclusion is further supported by the finding of the Wald Chi2 test, as seen later in the table representing the estimation results.

Apart from the above and in relation to fitting the models of South African and Egyptian greenfield investment projects, data series were tested for multicollinearity, stationarity and autocorrelation. General observation from Tables 10 and 11 is that, in both datasets, all independent variables are not strongly correlated to each other, and thus they could be tested simultaneously in one model, denoted hereafter as Model 2 and Model 3 for South African and Egyptian greenfield investment projects respectively. Stationarity of all used data series has been tested. It was found that the series of different variables, in both datasets, were stationary (i.e. of level 0); see Tables 12 and 13. Furthermore, the LM test for autocorrelation, for both models, accepted the null hypothesis of no autocorrelation at any conventional significance level (for Model 2: test statistic 1.35, p-value 0.24; and for Model 3: test statistic 0.67, p-value 0.43). The residuals are not so correlated.

Contrary to the first dataset models, count data panel models are fitting well with the second dataset models (i.e. Models 2 and 3), since they account for the special nature of the dependent variable (i.e. number of Egyptian and South African greenfield investment projects). As a count variable, the dependent

variable is characterised by the non-negativity and discreteness resulting from including only positive and integer values. Of the different count data panel models, Negative Binomial (NB) panel count models are the most commonly used technique to estimate count models, as it takes into consideration the over-dispersion and zero inflation of the dependent variable (Cameron & Trivedi, 1999; De Beule, 2000). Descriptive analysis of the total number of Egyptian and South African greenfield investment projects exhibits that the dependent variable is over-dispersed for both countries as the variance is greater than the mean, as seen in Table 14. Moreover, one could gauge that the zero is excessive in the response variable, as it accounts for around 84 percent and 67 percent of the number of Egyptian and South African greenfield projects respectively, as shown in Figure 10. Accordingly, the NB panel count model is the most appropriate estimation technique for the compiled dataset.

NB panel count datasets could be estimated by one of three models, namely: Random Effect (RE), Fixed Effects (FE) and Population Averaged (PA). As mentioned before, the FE model is excluded from the analysis as it does not control for time invariant variables included in the models. The RE model is preferred to Population Average, as the latter assumes that there is no panel effect, therefore the different groups are assumed to be relatively homogeneous. To double-check the fitness of the RENB (i.e. Random Effect Negative Binomial) model, the Wald Chi2 test is estimated (Reyna, 2007; Park, 2010).

Findings reflect that the RENB fits well with Model 2 in explaining South African greenfield investment projects. On the contrary, this conclusion is not supported for the Egyptian greenfield investment projects captured by Model 3. As the $\text{prob} > \chi^2$ of the test = 0.21, the null hypothesis (i.e. all coefficients are simultaneously equal to zero) was not rejected. Re-estimation of the Wald Chi2 test was in favour of fitting the PANB model (i.e. Population Averaged Negative Binomial) rather than the RENB model to explain the key pull drivers of the Egyptian greenfield investment projects (the $\text{prob} > \chi^2$ of the test = 0.018). Estimations of the five models are presented in Table 15.

Regarding the market-seeking driver, the market size of the host country, captured by GDP, has a positive influence on foreign market selection of Egyptian and South African greenfield projects. Similarly, the same conclusion is likely to be supported for South African OFDI assets. Accordingly, South African and Egyptian investments are assumed to target large economies. This finding is in line with previous research and what is concluded by the UNCTAD's global survey of developing and transition economies-based MNCs (UNCTAD, 2006).

In conjunction and associated with the above, the tangible influence of host country market size, particularly on the South African investors' decision of foreign market selection, could be further supported by considering the impact of other interrelated pull factors. These include, most notably, trade openness, the service sector quality, export to host country and the official exchange rate of the receiving destination.

Except for Model 1.c, models produce robust results for the trade openness with regard to the overall South African cross-border investments, including

both greenfield investment projects and total OFDI assets. South African outbound investments seem to favour countries with higher levels of trade openness. As postulated before, improvement in trade openness means that the host market becomes more integrated in the global economy, which in turn expands the potential size of the host economy. Similarly, prominence of service sector quality, proven by all models relevant to South Africa, indicates that South African corporations are predominantly interested in investment in downstream value chain, which is relatively linked to market seeking.

In the same context, despite being uncorrelated to South African greenfield investment projects, South African export to the host country has been proven to be a significant driver of the South African total OFDI stock, which could be perceived as further evidence of the influential role of the host market on shaping the map of South African cross-border investment. From another perspective, host country official exchange rate is proven in two models to have a significant negative influence over South African total OFDI, while not affecting the corresponding South African greenfield investment projects. As already mentioned, such negative association could be another proxy of the significance of market-seeking drivers.

In addition to the above, the influence of market-seeking interrelated pull drivers on the South African outbound investment tends to be more obvious when it is compared to the corresponding impact on Egyptian investment. Egyptian investors are less likely to consider trade openness, exchange rate and service sector quality when choosing their preferred foreign investment destinations. Moreover, Egyptian export to the host country doesn't stimulate Egyptian investment to this country.

From another perspective, the results provide evidence for the natural resources-seeking hypothesis, suggesting that South African and Egyptian greenfield investment projects are oriented to target countries with high natural resources endowment, as captured by the index of natural resources rent as a percentage of GDP. The same conclusion is likely to be supported by Model 1.c, with respect to the South African OFDI stock. Most previous studies conclude that countries rich in natural resources are more likely to attract FDI operating in natural resources-related sectors (Alon, 2010; Kalotay & Sulstarova, 2010).

Decisions of South African investors to set their greenfield projects in a certain market have been found to be driven by availability of strategic assets in the host country. On the other hand, strategic assets don't exercise any significant influence over their corresponding total OFDI stock and Egyptian greenfields as well. Almost half of the reviewed previous studies have admitted that strategic assets do not have a strong influence on the locational decisions of outbound investments flow from emerging economies (Buckley, Clegg, Cross, Liu, Voss & Zheng, 2007; Alon, 2010; Kalotay & Sulstarova, 2010). In addition to the empirical findings of previous research, only 14 percent of responses in the UNCTAD's global survey of developing and transition economies-based MNCs have referred to strategic asset seeking as motive for market selection (UNCTAD, 2006).

As predicted by the Uppsala Model, different models estimated by this article exhibit that Egyptian and South African MNCs show strong preference to

invest in nearby countries, as measured by geographical distance. This finding is in line with the fact that in 2014 Africa hosted around 67 and 63 percent of greenfield investments project involvement by Egyptian and South African MNCs respectively.

Apropos the role of institutions, findings shows that rule of law affects the market selection decision of South African investors. Nevertheless, conflicting findings have been concluded by the different models, regarding the direction of relation between the two variables. Despite being negatively associated with South African OFDI stock, the prevalence of rule of law in the host country boosts South African greenfield investment projects. Findings of previous research are likely to support the positive association between rule of law and OFDI. As rule of law improves, it is assumed that transaction cost and uncertainty tend to decline. It has been found that Egyptian investors do not pay tangible attention to the quality of institutions of the host country.

Contrary to the aforementioned pull factors which have been found to affect either South African or Egyptian investments or both of them, inflation is unlikely to influence the intention of both groups of investors while deciding on where to invest.

5.3 Limitations of the findings:

Before concluding this article, it is worth highlighting the main limitations of the previous results. While providing evidence for most of the hypotheses and being in line with the key findings of previous research, the results herein have to be treated with caution. The models used in this article certainly have various limitations. In Models 1.a, 1.b, and 1.c, based on data drawn from the South African Reserve Bank, only a small number of South African investment hosting countries have been included in the analysis.

In Models 2 and 3, based on data drawn from the FDI Intelligence Corporation, analysis is restricted to greenfield investment projects only, as the dataset does not include any information regarding other forms of OFDI involvement by South African and Egyptian firms, particularly pertaining to M&As. Moreover, owing to data limitation, it is not possible to include all countries hosting Egyptian and South African greenfield investment projects.

6 CONCLUSION

South African and Egyptian MNCs show overall preference to set their greenfield investments in nearby markets. In 2014, Africa was the most preferred destination for both groups of firms as it hosted around 63 and 67 percent of their greenfield projects respectively. Equally important, developing markets hosted around 72 and 89 percent of their investments in 2014. On the other hand, Europe is ranked first when it comes to the South African OFDI stock, as it held around 38 percent of such investment in 2013. Unlike emerging markets-based MNCs, the overall significance of Africa and developing markets tends to

increase in the structure of foreign markets of South African and Egyptian firms from one year to another.

Despite data limitation, the empirical analysis, using different panel data models, generally gives evidence to most findings of previous research pertaining to the pull factor drivers of emerging markets-based MNCs. Except for inflation, all host country macroeconomic drivers tested by this article have been found to affect either both South African and Egyptian MNCs or one of them at confidence levels less than or equal to 10 percent.

Market-seeking motives are found to be one of the most influential factors in the decision of foreign market selection of both groups of firms, bearing in mind the tangible difference between the two groups in this regard. Along with the actual market size of the host country, trade openness, the service sector quality, export to host country and the official exchange rate of the receiving destination are all significant pull factors of South African investors, taking into consideration the fact that coefficients are not consistently significant in the different models estimated by the authors.

Egyptian investors, on the other hand, are less likely to consider trade openness, exchange rate and service sector quality while choosing their preferred foreign investment destinations. Moreover, Egyptian export to the host country in no manner stimulates Egyptian investment flow to such country. On the contrary, Egyptian investors are solely concerned with the actual market size, as captured by the nominal GDP. In addition to market-seeking, other pull factors have been proven to influence the foreign market selection of South African and Egyptian MNCs. Results in this regard have confirmed the positive effect of the natural resources-seeking hypothesis, suggesting that South African and Egyptian greenfield investment projects are oriented to target countries rich in natural resources endowment.

Moreover, in line with what is expected by most theories, Egyptian and South African MNCs are showing preference to invest in nearby countries. This concurs with the fact that in 2014 Africa hosted around 67 and 63 percent of greenfield project involvement by Egyptian and South African MNCs respectively. From another perspective, the strategic assets availability in the host country and the prevalence of rule of law are found to solely affect the South African MNCs, bearing in mind two main matters. Firstly, coefficients are not consistently significant in the different models estimated by the authors. Secondly, conflicting findings have been concluded by the different models regarding the direction of relation between rule of law and South African outbound investments.

To consolidate the policy implications of the aforementioned findings concluded by this article, future research is recommended to address the current data limitation problem. It is proposed that this be achieved by expanding the dataset used in the analysis to include more countries, particularly those receiving Egyptian outbound investment, as well as the various types of OFDI, especially mergers and acquisitions. This is to complete the picture regarding the main factors shaping the map of Egyptian and South African cross-border investment. In addition to the above analysis, which focuses on the host country

macroeconomic perspective, it remains important to further examine the influence of pull factors from the microeconomic perspective to consider differences among sectors. Also, one could consider conducting the same analysis on the firm level. In doing so, special surveys should be conducted to collect detailed information required for such analysis.

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ANNEXURE
Table 1
Investment-development path stages

Stage	Outward FDI	Inward FDI	Net FDI flow	Economic development conditions	Motives for FDI
Stage 1	Negligible	Negligible	Zero	Lacks both ownership and location advantages	Resources-seeking investment
Stage 2	Remains very limited	Grows significantly	Negative	- Relative improvement in location advantages - Weak ownership advantages	Resources-seeking investment
Stage 3	Grows significantly	Lower growth rate	Remains negative as inward FDI stock remains higher	Relative improvement in both location and ownership advantages	Market-seeking and efficiency-seeking
Stage 4	Continued growth	Lower growth rate	Turns positive	Significant improvement in both location and ownership advantages	Efficiency-seeking, market-seeking and asset-seeking
Stage 5	High stock of outward FDI	High stock of inward FDI	Revolves around zero	Leading developed countries	Efficiency-seeking, market-seeking and asset-seeking

Source: Narula & Dunning (2000).

Table 2
Different pull factor determinants considered by previous research *

Domain	Variables/ relation with outward FDI	Kalotay & Sulstarova (2010)	Amal & Tomio (2012)	Alon (2010)	Buckley, Clegg, Cross, Liu, Voss & Zheng (2007)	De Beule (2010)	De Beule & Den Bulcke (2012)	Mughal, (2013)	Nunnenkamp, Maximiliano, Vadlamannati, & Waldkirch (2012)	Trinca (2013)	Elshamy, (2015)
Market size	Nominal GDP	+	+	+	+	+	+	+	-/ X		+
	Nominal GDP per capita		X	-		X			X		
	Nominal GDP growth rate			X					+ / X		
Natural resources endowment	Ratio of ores and metal exports to merchandise export	+			X	+	+				+
	Volume of agriculture, metals and fuels export			+	X						
	Oil exports to merchandise export						+				
	Natural resources rent as percentage of GDP								-/ X		
Assets endowment	Number of patents applications by residents	X					+				
	Total patents applications				X						+

Domain	Variables/ relation with outward FDI	Kalotay & Sulstarova (2010)	Amal & Tomio (2012)	Alon (2010)	Buckley, Clegg, Cross, Liu, Voss & Zheng (2007)	De Beule (2010)	De Beule & Den Bulcke (2012)	Mughal, (2013)	Nunnenkamp, Maximiliano, Vadlamannati, & Waldkirch (2012)	Trinca (2013)	Elshamy, (2015)
	Total patents applications as percentage to GDP					+					
	Total patents application/ population								+ / X		
	Total number of trade mark						+				
	Volume of expenditure on research and development			X							
	Expenditure on R&D as percentage of GDP					+					
	Tertiary school enrolment					+					
Similarity between host and home countries	Geographical distance	X	-	-	X	-	-	- / X	- / X	+	
	Geographical distance/population								- / X		
	Existence of home country expats			X				+	+ / X		
	Cultural distance		+		+						
	Common language							+	+ / X		
	Common borders									+	
	Income difference between home and host countries						-			X	

Domain	Variables/ relation with outward FDI	Kalotay & Sulstarova (2010)	Amal & Tomio (2012)	Alon (2010)	Buckley, Clegg, Cross, Liu, Voss & Zheng (2007)	De Beule (2010)	De Beule & Den Bulcke (2012)	Mughal, (2013)	Nunnenkamp, Maximiliano, Vadlamannati, & Waldkirch (2012)	Trinca (2013)	Elshamy, (2015)
	Difference between home and host countries regarding rule of law						+				
	Difference between home and host countries regarding control of corruption						+				
	Difference between home and host countries regarding political stability						-				
Integration into the global economy	Trade openness		+	+		+	+		X		
	Openness to FDI				X				+ / X		
	Policy liberalisation				+						
Economic relation between host and home countries	Regional grouping membership	+				+				+	
	Home country export to host			X	+			+			
	Home country import from host country			X				X			
	Bilateral treaty for investment and double taxation							+ / X	+ / X		
Quality of institutions	Control of corruption		+			-			X		

Domain	Variables/ relation with outward FDI	Kalotay & Sulstarova (2010)	Amal & Tomio (2012)	Alon (2010)	Buckley, Clegg, Cross, Liu, Voss & Zheng (2007)	De Beule (2010)	De Beule & Den Bulcke (2012)	Mughal, (2013)	Nunnenkamp, Maximiliano, Vadlamannati, & Waldkirch (2012)	Trinca (2013)	Elshamy, (2015)
	Government effectiveness		+								
	Political stability and absence of violence and terrorism		X			-					+
	Political risk				+						
	Rule of law		+			+					
	Regularity quality		X								
	Voice and accountability		+								
Other factors	Ratio of service sector to GDP	+									
	Exchange rate	X		X	X	+ /-					
	Real effective exchange rate		-								
	Inflation		+		+			+	X		-

Note:

* X refers to insignificant relation between the mentioned variable and OFDI, while minus and plus signs denote negative and positive subsequent relations. It is worth mentioning that some previous research had run more than one model to determine whether the significance of pull factors varies across sectors and/or groups of host countries. That is why one may find two different signs for the same variable in some of the reviewed research.

Table 3
Variables used in the model, definitions, data sources and hypothesised signs

	Variable	Definition	Hypothesised relation with OFDI	Data source
Dependent variables				
1.	OFDI (First dataset model)	Number of greenfield projects of South Africa and Egypt	-----	FDI Intelligence Corporation
2.	OFDI (Second dataset model)	Log of South African OFDI stock	-----	South African Reserve Bank
Independent variables				
3.	GDP	Log of nominal gross domestic product (GDP)	+	World Bank
4.	NAT	Log of natural resource rent as a percentage of GDP	+	World Bank
5.	TMAR	Log of total number of trade-marks	+	World Bank
6.	OPN	Log of exports plus imports as a percentage to GDP	+	World Bank
7.	EX	Log of export of home country to the host country	+	UNCTAD / South African Department of Trade and Industry
8.	RL	Rule of law index	+	World Bank
9.	GD	Log of geographical distance between home and host capitals	-	Map distance calculator
10.	INF	Log of inflation rate	-	World Bank
11.	EXCH	Log of official exchange rate	+	World Bank
12.	SGDP	Log of service sector value added as a percentage of GDP	+	World Bank

Source: Author's own compilation.

Table 4
Variance inflation factor (VIF) of Model 1 (South African total OFDI)

Variable	VIF	Tolerance
GDP	62.79	0.0159
NAT	7.52	0.133
OPN	8.51	0.1175
GD	34.61	0.0289
EX	10.34	0.0967
SGDP	8.13	0.123
INF	3	0.3337
RL	18.82	0.0531
EXCH	4.71	0.2123
TMAR	17.31	0.0578
Mean VIF		17.57

Source: Author's own calculation.

Table 5
Pairwise correlation coefficients of likely to be correlated variables in Model 1 (South African total OFDI)

	GDP	RL	EX	TMAR	GD
GDP	1				
RL	0.6	1			
EX	0.8	0.3	1		
TMAR	0.9	0.7	0.7	1	
GD	0.8	0.9	0.4	0.8	1

Source: Author's own calculation.

Table 6
Variance inflation factor (VIF) of Model 1.a
(South African total OFDI)

Variable	VIF	Tolerance
GDP	7.81	0.1281
NAT	3.47	0.2879
OPN	5.39	0.1856
SGDP	5.09	0.1966
INF	2.34	0.4279
RL	7.6	0.1316
EXCH	4.1	0.2439
Mean VIF		5.11

Source: Author's own calculation

Table 7
Variance inflation factor (VIF) of Model 1.b (South African total OFDI)

Variable	VIF	Tolerance
GD	7	0.1429
NAT	3.45	0.2899
OPN	3.25	0.3076
INF	2.1	0.4756
EXCH	3.15	0.3175
EX	2.78	0.3598
SGDP	5.35	0.1869
Mean VIF		3.87

Source: Author's own calculation.

Table 8
Variance inflation factor (VIF) of Model 1.c (South African total OFDI)

Variable	VIF	Tolerance
TMAR	7.94	0.126
NAT	6.96	0.1437
OPN	6.11	0.1637
INF	2.09	0.478
EXCH	2.23	0.4487
SGDP	6.99	0.143
Mean VIF	5.39	

Source: Author's own calculation.

Table 9
Results of the unit-root test for the South African OFDI stock dataset

Variable	P-value	
	Lag (0)	Lag (1)
FDI	1003	0.0000
GDP	0.1249	0.0374
NAT	0.2114	0.0006
OPN	0.1694	0.0850
EX	0.4522	0.0000
RL	0.6825	0.0002
TMAR	0.9729	0.0536
INF	0.3680	0.0000
EXCH	0.9886	0.0027
SGDP	0.4980	0.0017

Source: Author's own calculation.

Table 10
Variance inflation factor (VIF) of Model 2
(South African Greenfield investment projects)

Variable	VIF	Tolerance
GDP	6.13	0.1632
NAT	2.77	0.3605
OPN	1.6	0.6248
GD	1.79	0.5593
EX	1.31	0.7646
SGDP	3.33	0.2999
INF	1.58	0.6347
RL	2.93	0.3409
EXCH	1.39	0.7193
TMAR	5.43	0.1842
Mean VIF		2.83

Source: Author's own calculation

Table 11
Variance inflation factor (VIF) of Model 3
(Egyptian Greenfield investment projects)

Variable	VIF	Tolerance
GDP	3.45	0.2895
NAT	4.55	0.2199
OPN	1.87	0.5339
GD	2.35	0.4258
EX	1.39	0.719
SGDP	4.09	0.2442
INF	1.85	0.5395
RL	4.68	0.2137
EXCH	2.29	0.4362
TMAR	1.48	0.6757
Mean VIF		2.80

Source: Author's own calculation

Table 12
Results of the unit-root test for the South African Greenfield investment projects dataset

Variable	P-value
FDI	0.0000
GDP	0.0000
NAT	0.0000
OPN	0.0000
EX	0.0000
RL	0.0000
TMAR	0.0000
INF	0.0000
EXCH	0.0000
SGDP	0.0000

Source: Author's own calculation

Table 13
Results of the unit-root test for the Egyptian Greenfield investment projects dataset

Variable	P-value
FDI	0.0000
GDP	0.0000
NAT	0.0000
OPN	0.0000
EX	0.0000
RL	0.0000
TMAR	0.0000
INF	0.0000
EXCH	0.0000
SGDP	0.0000

Source: Author's own calculation

Table 14
Descriptive analysis of the Greenfield investment projects of Egypt and South Africa

Variable	Mean	Variance	Minimum	Maximum
Egyptian greenfield	0.22619	0.426297	0	7
South African greenfield	0.734195	2.215577	0	13

Source: Author's own calculation

Table 15

Pull factor determinants of OFDI of Egypt and South Africa

Country Variable	South Africa				Egypt
	Model 1.a	Model 1.b	Model 1.c	Model 2	Model 3
GDP	0.631 (0.211)*** <u>0.003</u>	NI	NI	0.69 (0.36)* <u>0.056</u>	0.98 (0.40)** <u>0.014</u>
NAT	0.253 (0.156) <u>0.106</u>	0.221 (0.153) <u>0.154</u>	0.488 (0.181)*** <u>0.007</u>	0.80 (0.26)*** <u>0.002</u>	0.99 (0.50)** <u>0.046</u>
TAMR	NI	NI	-0.022 (0.280) <u>0.937</u>	0.88 (0.34)** <u>0.011</u>	-0.01 (0.04) <u>0.730</u>
OPN	1.655 (0.525)*** <u>0.002</u>	1.180 (0.504)** <u>0.019</u>	0.816 (0.610) <u>0.182</u>	1.14 (0.69)* <u>0.099</u>	1.37 (1.24) <u>0.271</u>
EX	NI	0.461 (0.148)*** <u>0.002</u>	NI	0.06 (0.13) <u>0.678</u>	0.09 (0.14) <u>0.525</u>
RL	-0.967 (0.306)*** <u>0.001</u>	NI	NI	0.36 (0.21)* <u>0.091</u>	0.03 (0.45) <u>0.954</u>
GD	NI	-3.003 (1.087)*** <u>0.006</u>	NI	-5.93 (1.20)*** <u>0.000</u>	-3.05 (1.06)*** <u>0.004</u>
INF	0.023 (0.110) <u>0.833</u>	0.030 (0.108) <u>0.760</u>	-0.042 (0.128) <u>0.739</u>	0.11 (0.18) <u>0.552</u>	0.24 (0.43) <u>0.567</u>
EXCH	-0.801 (0.424)* <u>0.059</u>	-1.148 (0.455)** <u>0.012</u>	-0.410 (0.413) <u>0.321</u>	0.00479 (0.0003681) <u>0.896</u>	0.19 (0.26) <u>0.481</u>
SGDP	7.40 (2.86)** <u>0.010</u>	9.592 (2.837)*** <u>0.001</u>	7.308 (2.757)*** <u>0.008</u>	0.04 (0.01)*** <u>0.003</u>	-2.95 (2.20) <u>0.179</u>
Constant	-18.96 (4.75)*** <u>0.000</u>	-8.367 (4.47)* <u>0.061</u>	-11.047 (4.926)** <u>0.025</u>	4.04 (5.06) <u>0.425</u>	-3.59 (7.80) <u>0.645</u>
Wald Chi2	34.45	31.73	13.03	70.92	21.47
Prob > chi2	0.00	0.00	0.071	0.00	0.018

Note:

Values mentioned in each of the table cells are as follow: the estimated coefficient, the standard error (in parenthesis), and the probability value (underlined).

***, ** and * indicate that the coefficient is significant at 1, 5 and 10 percent, respectively.

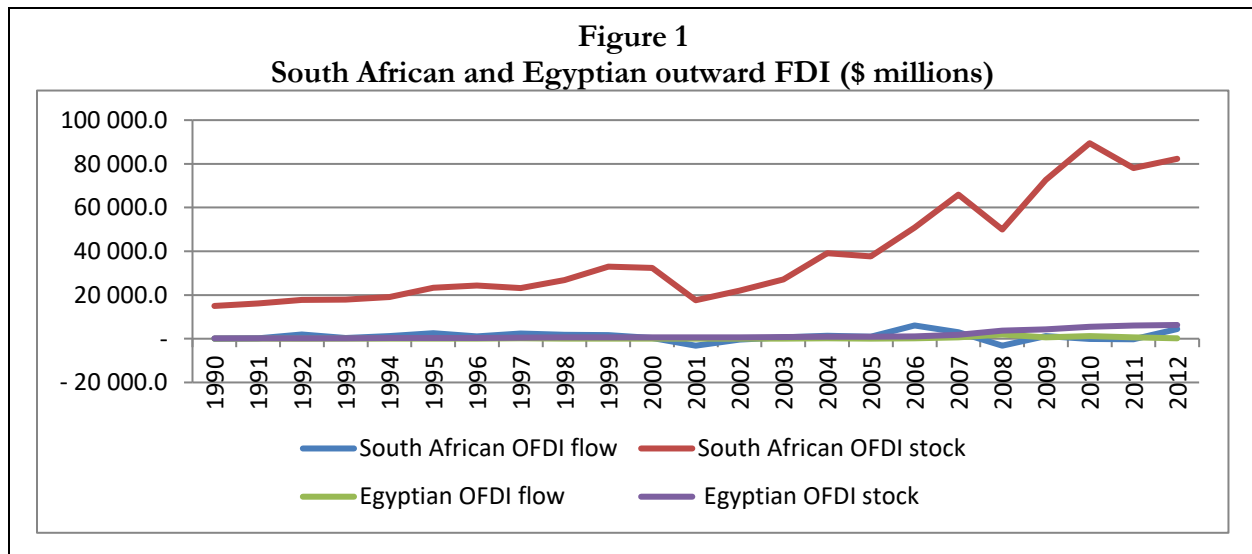
NI means not included in the model due to being strongly linearly correlated with one or more other variables.

Box 1

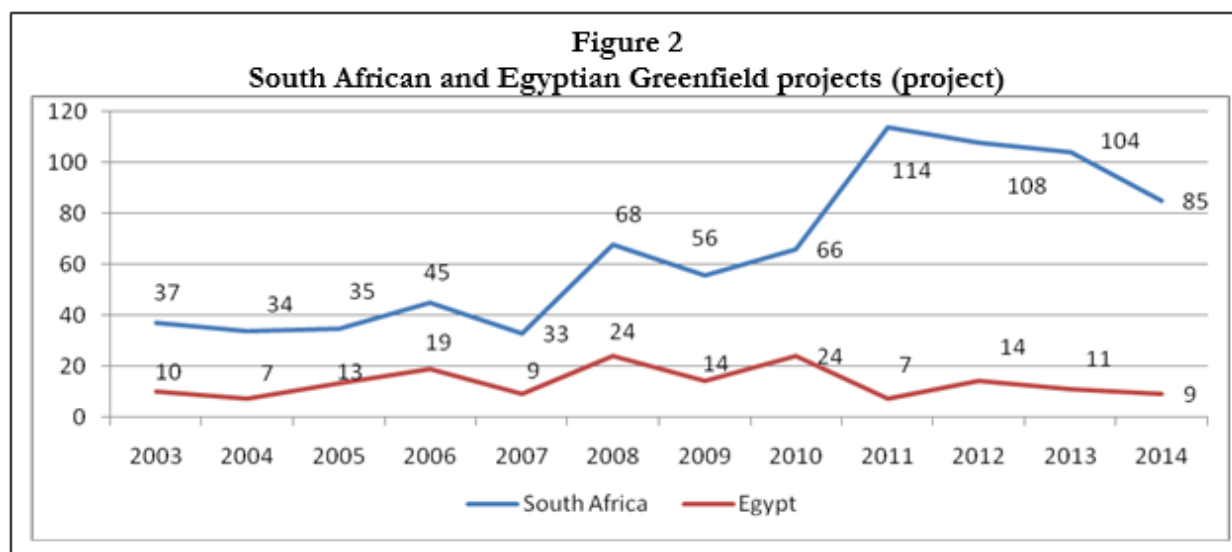
Breusch-Pagan Lagrange Multiplier test of random effect

<u>Model 1.a</u>	<u>Model 1.b</u>	<u>Model 1.c</u>
FDI[code,t] = Xb + u[code] + e[code,t]	FDI[code,t] = Xb + u[code] + e[code,t]	FDI [code,t] = Xb + u[code] + e[code,t]
Estimated results:	Estimated results:	Estimated results:
Var sd = sqrt(Var)	Var sd = sqrt(Var)	Var sd = sqrt(Var)
-----	-----	-----
FDI .6453201 .8033182	FDI .7468064 .8641796	FDI .7628862 .8734336
e .1009671 .3177532	e .1652715 .406536	e .1835044 .4283741
u .9619792 .9808054	u .9106941 .9543029	u .8222127 .9067594
Test: Var(u) = 0	Test: Var(u) = 0	Test: Var(u) = 0
chibar2(01) = 268.54	chibar2(01) = 449.75	chibar2(01) = 381.82

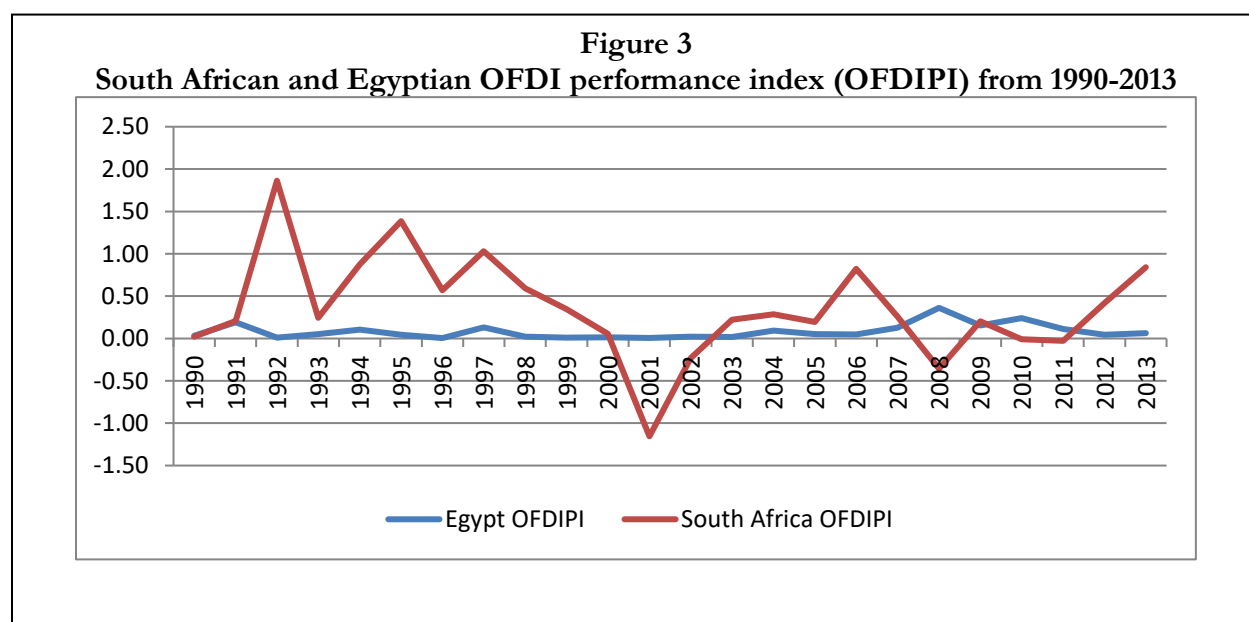
Source: Author's own calculation



Source: UNCTAD statistics.

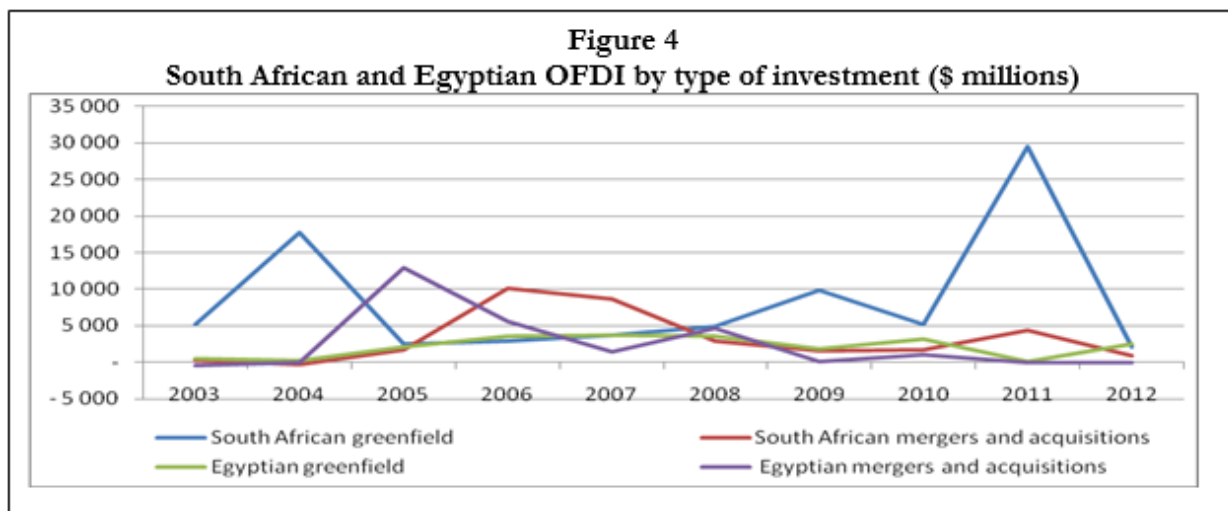


Source: FDI Intelligence Corporation

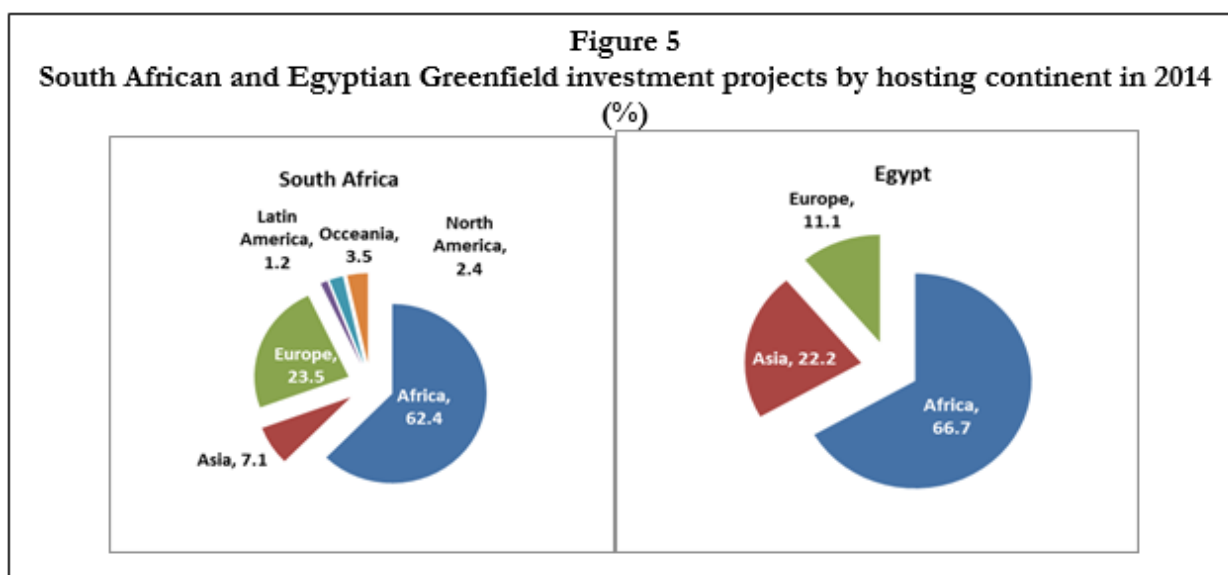


Source: Author's own calculation based on UNCTAD statistics.

Note: OFDIPI captures a country's relative success in investing in the global economy via FDI. If a country's share of global OFDI matches its relative share in global GDP, the country's OFDIPI is equal to one. A value greater than one indicates a larger share of OFDI relative to GDP; a value less than one indicates a smaller share of OFDI relative to GDP

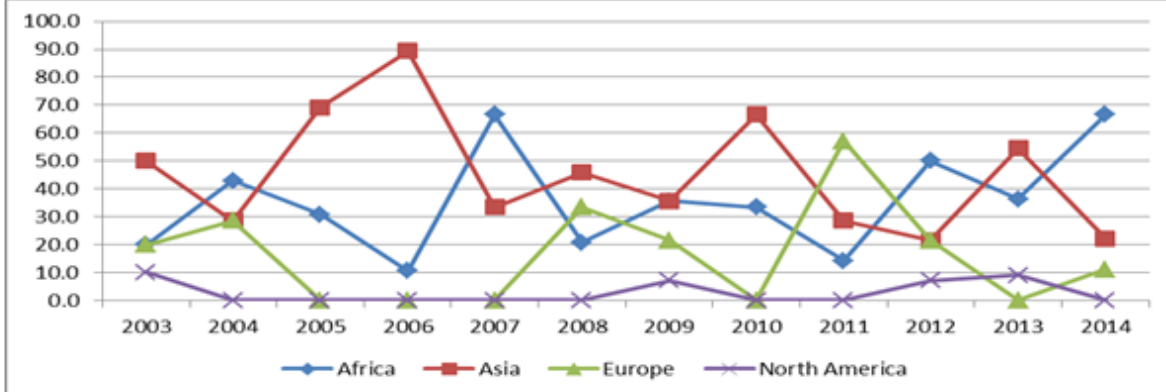


Source: UNCTAD statistics.



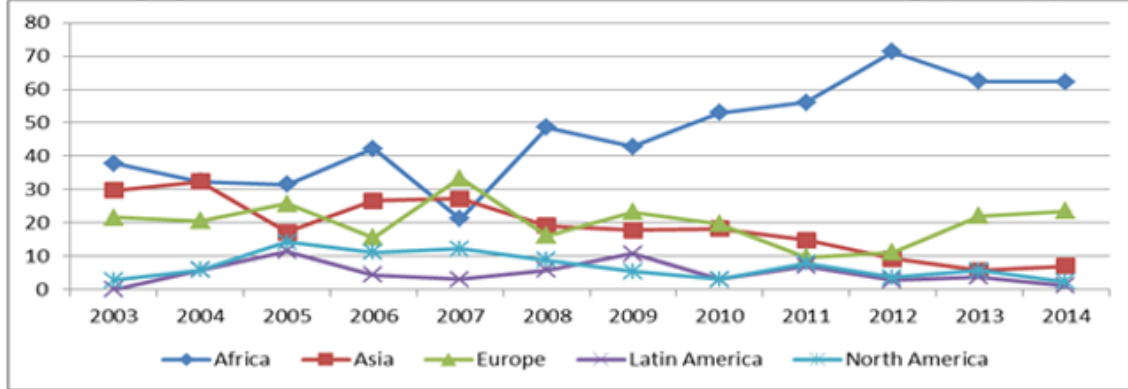
Source: Author's own calculation based on FDI Intelligence Corporation statistics.

Figure 6
Geographical breakdown of Egyptian Greenfield investment projects (%)



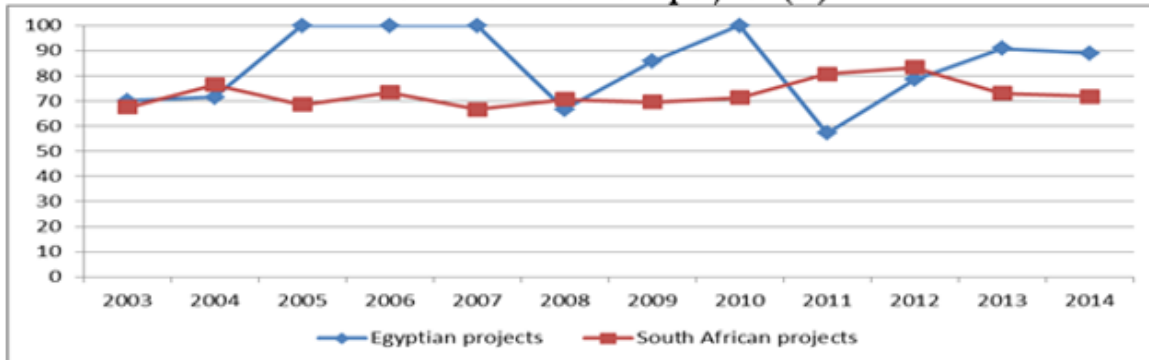
Source: Author's own calculation based on FDI Intelligence Corporation statistics.

Figure 7
Geographical breakdown of South African Greenfield investment projects (%)



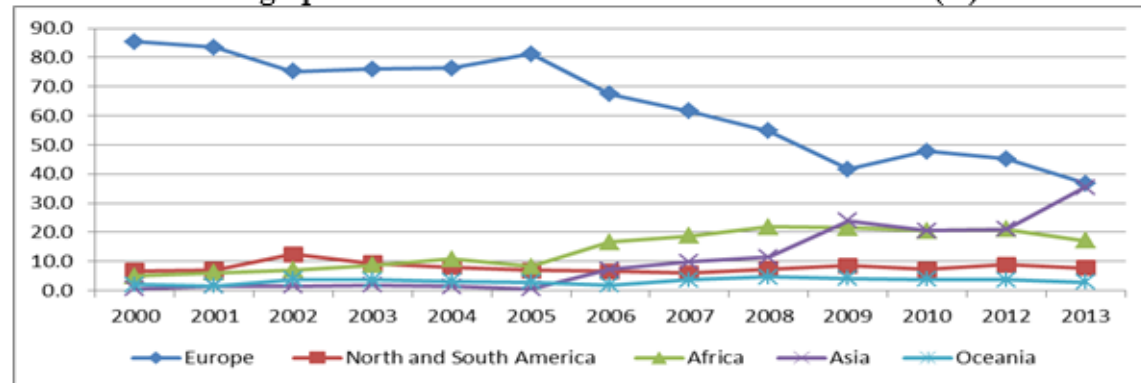
Source: Author's own calculation based on FDI Intelligence Corporation statistics.

Figure 8
Share of developing countries from total South African and Egyptian
Greenfield investment projects (%)

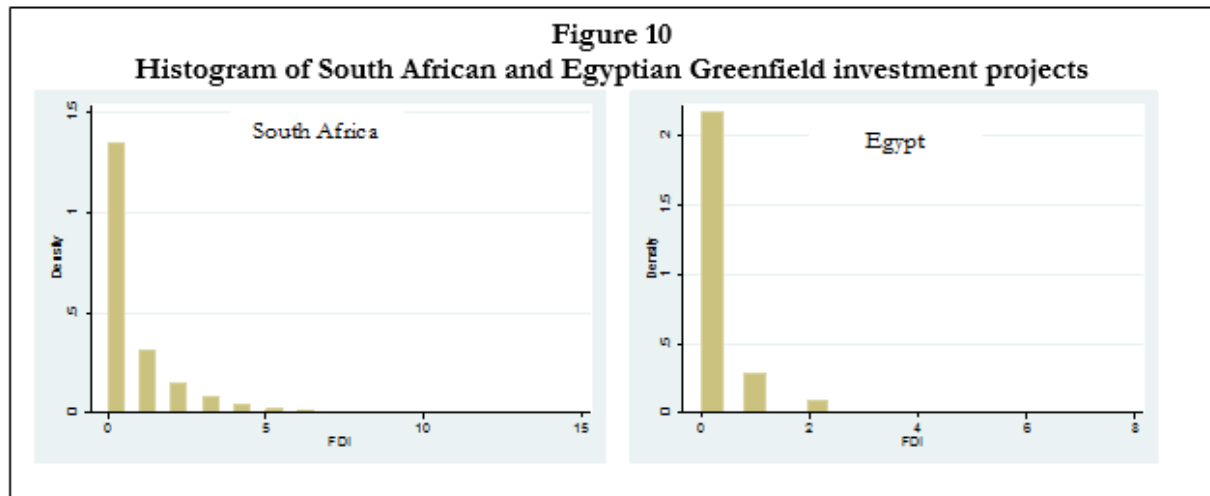


Source: Author's own calculation based on FDI Intelligence Corporation statistics.

Figure 9
Geographical breakdown of South African OFDI assets (%)



Source: Author's own calculation based on South African Reserve Bank statistics.



Source: Author's own calculation based on FDI Intelligence Corporation statistics.