Outward Investment from developing countries: 
Is the Last Wave of Investment Different? Evidence from the BRICs

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List of Acronyms

CIS – Commonwealth of Independent States
FDI - foreign direct investment
IDP - investment development path
LLL - linkage, leverage, learning
M&A - mergers and acquisition
MNCs – Multinational Companies
MOFCOM – Ministry of Commerce (China)
NICs- newly industrialized countries
NOIP – net outward investment position
OECD – Organization for Economic Co-operation and Development
OFDI -outward foreign direct investment
OLI – ownership, location, internationalization
R&D -research and development
SOEs -state owned enterprises
TNCs – transnational companies
TNI – transnationality index
Abstract

With the beginning of the new millennium, the outward foreign direct investment from the developing countries has increased with an unprecedented magnitude. This research examines the characteristics of the recent wave of investment from the developing countries and compares them to earlier periods of investment from the developing countries. The intentions of this paper was to uncover if this recent wave of investment is different in nature from previous waves. The study goes in depth into the behavior of the BRIC countries which are the leaders of today's wave. The findings were that today's increase of investment is different not only in magnitude but also in character as the leaders, especially Russia, China and Brazil have quite unique characteristics that differentiate them from other developing countries that were the most important sources of outward investment in the past.

Keywords

Outward FDI, developing countries, determinants of FDI, BRICs, Third Wave of OFDI
Chapter 1
Introduction

For most of the recent history, the world flows of investment have been circulating almost exclusively between the members of the the developed countries, the so called Triad comprised of the United States, Europe and Japan (UNCTAD 1991). By the end of the 1990s, countries from the developed North accounted for 76% of all inward stock and 90%\(^1\) of the world outward flows, leaving the rest of world at the bottom of the ladder.

The beginning of the new millennium marked a trend that seems to put the investment to and from the developing countries in a different perspective. Not only the flows to developing countries in 2010 reached an unheard of level of 51.6\(^2\), but also quite a few of the developing countries seem to be on a path of becoming global investors themselves.

Figure 1.1 illustrates the development of the outflows from the developing countries throughout the past 40 years:

![Figure 1.1](source)

As illustrated, the emergence of the developing countries, not only as

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1 UNCTADstats accessed November 3, 2011
2 UNCTADstats accessed November 3, 2011
recipients but also as a source of OFDI started in the beginning of the eighties but the magnitude of the outflows was unimpressive.

In terms of outward stock, which shows the value of the share of capital held by the investing country in the host country\(^1\) (UNCTAD 2011), between 2001 - 2010, the cumulative value of the stock of outward capital from developing countries has dramatically increased with more than four times over a short period of ten years\(^2\) This growth of OFDI stock by far surpassed the growth of the economies from the north whose stock increased 2.5 times over the same period (from 6.8 billion to 16.82)

Table 1.1 illustrates the change in share of OFDI flows from the top ten source countries from the developing economies. The top ten source countries are calculated based on UNCTAD statistics in each respective period and are selected because they comprise the majority of the outflows from the developing world.

<table>
<thead>
<tr>
<th>Period</th>
<th>Share in Total World Outflows</th>
<th>Share in Total Outflows from Developing Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990 – 1992</td>
<td>7.60%</td>
<td>99.00%</td>
</tr>
<tr>
<td>1993 – 1995</td>
<td>14.60%</td>
<td>91.00%</td>
</tr>
<tr>
<td>1996 – 1998</td>
<td>11.30%</td>
<td>85.00%</td>
</tr>
<tr>
<td>1999 – 2001</td>
<td>8.80%</td>
<td>91.00%</td>
</tr>
<tr>
<td>2002 – 2004</td>
<td>9.30%</td>
<td>86.00%</td>
</tr>
<tr>
<td>2005 – 2007</td>
<td>12.30%</td>
<td>76.00%</td>
</tr>
<tr>
<td>2008 – 2010</td>
<td>20.30%</td>
<td>80.00%</td>
</tr>
</tbody>
</table>

Source: Author's compilation based on UNCTADstats accessed October 20, 2011.

As evident from Table 1.1, the share of outward investment from the top ten sources of OFDI from the developing world rose to remarkable 20%

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1 UNCTAD 2011 definitions
2 Author's computation based on UNCTADstats accessed November 3, 2011
in the most recent years and it has never surpassed 15% in the last 20 years. A possible explanation is that this increase can be attributed to the effect of the crises on the OFDI from the developed countries.

On the other side, we can see that the share of OFDI from the developing countries started to increase significantly since 2005 and this was a period when outflows from the developed world were experiencing significant increases as well. Therefore this trend was emerging prior to the economic downturn and leaped ahead after the crises unfolded.

In 2010, the top 10 countries contributing to 80% of the outflows from the developing world and 23% of the world outflows were Hong Kong, China, Russia, Singapore, Korea, India, Mexico, Malaysia, Brazil and Taiwan. It is noteworthy to point out that for the purpose of this study, the classification categories of developing and developed countries are used as described by UNCTAD and for a clearer representation of trends, the “developing countries” category will encompass “transition countries” as well.

Another trend is that the percentage of the volume of investment from the top ten countries in the total volume of outward investment from developing countries, decreased to the 70th percentile suggesting that in the recent years outward investment is less concentrated in the top investor countries signifying the emergence of new players from the bottom. A deeper probe shows the rise of outward investment from countries such as Indonesia, Thailand, Angola, Nigeria, Lybian Arab Jamahiria, and Morocco that have appeared on the radar since 2005 (UNCTAD statistics accessed November 3, 2011).

Table 1.1 illustrates that in the beginning of the 1990s there was a significant increase in the outward investment from developing countries and looking further reveals that this was due to increased investment from the newly industrialized countries (NICs) of Hong Kong, Singapore, Korea and Taiwan. Of late, the share of the NICs countries has been on a
downward slope reaching 30 % in 2005\(^1\).

Therefore, new significant sources of outward investment have emerged. For the first time in 2003, India made an appearance on the list of the top ten investors and since 2006 the country is firmly keeping its position among the leading sources of OFDI from the South. Investment from Russia and China was climbing up in the beginning of the 2000s and past 2005 both countries took positions among the top 5 investor countries\(^2\).

The former leaders from the NICs countries, while still influential, have given a way to the quickly adapting new players that seems to be capable of climbing up the ladder with a remarkable speed.

### 1.1 Scope of research

With this paper I will take a closer look at the current wave of FDI outflows from the developing countries. The aim of the research is to uncover the magnitude of the difference between this wave and previous periods in which an increase of outward investment from the developing world was taking place.

The main research question is directed toward discovering if the determinants of direct investment of the leaders of today's wave are different and if traditional theories of FDI are still adequate in explaining the decisions of multinationals from the developing world. In order to accomplish that, the research will be focused towards uncovering i)differences between the overall trends today and earlier periods , ii)differences in determinants that motivate the leaders of today's wave to go abroad from what impelled their investment decisions in earlier periods and iii)differences between the investment from the BRICs and the other

\(^1\)Author's computation based on UNCTADstats – accessed November 3, 2011

\(^2\)Authors computation based on UNCTADstats - accessed November 3, 2011
developing countries in past periods.

Since the main unit of FDI is the multinational firm, I will look at determinants and theories that could influence decisions at a firm-level but I will also consider more broader frameworks that include home country characteristics as well.

Beyond this point the paper will be structured as follows. Chapter 2 will provide description of the overall trends during the earlier periods of investment from the developing countries and will trace in more detail the investment behavior of the BRICs. Chapter 3 will introduce the different theoretical frameworks explaining the determinants of flows. Chapter 4 will analyze the overall trends in the outflows during the most recent wave of investment. Chapter 5 will concentrate on uncovering the determinants of OFDI flows from the BRICs in the recent wave and compare the findings to trends in the behavior of the BRICs in the previous years and Chapter 6 will conclude.

There are several reasons why the BRICs countries are selected for a closer study as opposed to other developing regions. First, this group of countries seems to be leading the wave of today’s surge of investment from the developing world as their share in increased from 5% in 2000 to 36% in 2010 surpassing the Asian Tigers (UNCTADstats accessed November10, 2011). Second, the BRICS are newcomers in the sense that they were never the leaders of any of the previous waves of investment from the peripheral countries. Lastly, unfortunately OFDI data pertaining to the developing countries from the bottom that have been climbing up the ladder in the last years is very limited and scattered as investment from those countries is a very recent event. Thus, data limitation prevents this study of making a
meaningful analysis of the determinants of the countries that contribute to the bottom 20% of the outward investment from the developing countries.
Chapter 2
Historical overview of Outward FDI from developing countries

As the main objective of this paper is to uncover novel trends in the most recent increase of investment from developing countries, this chapter will briefly present the main characteristics of the first and the second wave of investment from the developing countries and will focus on the nature of investment from the BRICs during those periods.

2.1 First wave of Outward FDI from developing countries - under import substitution policies (1960 -1980)

The first wave of investment from developing countries occurred in an environment of import substitution policies that most developing countries adhered to up to the 1980s (Chudnovski and Lopez 2000:31, Rasiah et al 2010:336). In the late 1960s and the beginning of the 1970s, the manufacturing sector of a few developing countries such as Singapore, Hong Kong, India, Brazil, Mexico and Argentina increased dramatically and even reached the scale of the manufacturing industry of some of the industrialized countries (Wells 1983:2). Until then, investment from the countries from the periphery that didn’t pertain to a few isolated cases was almost non existent, and this first surge in OFDI from the developed countries altered their image as purely agricultural societies and sources of raw materials (Wells 1983:2).

During this period, outward investment was largely confined to few developing regions such as South Asia, South-East Asia and few countries from Latin America. It was directed predominantly towards neighboring
countries. Manufacturing was by far the leading sector accounting for over 80% of the investment from India (Lall 1983:94). For example, the geographical destinations for the investment of the Indian firms were mainly countries such as Indonesia, Malaysia, Nigeria, Thailand and Nepal. They were at a lower level of development and most likely the Indian firms possessed some type of an advantage in comparison to the indigenous firms which helped them penetrate the local market (Lall 1983:27).

It seems that during this period some manufacturing firms were able to adapt technology from the industrialized countries by substituting some of the inputs with locally produced raw materials or parts and then introduce this technology to other developing countries (Wells 1983:38).

Some investment in the other two sectors was also visible, namely the banking, construction, hotels, engineering and consultancy industries. The extractive sector was also present however at a very small magnitude. Moreover, while in the West the purpose of the banks was to mainly support the operations and needs of the already existing multinationals, the banking industry from the developing countries was related to supporting trade and exports (as was manufacturing) (Wells 1983:118-138).

Brazil: “The concluding Chapter of the First Wave”

Compared to the other Latin American countries that led the First Wave of investment in the 1960s and the 1970s, Brazil seems to have exhibited slightly different behavior from its neighbors. Investment from Brazil started to increase in the 1980s when it was already on a decline in the other Latin American economies and it was considered to be the last push of investment from the first wave (Chudnovsky and Lopez 2000:46).

According to UNCTAD data, this trend actually started in the end of 1970 when outflows from Brazil surpassed outflows from the rest of Latin
America and lasted up to the late 1990s\(^2\). Consequently, in 1980 and 1990\(^1\), Brazil was the leader of the developed world in terms of OFDI stocks (UNCTAD 2006) even before full blown privatization activities took place. Not only the timing of the outward investment from Brazil was atypical but also its characteristics seemed to be very unusual. In contrast to the other Latin American countries, Brazil was targeting not only developing neighbors where its firms could exploit a possible advantage acquired during years of successful industrialization under import substitution. It was also aiming at the developed country's markets and their skill intensive manufacturing industries such as car components, textiles, compressors and packaging (Chudnovsky and Lopez 2000:Table 4). Thus, in contrast to other developing countries that were predominantly concentrating manufacturing activities in countries at similar or lower stage of development, Brazil firms were not shy to invest in more developed countries and operate in an environment with stronger competition.

The “Red Multinationals”

Contrary to expectations, incidents of outward investment from companies from the Russian Federation can indeed be traced back to the Soviet era (Filippov 2009, Andreff 2002). The “Red Multinationals” were unsurprisingly fully state owned companies and their activities were directed particularly towards supporting trade activities of the mother country (Andreff 2002).

Even though I was perplexed by the lack of numerical data about the geographical and industrial distribution of the subsidiaries of those companies, the observation that one third of the foreign trade related organizations of the Soviet Union “had invested in 324 wholly-owned or partially owned Western companies” (King at al. 1995), pointed to the existence of subsidiaries oriented towards the West. However, the “Red

\(^2\) UNCTADstats accessed November 10, 2011.
\(^1\) Source: World Investment Report 2006: Table III.4
Multinationals” during those times were small in size and scale of operation and, unlike their Western counterparts, profit maximization was not their primary motive as in many cases losses were reported (King et al. 1995). The activities of their subsidiaries were concentrated exclusively in the service sector with the most vital activities being marketing, purchasing, distribution and transportation (Andreff 2002, King et al. 1995).

Data on manufacturing activities of the “Red Multinationals” in the developed countries was not found (King et al. 1995) but it is plausible to suspect that due to the political agenda of those times such activities were conducted internally behind the borders of the USSR and its satellite countries.

**India - Manufacturing in the neighboring countries**

The First wave of outward investment in India embraced the period during times of protectionism and import substitution strategies. Investment from Indian enterprises started to appear on the scene but was relatively low in volume. It was directed almost exclusively towards establishing manufacturing facilities in the neighboring developing countries (Pradhan 2005, Kumar 2007, Lall 1983:29). During this time the Indian firms were the most diversified among peers in the manufacturing industries they were investing and they had the highest “know-how” suggesting that these firms had superior knowledge (Lall 1983:15) over other developing firms.

It seems that during this period cultural ties and geographic proximity played a very important role in influencing the locational investment decisions (Lall 1983:28). Greenfield establishments were the exclusive form of entry into the foreign market (Athukorala 2009). Keeping in mind the background of the political and economic agenda during this era, the outward investment scene was heavily dominated by a few state companies (Hong 2011). For these companies OFDI was an important tool for supporting export (Lall 1983:24). A few large business groups such as
Tata and Birla Group were among the major investors of that time but their investment decisions were monitored and sometimes dampened by government restrictions (Lall 1984:33). Thus the main driver that was pushing companies to go abroad was to overcome restrictive policies at home (Lall 1983:68).

**“China” - no firms allowed to go out**

During this first wave of investment, outward flows from China seems to have been almost nonexistent as described by Goldstein (2010) and Cheng and Ma (2008:2). However, this scenario started to change at the end of the wave when in 1979 as China adopted an “open door policy” (Mathews 2008) which allowed for some firms (although heavily regulated) to go abroad (Mathews 2008, Cheng and Ma 2008:3).

In the 1980s the 2/3 of OFDI was directed towards Asia followed by North America and Oceania. The majority of the Asia OFDI went to Hong Kong and Macau (Cheng and Ma 2008:3). Services were the most attractive industry for investment however with the main motivation being to promote exports (Cheung and Ma 2008:3). It was also driven by political rather than economic factors (Cheung and Qian 2009:314). Extraction of natural resources was the second industry of importance (25%) and manufacturing as at the bottom amounting to 15%. Prior to ‘85, only government entities were allowed to invest (Cheung and Qian 2009:314).

In summary, the outward investment from the developing countries during the first wave was small in magnitude and it was at large directed towards the manufacturing sector of the neighboring developing countries who were usually at the same or lower level of development.

Geographical and cultural proximity seems to have played an
important role in the investment decisions of the firms. Brazil was the latecomer in the first wave of investment and while still investing in manufacturing in contrast to the other countries, Brazilian firms were highly investing in manufacturing in the developed world as well. India's Behavior is in line with the general trends of the first wave. China and Russia were under a closed regimes and the rare incidents of outward investment were with trade supporting purposes. In terms of motivations of the firms during the first wave it seems that they were driven by the desire to access markets, access low cost production and support trade activities (Rasiah at al. 2009:337, Wells 1983:88).

2.2 Second wave of investment - under export promotion policies (1980s onwards)

After a period of economic recession experienced between 1980 – 1984, the growth of FDI outflows exceeded three times the growth rate of exports and four times the growth of world's GDP (UNCTAD 1991). This increase occurred against the backdrop of a changing attitude towards restrictive policies and many governments shifted gear towards a more liberal agenda and opened the doors to international firms to enter markets that were previously restricted to government owned entities only (UNCTAD 1991).

During this period, the NICs countries of Hong Kong, Singapore, Taiwan and Korea adopted export-oriented industrialization strategies. Pushed by current account surpluses and appreciated currency (making it more profitable for companies to acquire foreign assets in comparison to domestic assets) (UNCTAD 1991), they took the lead in the second wave of investment (Rasiah at al. 2010:336). The shift in policies and the increased investment from the NIC countries was also accompanied with a major shift at industry level where manufacturing lost ground and services became the
leading industry (Rasiah et al. 2010:335).

During this time the NICs leading the wave were expanding most significantly into the neighboring Asian countries and to other Asian countries. They were attracted by the the dynamic growth of the markets of some countries and access to cheap labor in other countries (Rasiah et al. 2010:336). In contrast to the firms from the earlier period, the firms in the second period were more frequently private owned but the state was still largely involved, especially in the extractive sector (Rasiah et al. 2010:335).

During this time some firms started to look into developing countries' resource and markets, next to developed countries' assets and markets (Rasiah et al. 2010:337).

Some companies from the east Asian countries - aspecially Korea and Taiwan started to invest in developing countries as well (Chudnovski and Lopez 2000:32).
Brazil: decade of full blown privatization and decline in OFDI

While the first wave of investment from Brazil briefly overlapped with the increased investment from the NICs countries, it abated in the beginning of the 1990s as the country embarked on a large-scale privatization program during which not only small companies but also state oligopolies in strategic industries were privatized (OECD 1999). According to Chudnovsky and Lopez (2000), as Brazil was a latecomer in the privatization process, the delayed structural reforms explained the decrease of outward FDI from Brazil as a “linkage exists between structural reforms and FDI outflows by Latin American firms in the 1990s” (Chudnovsky and Lopez 2000:55).

During this time the Brazilian firms that engaged in FDI were predominantly economic groups that were mostly family owned operating in mature industries such as textile, paper, steel and few in more skill intensive industries such as car and transport equipment. State owned companies dominated the extractive sector and more specifically the oil industry. The majority of the companies that were previously operating in developed countries, especially those operating in skill intensive industries, were purchased by TNCs (Chudnovsky and Lopez.2000:56 - 57)

According to Chidnovski and Lopez (2000) during this time the main factors that motivated firms to go abroad were unfavorable home environment and search for resources and some industry specific characteristic such as in the car industry - such as technological and productive transformation (Chudnovsky and Lopez.2000:50)

Russia - The rise of the “Oligarchs” and expansion into CIS
With the collapse of the “Soviet Union” at the end of the 1980s, most of the “Red Multinationals” and their foreign subsidiaries were disseminated. In the early 1990s president Yeltsin launched first privatization program that turned out to be highly unsuccessful (Filippov 2010). Soon it became evident that radical measures are needed to curb the turbulent political situation and in the mid 1990s President Yielzin embarked on a very controversial privatization program in which the heavily protected key industries of the former USSR economy were sold, at an extremely low price and in many cases using state funds, to a handful of selected group of businessman (Filippov 2010). This process gave the birth of the modern Russian multinationals that were privately owned (Filippov 2010) but is arguable that the main motivation for those companies to go abroad was unfavorable home environment (Kalotay, 2010, Filippov 2010). According to Vahtra and Liuhto (2004), capital flight accounted to 10% of the GDP during this period Kalotay (2010) also suggest the possibility of under reporting as most of the investment during this period was informal.

India

The 1990s marked the beginning of the opening up of the Indian economy and with the enforcement of series of liberalization policies outward investment not only increased in magnitude but also changed in terms of geographical distribution and sectoral composition. (Pradhan 2005, Kumar 2007). Indian companies were born with the opening up and as Ratan Tata, the CEO of the major Tata companies\(^1\) quoted by “the Economist” recalls:

“ When the Indian market opened up, he recalls, Indian companies thought

\(^{1}\) http://www.tata.com/aboutus/articles/inside.aspx?artid=uBZjT+/ooH8=
they would all have to merge with each other, because years of protection had made them too weak to face the new foreign competitors” (The Economist).

As India became included the the global chain of service supply which could have helped the firms to accumulated capabilities in this sector and impelled them to invest abroad (Hong 2011), the preferred sector of operation shifted from manufacturing to serviced accounting to 60% of the total outward investment(Pradhan 2007, Kumar 2007). The decline in manufacturing was largely led by the abatement of outward investment in industries such as fertilizers and pesticide, leather and shoes, and iron and steel and changed coarse towards industries such as pharmaceuticals and IT (Pradhan 2005).

**China - 1991 - 1997**

In 1991 China’s leader Deng Xiaoping announced a commitment of China to a reform and its open door policy and from this period outward investment started to steadily intensify (Cheng and Ma 2008:3, Buckley et al. 2007:500).

During the 1990s - natural resources was still important but more Chinese firms started to acquire advanced technologies and skills, and investment into US intensified(Cheung and Qian 2009:4). According to Cheung and Quain 2009:317, Figure 3) North America was the leading holder of Chinese stock in the 1990s. Also, Chinese companies started to invest in other regions such as Latin America and Africa.

It is noteworthy to mention that distinction between first, second and third wave seems to be very arbitrary especially when it comes to terms of the beginning of the Third wave. Some authors such as Rasiah at al (2010) take the beginning of the Third wave as the 1995 and some others such as Narula and Nguyen (2011) question if this was a a”third wave “ or a continuation of the second wave. Since the focus of this paper is on the BRICs it seem and OFDI from these countries increased significantly only after 2000s , I would take as a starting point for the purpose of this paper the years past the 2000s.
Chapter 3
Literature review

This chapter will look at some of the main theoretical perspectives that are used to provide explanation of the flows of investment. The orthodox theories that seem to have been very influential in explaining the flows of investment since the 1980s have been challenged by some authors who argue that those theories have lost their predictive power in the case of the emerging outward investment from developing countries.

The firm level literature that examines the determinants of FDI is extensively theorized by the International Business school. The main question of this micro-level approach is why a firm will prefer to enter the foreign market via FDI rather than other options such as licensing or exports (Bloningen 2005, Moon and Roehl 2001). At this level, the apple of discord between the different schools of thought seems to be the debate if firms are impelled to go beyond the national border because of possession of a certain ownership advantage they would like to capitalize on or because of a disadvantage they posses and would like to correct.

Orthodox theories and the “Ownership advantage”

The idea of the “ownership advantage” as an enabling factor for internationalization was first introduced by Stephen Hymer and entailed that, in order for firms to enter an unfamiliar market and overcome competition from indigenous firms, they need to possess a specific advantage over indigenous firms which could stream from access to certain knowledge, skills, capital, product differentiation, preferential government policies and more (Nunnenkamp and Spatz 2002, Forstgren 2008:15; Goldsten 2007:75). Thus, firms advantages in Hymer's theory are typically based on the possession of specific assets that makes them superior compared to other firms and thus stimulates them go beyond national
borders in search of higher profits (Forsgren 2008:16).

Hymer's theory not only opened the door to the formation of theories of FDI but also inspired many scholars and his work was later extended into the two widely accepted theories of FDI such as the internalization theory introduced by Buckley and Carson and the eclectic paradigm theory developed by J.H Dunning (Moon and Roehl 2001).

Dunning’s theory also known as the OLI framework combines key aspects of the earlier theories such as the “ownership advantage” of Hymer and “internalization” process described by the “Internalization theory” and adds the importance of the host countries characteristics in attracting investment of the “locational factor” (Dunning 1985). According to Dunning's theory in order a company to go abroad three sets of factors are needed: i) ownership advantage (O) ii) location (L) iii) internalization (I). The ownership advantage refers to the need of firms to possess some advantage over the domestic firms which would compensate for the additional expenses and risk incurred to set up production abroad. Such advantages could stream form possession of certain assets and/or transaction advantages (Dunning 1985).

The Internalization factor of the paradigm explains the “why” in the decision of firms to go abroad. These are the advantages that make the firm start the production itself rather than making a contract with a domestic firm. (Marrewijk 2006:319). Within Dunning's theory the ownership and the internationalization conditions influence the investment decision at firm level. The (L) locational determinant in the OLI paradigm refers to the host country conditions that attract the flows of FDI and is also referred to as a pull factor (Marrewijk 2006:319).

In the recent years the OLI theory has been under the scrutiny of various scholars who call for modification on the account that rarely enterprises in developing countries possess monopolistic advantages over their developed counties counterparts and that the eclectic paradigm in practice neglects strategic investments and characteristics of the decision
maker which could play an important role in steering the investment decisions (Goldstein 2007:81).

Theories advocating “Asset - augmenting”

Even though different in many ways, all of the orthodox theories I encountered seem to assume that possessing an ownership advantage is a prerequisite for the companies to go abroad. On the other side of the coin, there is another line of thinking that puts in the center not the ownership advantage the firms but their desire to acquire such. According to UNCTAD (2006), another type of multinationals who does not seem to posses ownership advantages have been in the rise in the recent years. This type of multinational, also referred to as an ‘asset – augmenting’ firm, attempts to gain advantages by investing abroad in order to overcome its shortcomings. Such firms seem to be driven by the highly competitive and changing environment and technology to firms that if they do not augment their assets and capabilities they will fall behind the competition (UNCTAD 2006). The literature nested in this stream argues that the OLI framework was developed in a reality of dominance of companies from the developed world and does not provide plausible explanation of the investment behavior today's TNCs from the South (Moon and Roehl 2001, Mathews 2006, Buckley at al. 2007).

The asset augmenting behavior of the firm seems to be in the core of the some of the alternative theories about the behavior of the firm such as Moon and Roehl's Imbalance theory and Mathews' LLL (linkage, leverage, learning) framework (Mathews 2006, Moon and Roehl 2001).

Mathews (2006) sheds a light on how multinationals from emerging markets managed to make themselves successful at a global scale. The “Dragon Multinationals”, as the author names them, are much more driven
by the pull factors than the first wave of MNCs from the developing world who sought to escape perplexes in the home market. According to the author, the new multinationals are better equipped at quickly grasping opportunities created by the globalization and becoming important players in the world economy. Earlier theories of internalization were created in completely different reality when internalization provided many obstacles and thus the firms had to possess solid advantages over indigenous firms in order succeed. In the new reality, multinationals see internalization as an advantage and the works as full of resources to be tapped. Such view is in contracts with the OLI framework that predicts that firms will decide to internationalization because they have superior resources (Mathews 2006).

Another theory following this line of arguments is the Imbalance Theory of Moon and Roehl that attempts to explain why firms who do not have significant ownership advantages decide to internationalize (Moon and Roehl 2001). Author's argument is that most of the existing theories on FDI focus on failure of markets for existing assets which does not seem to provide a plausible explanation of the increasing amount of firms from the less developed countries that in many cases do not possess an ownership advantage. In the recent years we have also observed increased volume of South-North investment, which cannot be satisfactorily explained by the internationalization or the eclectic paradigm theories. Moreover, the traditional theories come short of explaining the strategic investment undertaken by firms whose aim is to acquire new assets and competences that will strengthen the firms position amidst rising competition. The core of the Moon and Roehl's (2001) line of thinking is that FDI occurs because of the necessity of firms to readdress their imbalance in resource of competitive position or in other words - FDI could be used as a catch up mechanism (Moon and Roehl 2001).
**IDP Framework**

With the shortcomings of the OLI theory to successfully provide a plausible explanation about investment form firms that do not seem to possess an ownership advantage, Dunning developed an Investment Development Path (IDP) framework that encompasses not only the decisions at firm level but also the characteristics of the host country environment. This more macro level approach links different stages of the economic development of the countries with how this affects the interaction between the OLI components of the multinationals and thus their propensity to invest abroad (Goldstein 2007:82). The core hypothesis of this theory is that:

"as a country develops, the configuration of the OLI advantages facing foreign-owned firms that might invest in that country, and that of its own firms that might invest overseas, undergoes change, and that it is possible to identify both the conditions making for the change and their effect on the trajectory of the country’s development" (Dunning 2001:180)

The IDP theory allows for the possibility that during different stages of development, different determinants could have stronger influence on the investment decisions of the firms. According to the postulates of the framework, investment behavior can be divided into four stages depending on the economic development of the country. During the earliest stage, the country is at a low level of economic development and thus it is not an attractive destination for inward investment due to high risk, bad institutions, etc. During stage two, with the improvement of the economic condition that country is starting to attract a large amount of investment however it is not an investor itself. If a country passes on to the next stage domestic firms are starting to increase rapidly and then in the final stage OFDI is even more than inward or fluctuation. During this stage firms look not only to exploit ownership advantage but also to augment ownership advantage and
enter new markets (Goldstein 2007:82, Dunning 2001)

The IDP model proved to be helpful in explaining the development of the outward investment for many countries in the past and provided a good explanation about the development of OFDI of the smaller European countries (Goldstein 2007:82). Small countries also tended to export capital much earlier because of the limitations of the size of their market to receive additional units of FDI (Goldstein 2007:82).

**Uppsala behavioral model**

The theories described above are more rooted in the economic factors that explain the determinants of FDI. On the other side, there are several models that are more based on the organizational behavior of the firms as an explanatory factor of FDI (Forsgren 2008:105). The Uppsala model views the internationalization of the companies as a gradual, step by step process through which knowledge is acquired at one stage is and only after then further steps are taken (Goldstein 2007:79). Thus the expected steps of internationalization are that a company will “start and continue to invest in just one of a few neighboring countries” and also investments “are made cautiously, sequentially and concurrently as the employees of the firms learn to operate in the market” (Forsgren 2008:105).

A central concept in the Uppsala model seems to be notion of “psychic proximity” as explanatory of the steps of investment (Goldstein 2007:79, Cyrino at al. 2010). Thus, a company will first invest in a country that is more similar to in terms of culture and institutional norms. This theory explained the investment from some of the Nordic countries however it is highly arguable that it is very limited when we consider the investment decision of the firms from the developing countries (Goldstein 2007:79).

**Push and Pull Factors of Investment**

In terms of the motives behind firm's investment abroad, Dunning finds that there are four main reasons behind the investment decision of the firms which are i) natural resource -seeking , ii) strategic assets seeking
iii) market seeking and iv) efficiency seeking (Nunnenkamp and Spatz 2002). Table 3.1 describes a majority home and host countries factors that can have an effect on the investment decisions of the firms. Most of the empirical studies seems to examine a variety of the host and home country determinants listed on the left side of the column in order to determine the motivations behind the firm's investment decisions (listed on the right). For example, finding out that the size of the market attracts investment will mean that firm's investment of motivated be market seeking reasons.

<table>
<thead>
<tr>
<th>Host country determinant</th>
<th>Motivation for Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economic factors</strong></td>
<td></td>
</tr>
<tr>
<td>“L” factor in Dunning OLI paradigm</td>
<td>Size of market</td>
</tr>
<tr>
<td></td>
<td>Growth of market</td>
</tr>
<tr>
<td></td>
<td>Access to regional and global networks</td>
</tr>
<tr>
<td></td>
<td>Structure of the markets</td>
</tr>
<tr>
<td><strong>Cost of resources such as labor, raw materials, various inputs</strong></td>
<td>Indicative of Efficiency seeking behavior</td>
</tr>
<tr>
<td><strong>Availability of raw materials, presence of assets such as knowledge, technology, etc; presence of skilled labor</strong></td>
<td>Indicative of asset and resource-seeking behavior</td>
</tr>
<tr>
<td><strong>Political factors</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>industrial policies, politic/economic social stability, investment agreements between</td>
</tr>
</tbody>
</table>
countries; stability of exchange rate, property rights

<table>
<thead>
<tr>
<th>Business Environment</th>
<th>Investment incentives, reduction of hassle cost (cost related to corruption, etc)</th>
</tr>
</thead>
</table>

### Home country determinants

<table>
<thead>
<tr>
<th>Market size and trade conditions at home</th>
<th>Motivation for Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home country government policies</td>
<td>*examples of such behavior are the adoption of more liberal policies of FDI, government measures for stimulation FDI such as China's &quot;going global&quot; policy, etc</td>
</tr>
<tr>
<td>Cost of production at home</td>
<td></td>
</tr>
<tr>
<td>Business conditions</td>
<td></td>
</tr>
</tbody>
</table>


Having reviewed the literature related to the determinants of the flows of FDI, we can conclude first the theoretical explanations are very varied, the determinants of FDI seems to be abundant, complex and their weight changing throughout the year. Comprehensive analysis of all available points of view is impossible to undertake within the scope of this paper and the theoretical frameworks selected seemed to be the most used in the literature. It seems that the mainstream theories such as the OLI framework, the IDP framework, the Uppsala schools are under increasing criticism in the reality of changing global environment. They have been challenged by theories arguing in favor of the increased importance of the desire of companies to acquire assets as a propeller of OFDI especially of the countries from the South.
Chapter 4

Overall Trends

The number of mega-purchases from TNCs from the developing countries has progressively increased from 1 in 1990, 19 in 2005 (UNCTAD 2006) to 35 in 2010 (UNCTAD 2007). The 35 deals completed in 2010 contributed to 23% of all M&A deals over 1 billion completed in 2010 which parallels with the increase of world share the outflows from the developing economies discussed in Chapter 1. Such observation hints to the increased financial strength of the companies from the South and their desire to operate beyond national borders.

4.1 The Top 50 multinationals from the developing countries.

A comparison between the top 50 TNCs from the developing countries in 1998 and 2008, based on UNCTAD annex tables for the respective years, reveals that there is a significant difference in the characteristics of the multinationals from the South in both periods not only in terms of absolute value of their foreign assets but also in their country of origin. In 1998, almost 48% of the firms were from the NICs and 26% from Latin America which is expected having in mind that the Asian Tigers were the leaders of the second wave of investment. In 2008, the percentage of both regions decreased to 40% for the East Asian Tigers and 14% for the TNCs from the Latin American countries signifying the emergence of new

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1 Author's computation based on World Investment Report 2010, Annex Table 17
2 Latest available data on to 50 companies from the developing world published by UNCTAD is in 2008
3 48% from NICs, 10% from China, 6% from Malaysia and Philippines
4 12% - Brazil, 10% - Chile and Argentina
players. In 2008, 12 new companies amounting to 24% of the foreign assets of the top 50 firms were from Russia (4) India (4), the Arab peninsula and North Africa - countries and regions not previously represented on the list. Looking at the most recent data on M&A over 1 billion completed in 2010 the trend is similar - 67% came from the BRICs countries, 21% from the NICs and the remaining 11% from Thailand, Columbia, Mexico, Qatar and Malaysia (UNCTAD 2008, 1998) This highlights the shift in the leading position and the ability of more countries from the developing economies to produce firms that are able to compete in a global environment.

In terms of industry distribution of the operation of the firms, some activities have gained ground while others declined. Investment in the telecommunications sector has intensified in the recent years and while no firms present on the top 50 list in 1998 were operating in this industry, in 2008 there were 8 TNCs from variety of countries such as Singapore, South Africa, Mexico, Qatar, Kuwait, Malaysia and Egypt. In contrast, investment in the preferred industries of 1998, construction and food and beverage, declined significantly and in 2008 only one construction firm and none operating in the food and beverage industries were present among the top 50 firms. In the earlier period under observation, the leading multinational companies from the developing world were active predominantly in the oil and mining (24%), diversified (21.7%) and construction (15%) fields contributing to 61% of the foreign assets of all firms. Of late, 61% of the foreign assets of the firms were in diversified (21.4%) primary (17%) telecommunications (12.4%) and electronics (10.5%). Such change in the industry distribution shows that while in the earlier period the majority of operations were more concentrated within industries, in 2008 the activities are slightly more dispersed and also the companies are more interested in operating in knowledge and skill intensive industries such as telecommunication and electronics. Data for the analysis above is obtained from Annex Tables on the “Top 50 TNCs from developing countries, ranked by foreign assets” published in UNCTAD's World Investment Report.
4.2 Transnationality Index

The Trans-nationality Index (TNI) seems to provide a good measure of the degree to which companies are interested in investing abroad versus concentrating operations at home. It is calculated by taking the average of three ratios – foreign employment to total employment, foreign assets to total assets and foreign sales to total sales (UNCTAD 2007). However, a limitation of this measure that should be kept in mind, is that it does not provide an estimate about the geographical dispersion of the activities across countries (UNCTAD 2007). Comparison between the TNI of the top 50 non-financial firms from the developing world in 1998 and 2008, reveals that the companies from the developing countries have become increasingly more interested in locating activities abroad as their average TNI increased from 25.5% in 1998 to 47% in 2008 (UNCTAD 2008, 1998). Moreover, all the Russian and Chinese firms present on the list had an above average TNI along with 23 of the firms from Brazil suggesting that companies from these countries are highly interested in operating beyond national borders. According to the IDP framework discussed in Chapter 3, it is expected that companies originating in countries with larger market size will be slower to begin the internationalization process compared to their peers from smaller countries. This scenario was indeed the case of the smaller European countries that were pushed to go abroad due to the limitations of their home market (UNCTAD, 2007, Goldstein 2007:82). However, the majority of the companies from countries like China, Brazil and Russia - countries with immense market size - exhibit higher than average TNI. Moreover, the

1 UNCTAD (2007), The Universe of the Largest Transnational Corporations
2 Authors computation based on World Investment Report 1998 and 2008 Annex tables
3 Only one company from China had an average TNI
economies of these countries opened up relatively late compared to other developing countries and according to the postulates of the IDP framework, as the huge markets of the host countries will be able to absorb FDI and nurture domestics firms, it will take some time before those countries become investors themselves. Instead, OFDI from Russia has already exceeded the inflows of the countries (Goldstein 2007:82), and companies from developing countries seem to be entering various industries. This trend also observed by other authors questions the predictive power of Dunning’s framework in the third wave of investment from the developing countries.

Table 4.1 provides an insight about the industries in which the biggest and most internationalized compares from the developing countries are operating in 1998 and 2008.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Year</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
<td>1998</td>
</tr>
<tr>
<td>Oil and mining</td>
<td>34%</td>
<td>20%</td>
</tr>
<tr>
<td>Diversified</td>
<td>9%</td>
<td>16%</td>
</tr>
<tr>
<td>Construction</td>
<td>4%</td>
<td>12%</td>
</tr>
<tr>
<td>Food and Beverage</td>
<td>-</td>
<td>16%</td>
</tr>
<tr>
<td>Utilities</td>
<td>9%</td>
<td>12%</td>
</tr>
<tr>
<td>Chemicals</td>
<td>9%</td>
<td>4%</td>
</tr>
<tr>
<td>Motors and Automobiles</td>
<td>9%</td>
<td>-</td>
</tr>
<tr>
<td>Electronics</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>Metals /steel;iron</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>Other</td>
<td>9%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Source - Author’s compilation based on UNCTAD 1998 and UNCTAD 2008 - the top 50 firms from developing countries.

As illustrated by the table above, the oil and mining sector continues to be the leading industry accounting for 34% of the foreign affiliates of

1 Based on higher than average TNI of firms present on the top 50 lists in 1998 and 2008
the TNCs with the highest transnationality index and even foreign affiliates of the companies in this sector have intensified. The most transnational companies have stated to operate in variety of industries in the more recent period meaning that the companies operating in the natural resources sector have become more interested in investing abroad, which could also be due to the geographical dispersion of the natural resources at various countries (UNCTAD 2007). However, it should be noted that this could mean that the firms operating in the primary sector are tapping resource in higher numbers of countries. Another trend is the increased operation in industries that are skill and knowledge intensive such as chemicals, pharmaceuticals and motors and automobiles which is a trend also unveiled in point 4.1 in this Chapter.

4.3 Geographical distribution of the OFDI from developing countries during the Second and the Third wave of investment

Since the transnationality index is indicative of the degree to which companies operate abroad but not of the geographical dispersion of their activities, Table 4.2 provides information about the geographical distribution of the foreign affiliates of companies from the developing countries in 1989 and 2005.
Table 4.2 Geographical distribution of the foreign affiliates of the developing countries TNCs (over 5 affiliates)

<table>
<thead>
<tr>
<th>Number of foreign affiliates located in one host country</th>
<th>1989</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Host countries - None</td>
<td></td>
<td>China, USA, UK and Slovakia</td>
</tr>
<tr>
<td>76 - 500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total host countries - 7</td>
<td>USA, Australia, Malaysia, Singapore, The Netherlands, Belgium, Germany</td>
<td></td>
</tr>
<tr>
<td>6 - Europe (France, Germany, Poland, Luxembourg, Czech Republic, Hungary)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 – Asia (Japan, Malaysia, Singapore, Indonesia)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 - Latin America (Brazil, Argentina)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - North America (Canada)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - Australia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 - 75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total host countries - 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 – Asia (China, Japan, Papua New Guinea)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 – Europe (Spain, Luxembourg, Austria)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 – North America (Canada)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 - Latin America (Mexico, Uruguay, Peru, Colombia, Venezuela)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 - Europe (Portugal, Slovenia, Sweden, Finland)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 – Asia (Thailand, Philippines, Papua New Guinea)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 - CIS - Ukraine, Russia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - Middle East (Saudi Arabia)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 - 21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total host countries - 26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 – Latin America (Mexico, Brazil, Panama, Argentina, Uruguay, Peru, Colombia, Venezuela)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 – Asia (Indonesia, Taiwan, South Korea, Turkey, Thailand, Philippines)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 – West Europe (Ireland, Portugal, Italy, Denmark, Sweden)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 – Central and East Europe (Russia, Romania, Poland, Slovakia, Czech Republic)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 – Middle East (Saudi Arabia)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 – Africa (Uganda)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 - Africa (Egypt, South Africa, Mozambique, Zambia, Tanzania, Malawi, Uganda, Madagascar)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 – Latin America – Chile, Ecuador, Bolivia, Paraguay, Nicaragua, Panama, Costa Rica</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 – Europe – Ireland Denmark, Serbia, Macedonia, Romania, Croatia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 – Asia – Taiwan, South Korea, India, Pakistan, Turkey</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total number of countries hosting foreign affiliates of companies from developing countries|
40 | 61 |

Source: based on UNCTAD - World Investment Report 2006, Section II, Figure III.10
The first obvious trend that transpires from the table is that the number of countries hosting foreign affiliates of developing TNCs has increased from 40 to 61. Compared to 1989 when the affiliates of the developing countries TNCs were concentrated only in few regions, in 2005 the distribution is much more dispersed geographically, reaching out to many regions - developing and developed alike. Second trend is that while in 1989, when the majority of the OFDI was coming from the Asian Tigers followed by the Latin American region, the highest concentration of foreign affiliates of TNCs from developing countries was observed in Malaysia, Singapore and China along with North America, Australia and few European countries, in 2005 the countries-recipients of the most foreign affiliates included new countries and regions such as Latin America and Central and East Europe. The clustering of affiliates in the East and South-Eastern Asian countries in the earlier period will imply that much of the investment was intra-regional and probably efficiency seeking or market seeking in the case of China, where cost production was lower. Such an observation is also noted by Rasiah et al (2010) stating that the leading countries of the second wave were also investing in the developing countries to access cheap labor (Rasiah et al, 2010). The agglomeration of affiliates in big markets such as US and Canada could suggest market seeking behavior and motives related to the export of production or resource seeking behavior as those countries are rich in natural resources. Moreover, as pointed in Chapter 2, during this time Brazil had firms with foreign subsidiaries operating in the manufacturing sector in developed countries. Tax heaven countries such as Luxemburg and the Netherlands were attracting more investment compared to other European countries suggesting that some investors could be escaping unfavorable home conditions.

A third trend is an intensification of number of affiliates in countries

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1 Netherlands is not a “pure tax heaven” but has preferential policies thus inducing tax alleviating behavior form companies - Reference: “The Netherlands: A Tax Heaven?” -Nov 06 - Michael van Dijk, Francis Wayzic and Richard Murphy
that were already hosting FDI. If we take Mexico as an example, in 1989, the country was hosting between 5 -21 foreign affiliates, and in 2005, the number increased to 21 - 75. The same is valid for 58% of the countries that were in the 5-21 group implying gradual agglomeration of FDI. However, 23% of the receiving countries jumped ahead from their peers meaning that they attracted a higher number a foreign affiliates form the MNCs from the developing countries between 1989 and 2005 and those countries were Czech Republic, Slovakia and Poland which had former close ties to USSR; Brazil and Argentina, which could signify intra-regional FDI and Indonesia and China - low cost productions. Such an observation means that i) foreign affiliates agglomerated where there was already FDI going and ii) geographical and cultural proximity probably played a role in the spread of the affiliates. This observation goes in line with the Uppsala school of thought (mentioned in Chapter 3) that advocates the gradual steps of investment and stresses the importance of physical and moreover “psychic” proximity in the investment decisions of the firms. However, it is noteworthy to point that the year 2005 captures older trends as it includes accumulation of foreign affiliates between 1989 - 2005, which captures the second wave. Thus, it will be most interesting to see what is the spread in 2010, but unfortunately, due to the novelty of the trend, the data is limited.

In short, from this chapter the findings were that indeed in the recent years the companies from the developing countries are increasingly investing abroad in variety of countries and in industries that are more knowledge and skill intensive.

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2 Author's computation - 15 out of the 29 countries moved from one category to the higher. 6 out of of 29 moved 2 categories higher and 5 out of 26 stayed in the same category.
Chapter 5
Outward Investment from the BRICs

5.1 Brazil

The investment from Brazilian MNCs surged dramatically after 2004. This was reflected in the impressive increase of the annual outflows from $1.2 US billion in 2003 to $13.6 billion in 2008 (Arbix and Caseiro 2011:208).

In the mid and late 1990s, the investment in developed countries was rare and there was significant investment of Brazilian firms into Argentina (Chudnovsky and Lopez 2000:56). In recent years investment into Europe increased from 39.14% in 2003 to 69.51% in 2006 representing the desire of the multinationals from Brazil to invest in more developed countries. The share of investment into the Latin American countries over the same period decreased from 41.5% to 19% (Goldstein 2010:Table II).

According to Arbix and Caseiro (2011), in contrast to the earlier periods, in recent years the Brazilian companies seem to be more interested in investing in regions that are not in their immediate neighborhood. It is noteworthy to point out that more than 2/3 of the outward investment from Brazil passes through the tax haven economies thus making it difficult to determine the final recipients (Arbix and Caseiro 2011). While being mindful of this trend it seems plausible to conclude that the interest of Brazilian countries to invest further away from the national borders has been

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5 Flows to tax haven countries from the Caribbean basin are excluded in the estimation of the share of stock as they represent a substantial part of Brazilian OFDI stocks. Luxemburg is excluded but the Netherlands, Ireland and Denmark are not. The last three countries are also tax heavens and could skew results. However the author points out that the trend that this trend of increased importance of the European countries as a destination of OFDI from Brazilian TNCs is confirmed by other studies such as Christiansen et al. 2007 that examines statistics of cross-border M&A. (Goldstein 2010:295).
intensifying. This recent trend challenges the postulate of the Uppsala school framework that has been extensively used to explain investment from Brazil (Arbix and Caseiro 2011). It is noteworthy to point out that some studies such as Cyrino at al. (2010) and Carvahlo at al. (2010) highlight the huge importance of the Latin American region as a destination of the Brazilian OFDI. Empirical studies conducted by the Cyrino at al. (2010) showed that indeed the subsidiaries of the 40 most internationalized companies are located in Latin America and that cultural proximity was a highly significant variable influencing investment decisions.

According to data provided by a study conducted by Mlachila and Takebe (2011) the average level of Brazilian stock in Latin America measured between 2000 and 2007 is more than 90% of the total stock to all developing countries\(^1\). However, the percentage increase in the stock in Latin America between 2000 and 2007 was 27% and as a whole, based on UNCTAD statistics, the Brazilian outward stock increased with 181\(^2\), suggesting that the huge accumulation of stock in the last years was not in the Latin American region.

**Industrial distribution**

In terms of industrial distribution of the operations of the MNCs from Brazil, a compilation of data that compares the distribution during two different periods compiled by Arbix and Caseiro (2011:219-Table 2), reveals that the industries in which the MNCs operate in the recent years have become more varied. In contrast to 1994 when 73% of the firms operated in 6 industries, in 2009 53% of the companies operated in the top six industries. Moreover, not only the concentration of activities in few top industries has decreased but also the weight of industries has changed – some new industries emerged and others declined. The most pronounced decline was experienced in the food and beverage industry, the financing

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1  Authors’s computation based on Malachila and Takebe 2011:Table 4
2  Authors computation based on UNCTADstats accessed November 3, 2011
industry and engineering, while IT, electronics, pharmaceuticals, and building materials/cement had experienced a significant increase. These findings are actually in line with the analysis of the TNI index discussed earlier and show similar patterns of industry distribution. It is also evident that the preferred industries of operation have become more skill- and knowledge intensive.

**Determinants of OFDI from Brazil**

The econometric studies on the determinants of the Brazilian firms seem to be quite limited. For the analysis of the determinants of the outflows from Brazil, the following studies are used: Carvalho at al. (2010) - econometrics and Arbix and Caseiro (2011) – descriptive.

Carvalho at al. (2010) research is based on survey of Indian firms conducted in 2007. The finding were that the main drivers of companies to go abroad are: technology exploitation, market-seeking motivations and learning new competences, in order of importance. Their findings were also that resource seeking behavior was the least important and the author attributes this finding to the observation that Brazilian firms when surveyed responded that their access to natural resources is actually their strength compared to the other firms. When firms were asked why they internationalize they responded that the leading motivation was to “boost comparative advantage through exports”. The second most important was to “acquire new knowledge”, followed by the third motivation, “brand globalization” (Carvalho at al. 2010)

### 5.2 Russia

Investment from Russia only increased significantly after the 2000s when outflows increased threefold between 2002 and 2003 (UNCTADstats), coinciding with a change in the political course that occurred during this time in Russia. As president Putin stepped into power,

1 Author's computation based on UNCTAD stats accessed November 3, 2011
the state regained control over some key industries that were privatized before. The reign of the “oligarchs” was on a decline (Harris 2009). With an increase in the outflows of FDI from Russia, several changing trends in the behavior of the Russian firms can be detected. Capital flights reduced to 0.6% in 2003 (Vahtra and Liuhto 2004) and the geographical and industrial distribution of OFDI shifted.

Prior to 2004, the EU 25 countries were the leading recipients of investment from Russia with their importance listed in descending order: Poland (30%), Luxemburg and Cyprus (17%), Lithuania, Latvia and Estonia (13%), France (9%), Austria (9%), Germany (9%), Finland (7%), UK (5%), and Others (3%) (Vahtra and Liuhto 2004:table 3).

Therefore, it can be argued that investment from Russia prior to 2004 was directed predominantly towards countries with which Russia had previous ties or countries that were culturally more similar. Indeed, the Baltic countries that used to be part of the USSR and the political satellites such as Poland received 43% of the investment. The tax haven regions of Luxemburg and Cyprus attracted significant portion, suggesting an escape of home environment restrictions or possibly using the tax haven countries as a platform to access other regions in the European Union. Finland is the closest Western country to Russia, suggesting that geographical proximity could have played a role.

The geographical distribution of the OFDI stock from Russia in 2007 reveals a slightly different picture:

Figure 5.1 - Geographical distribution of Russia's OFDI stock, 2007
In more recent years, accumulation of Russian stock in the CIS countries is represented only by Belarus and Ukraine, totaling 6%. Stock in tax haven countries has increased dramatically. Kalotay (2010) also reveals that after starting up in the neighboring countries, the majority of the M&A in the recent years turned to developed countries that were farther away and also to other developing regions such as Africa and Asia (investment to which started to appear in the last four years).

The number of M&A soared more than tenfold after 2004 (Kalotay 2010). Looking at the M&A conducted by Russian companies after 2003 (UNCTAD Annex Tables)\(^1\), the preferred industries were natural resources and telecommunications. Out of the 19 billion in acquisitions from Russian firms, 9.4 billion (60%) went to mining and extracting and 7.1 to radio technology and telecommunications. In 2005 – 2008, the services sector as a whole declined to 16% and manufacturing rose from 8% in 1997 -2001 to 34% (Kalotay 2010).

Another trend is that activities of the Russian firms while

\(^1\) Various Annex Tables on M&A over 1 billion completed past 2003 – source - UNCTAD World Investment Reports
concentrated in the primary sector have started to become more diversified in terms of geographical distribution. Lukoil, the biggest oil producer in Russia and the most international company, locate their extraction facilities mainly in South Africa and the Middle East. They control their refining facilities in distribution outlets in various Eastern European countries and in terms of marketing and retail they base themselves in the US (Vahtra and Liuhto 2004:87). According to the report, the oil companies were rapidly expanding in upstream and downstream sectors at the same time.

Even though greenfield investment is a less likely form of entry into the foreign market, the analysis reveals that the largest companies purchasing assets via M&A are also involved in these investments. This reveals that a high concentration of investment is in the hands of few companies. Geographical distributions of greenfield investment seems to be influenced by the proximity of the countries and their cultural and political ties (Kalotay 2010).

In recent years, the TNCs from Russia were growing bigger and more international. According to an OECD (2007), around 65% of OFDI investment from Russia comes from four major companies – Lukoil, Gazprom, Sevastal and Russal, which operate in extractive and primary metals sectors. Recently, the kaleidoscope of Russian TNCs seems to have changed from a few privately owned companies that were dominating the scene in the 90s to predominantly large conglomerates that are either state owned or state influenced (Kalotay 2010).

For example, Lukoil sprung from the roots of the Former USSR Ministry of Oil and became the largest TNC in Russia in terms of foreign assets. Even though Lukoil is a private and dynamic company, it does maintain close ties with the national government and it can be argued that it acts according to national interests (Gorst 2007). Filippov (2010) also suggests that firms like Lukoil, Russal and Sevastal might be indirectly
related to the state.

Determinants of OFDI from Russia

Since OFDI investments from Russia is a very recent event, empirical studies examining the determinants of outward investment are scarce. Kalotay (2010) is one of the first to empirically investigate the motives behind the investment decisions of the Russian firms and it is based on M&A data only. This is due to the unavailability of thorough statistics on greenfield investment. Filippov (2010) provides an extensive overview of the four different types of investment behavior distinguished by Dunning's OLI eclectic paradigm and their respective weight in the OFDI from Russia.

Push factors

As exposed in the analysis above, the state seems to play a very important role in steering the investment decisions of the firms. Kalotay (2010) argues that one pronounced trend that differentiates the determinants of the investment of the Russian TNCs from the determinants of investment from companies from developing countries, is the huge importance of the home country environment in impelling investment beyond national borders. The author finds that the home country GDP per capita was significantly influencing the investment from firms, confirming the importance of the push factors as propellers of OFDI (Kalotay 2010). Moreover, while the OLI paradigm is relevant in explaining the internationalization decision of the Russian firms, it doesn’t properly explain the ownership advantages. It also disregards the characteristics of the home country environment that seems to play a role in investment decisions of the Russian firms and the firms from most developing countries as a whole (Kalotay 2010).

Pull factors
On the pull factors side, the host country market size showed a highly significant and positive coefficient, pointing to market seeking behavior of the TNCs from Russia (Kalotay 2010). The host country's natural resource endowment was also found to be very significant (Kalotay 2010).

Even though asset-seeking behavior seemed to be a very unlikely motivation for investment in Kalotay's (2010) study, Filippov (2009) pointed out that even though this sort of behavior appears to be rare, there is an increasing trend of focus of TNCs from Russia on acquisition of firms with a high level of technology and R&D, which signifies asset-seeking behavior (Filipov 2010). In Filippov's words: “Russian companies have a great interest in advanced technologies, marketing experience and modern managerial skills” (Filipov 2010:315).

Summary

Based on the analysis above it seems that OFDI from Russia in recent years is extensively dominated by a few conglomerates operating predominantly in the natural resources and telecommunications sectors. Most of the investment is directed towards the tax haven economies, the industrialized countries and in recent years Asia and Africa. The findings of the empirical study of Kalotay (2010) confirm a market seeking and natural resources seeking motive of these companies. Even though the asset seeking behavior is refuted by the empirical findings from Kalotay, it could be due to the short period of investigation; asset seeking behavior could be a very recent trend which is not captured by the data yet. Filippov (2010) points out the increased importance of R&D in acquisitions and the strategic alliances of companies for asset seeking motives.
5.3 China

“Going Global “

Since the embrace of “going global” policies, China's role as a major world investor has been strengthened immensely (Chaung and Qian 2009). Investment for the first time surpasses investment coming from other major world investors such as Japan, Canada, the Netherlands, Switzerland and others (UNCTADstats)\(^1\). In terms of stock, China climbed up to the 8\(^{th}\) place in 2008. The shift of policy as embodied by the “going global” initiative also appeared to have changed the determinants of the investment from China as uncovered by Cheung and Qian (2009).

Geographical distribution

The first noticeable characteristic of the geographical distribution of OFDI from China is that it has become much more dispersed over different regions and countries. In 2004 China's OFDI flows were distributed among 111 countries, while in 2010 a 152 countries were recipients of flows from China (MOFCOM 2010)\(^2\). These additional 41 countries were from all over the world but the most pronounced increase was observed in Africa and Europe with 12 new countries from each region. This is followed by Latin America and Asia with 9 new countries each\(^2\). This important trend of diversification of OFDI from China, especially in developing countries, is also confirmed by an empirical study conducted by Cheung and Qian (2009). They noticed that in previous periods investment from China was attracted by existence of prior investment in the same country. In contrast, this variable is not as significant in recent years, as China seems to be

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1 Based on UNCTADstate accessed November 10, 2011

2 Authors compilation based on Table 1. “China's Outward FDI flows by country and region, 2004 – 2010” appearing in 2010 Statistical Bulletin of China's Outward Foreign Direct Investment.

2 The countries are classified according their geographical location - e.g Russia, Ukraine, Georgia are listed under Europe.
spreading its investments everywhere (Cheung and Qian 2009). The trend was not that pronounced for the developed countries but the authors hinted that by 2005 there were signs that this is starting to change.

*Sectoral distribution.*

Analysis of the sectoral and industrial distribution of Chinese outward flows and stock reveals that in the recent years the tertiary sector is attracting the biggest share of the investment leaving the primary sector and the manufacturing industries far behind. The table below provides a detailed overview of the distribution of flows and stocks among various industries.

Table 5.1  Sectoral and Industrial distribution of the cumulative values of China's OFDI flows and stock for two periods 2005 – 2007 and 2008 – 2010 (USD millions)
The percentage of the industry distribution signifies the percentage weight in the sector.


Several interesting trends are revealed by looking at the table. First of all, if only the sectoral distribution of flows and outflows is considered, a wrong conclusion about the importance of the primary sector can be made. As evident, the primary sector contributed only to about 15% of all outward investment and its weight had even slightly decreased in the second period under observation. However, if we look at the distribution at industry level, it becomes evident that mining and petroleum is the third most lucrative industry in terms of outward stocks and flows.

Second, the explosion of the service sector is led by impressive surge in leasing and business, and banking activities. In the recent years, these two industries experienced the largest percentage increase in terms of both stocks and flows. However, it is noteworthy to point out that investment in

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>14 838.5 (25%)</td>
<td>25 933 (14.3%)</td>
<td>44 100 (16.5%)</td>
<td>114 217 (15.3%)</td>
</tr>
<tr>
<td>agriculture</td>
<td>562</td>
<td>1 049</td>
<td>2 534</td>
<td>6 108</td>
</tr>
<tr>
<td>petroleum and mining</td>
<td>14 276</td>
<td>24 881</td>
<td>41 566</td>
<td>108 109</td>
</tr>
<tr>
<td>Secondary</td>
<td>5 312 (9%)</td>
<td>8 671 (5%)</td>
<td>22 844 (8.5%)</td>
<td>41 055 (5.4%)</td>
</tr>
<tr>
<td>Tertiary</td>
<td>39 780 (66%)</td>
<td>146 643 (81%)</td>
<td>198 803 (75%)</td>
<td>591 665 (79%)</td>
</tr>
<tr>
<td>Utilities</td>
<td>278 (1%)*</td>
<td>2 788 (2%)</td>
<td>1318 (1%)</td>
<td>7513 (1%)</td>
</tr>
<tr>
<td>Construction</td>
<td>444 (1%)</td>
<td>2 721 (2%)</td>
<td>4408 (2%)</td>
<td>12267 (2%)</td>
</tr>
<tr>
<td>Transport and Storage</td>
<td>6 018 (15%)</td>
<td>10 378 (7%)</td>
<td>26710 (13%)</td>
<td>54339 (9%)</td>
</tr>
<tr>
<td>IT</td>
<td>367 (1%)</td>
<td>819 (1%)</td>
<td>4674 (2%)</td>
<td>12040 (2%)</td>
</tr>
<tr>
<td>Banking</td>
<td>5 198 (13%)</td>
<td>31 409 (21%)</td>
<td>32325 (16%)</td>
<td>137941 (23%)</td>
</tr>
<tr>
<td>Wholesale and retail</td>
<td>9 978 (25%)</td>
<td>19 379 (13%)</td>
<td>44606 (22%)</td>
<td>107557 (18%)</td>
</tr>
<tr>
<td>Real estate</td>
<td>1 408 (4%)</td>
<td>2 890 (2%)</td>
<td>8027 (4%)</td>
<td>16707 (3%)</td>
</tr>
<tr>
<td>Leasing and business</td>
<td>15 070 (38%)</td>
<td>72 471 (49%)</td>
<td>66532 (33%)</td>
<td>224778 (38%)</td>
</tr>
<tr>
<td>R &amp; D</td>
<td>715 (2%)</td>
<td>1 962 (1%)</td>
<td>3247 (2%)</td>
<td>8823 (1%)</td>
</tr>
<tr>
<td>Other</td>
<td>305 (1%)</td>
<td>1 826 (1%)</td>
<td>6956 (3%)</td>
<td>9700 (2%)</td>
</tr>
<tr>
<td>Total</td>
<td>59 931</td>
<td>181 247</td>
<td>265 474</td>
<td>746 937</td>
</tr>
</tbody>
</table>

* The percentage of the industry distribution signifies the percentage weight in the sector.
the banking industry appeared in the statistics only after 2006 due to lack of statistics in the previous years (Cheng and Ma 2008) suggesting that banking activities in the first period (2005 – 2007) can be underestimated.

Collating the huge investment of China into Hong Kong and the tax haven economies with the immense increase in the business, leasing and banking industries calls to mind that it is possible such investment to be channeled predominantly to those economies. However such a statement is speculative as it is not based on specific data.

Thirdly, if we put aside investment in leasing and business and banking, then the importance of the extractive sector is quite obvious but also it becomes evident that several other service industries actually increased their share of outward flows such as utilities, R&D, and construction. The outward stocks reveal similar picture - investment in utilities and R&D has indeed increased but construction remained at the the same level.

**Firm Level Analysis:**

In 2010, China alone accounted for over 30% of the M&A from developing countries signifying an increased trend of Chinese companies to enter the foreign market via M&A (WIR 2011). As pointed out by Cheng and Ma (2008), the majority of the investment from China continues to come from SOEs (stated - owned companies) or large multinationals that are administered by the Central Government Ministries and Agencies. A look at the M&A of over 1 billion USD, completed after 2002, confirms this trend: most of the companies that were able to engage in large deals were Sinopec\(^1\) (2 deals), CNOOC\(^2\) (3 deals) and CNPC\(^3\)(Annex Table, ?). Those three important state companies operating in the primary sector have been active in all world regions endowed with natural resources (Cheng and Ma 2008).

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1. China Chemical and Petroleum Corporation
2. China National Offshore Oil Corporation
3. China National Petroleum Corporation
Determinants of Chinese OFDI

The above analysis suggests that resource seeking behavior will be very prevalent in the investment decisions of the companies from China and that state continues to have a very big part in the investment decisions. In order to uncover the push and pull factors of the outward investment from China, I resorted to the findings of three empirical studies - Buckley at al. (2007), Cheng and Ma (2008) and Cheung and Qian (2009).

Cheung and Qian (2009) probably provide the most comprehensive investigation of the determinants of Chinese OFDI I was able to find. The period covered was 1991 - 2005 which was further subdivided to 1991 – 1992 and 2002 onwards. Their findings were very interesting as they pointed out that the determinants of Chinese investment are different depending on the type of country, namely: developed or developing and also depending on the period. Maybe the most unexpected finding is that the natural resource seeking motive ceased to be leading determinant for the developing countries after 2002 but became significant as a determinant of OFDI to developed countries past 2002. Buckley at al. (2007) found that the natural resource determinant is highly significant but the sample included a period up to 2001.

Cheung and Qian (2009) also discovered that a market seeking motive was hardly the case for investment into developing countries and although an efficiency-seeking investment into developing countries was important in the past, it lost its significance after 2002. Market-seeking behavior was important for developed countries as their GDP mattered in attracting investment, which suggests Chinese companies are attracted to large markets (Cheng and Ma 2008).

Trends of increasing asset seeking behavior was uncovered by Cheun and Quain (2009). Desire to acquire strategic assets is indeed becoming more pronounced in the later years.

Cheng and Ma also investigate the distance from the country and they find that distance was not an important factor in influencing the stocks
Buckley et al. (2007) uncovered that during 1984 - 1991 investment from China was both associated with high levels of political risk and cultural proximity to China. In this period investment was more related to host market size, suggesting market seeking behavior. In later periods it was more influenced by natural resources endowment.

According to Buckley et al. (2007), it seems that Chinese companies seem to be more willing to take risk. One explanation of this trend is that the majority of companies investing abroad are state owned companies and thus might be driven not only by profit but by a political objectives (Hong 2011).

*Push factors*

Cheung and Qian also examine two push factors: China's amount of foreign reserves and the exports to host countries. As evident from the sectoral analysis, China's investment is increasingly in wholesale, trade and business activities and thus Cheung and Qian's (2009) argument is that promoting exports will be a very important part of China's OFDI policy. The results of their empirical study showed that Chinese exports are a significant determinant of investment to developing countries (especially after the Asian crisis and onwards), but not relevant to developed countries. A possible explanation provided is that China has to invest in developing countries in order to be able to export to them efficiently (which could otherwise be hampered by things such as bad infrastructure) (Cheung and Qian 2009).

Another determinant included was the accumulation of foreign reserves which proved to be a strong propeller for outward FDI in the case of the developed countries. However it was not that important to developing countries. This signifies that the currency-rich Chinese companies are able to go on a shopping spree in the developed world. Also, according to Hong

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1 It was found significant in flows but the authors argue that the model has a better explanatory power for the stocks of investment.
(2011), this sort of behavior reveals a trade related investment which is aided by the accumulation huge amounts of foreign result by China, and is also aided by the onset of the crises, which provided China with an opportunity to purchase various assets and natural resources at depressed prices.

5.4 India

Geographical distribution of the OFDI from India:

A study carried out by Hattary and Rajan (2010) reveals that between 2000 - 2007, the appetites of Indian firms were mainly for obtaining companies located in the developed countries as they received 75% of all deals. The top ten destinations in which Indian companies acquired assets listed in descending order are Canada (34%), USA (24%), Rest of Europe (12%), Russia (8%), Singapore (7%), Egypt (6%), UK (5%) and South Africa (1%). (Hattari and Rajan 2010:506 - Figure 2)

Also, it can be inferred that the largest recipients are countries with large markets such as Russia, USA and Canada which received 66% of the OFDI acquisitions. Most of these countries are not in the vicinity of India suggesting that maybe geographical or cultural proximity doesn't play a very important role in influencing an Indian company's investment decisions.

Industrial distribution of OFDI from India

In contrast to China and Russia, the Indian companies are predominantly privately owned and the state companies investment decisions are steered by the forces of the market. The last decade the government of India is perceived to play a role only in few key industries such as extractive resources and power (Pradhan 2010, Hong 2011). The conglomerates in the case of India also play a very important role.
<table>
<thead>
<tr>
<th>Target Industry</th>
<th>Value of M&amp;A (USD million)</th>
<th>Host country</th>
<th>Value of Greenfield (USD billion)</th>
<th>Host country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil and Gas</td>
<td>850</td>
<td>Colombia</td>
<td>9.1</td>
<td>Nigeria, Iran, Serbia and Montenegro</td>
</tr>
<tr>
<td>Metals and Mining</td>
<td>22,168</td>
<td>UK, US, Canada, Indonesia</td>
<td>6.9</td>
<td>Indonesia, Bolivia, Philippines</td>
</tr>
<tr>
<td>Electronics</td>
<td>1,692</td>
<td>France, Korea, US</td>
<td>3.3</td>
<td>Poland, Italy</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>927</td>
<td>Germany, Romania</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Food and Beverage</td>
<td>1,853</td>
<td>UK, US</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Energy</td>
<td>565</td>
<td>Belgium</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Financial</td>
<td>658</td>
<td>Norway</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Petrochemicals</td>
<td>x</td>
<td>x</td>
<td>5.3</td>
<td>Saudi Arabia, Egypt</td>
</tr>
</tbody>
</table>


As illustrated in the Table 5.2, in terms of M&A the mining and metal sector was by far the most lucrative for the top Indian firms suggesting that a desire to obtain primary resources could be an important propeller for investment. A closer look into the behavior of one of India's most important conglomerates, the Tata Group, which was responsible for 64% of the value of M&A in the metals and mining sector (Annex table 3), uncovers that while Tata Power acquired the Indonesian coal producer Kaltim Prima Coal (signifying accessing the downstream market), Tata Steel also acquired the UK's Corus group, positioning itself as the second largest producer of steel in Europe¹. This suggests a desire to establish global presence by obtaining companies with an established name.

This behavior calls to mind the behavior of the Russian oil giant Lukoil. Other important industries seem to be the high skill- and knowledge intensive industries of IT and Pharmaceuticals.

¹Tata steel website (http://www.tatasteeleurope.com/en/)
While the analysis of M&A reveals that Indian enterprises are predominantly interested in acquiring assets of well established enterprises from wealthier economies, the data on the greenfield investments points to resource seeking behavior as a majority of the projects are concentrated in extractive sector of the developing countries.

Looking further into the composition of the companies we can see that the majority of the companies establishing greenfield investments are government owned enterprises such as ONGC, GAIL and NALCO (National Aluminum Company). These companies seem to be actively tapping into resources like coal, oil, gas and core materials used in manufacturing.

*Push and Pull factors of OFDI from India*

In terms of push and pull factors of OFDI from Indian firms, two econometric studies conducted by Hattari and Rajan (2010), Pradhan (2009) and two more descriptive studies of Athukorala (2009) and Hong (2011), showed mixed results.

In terms of resource seeking behavior: In Hattary and Rajan's (2010) study, India was compared to a sample of developing and developed countries from a period between 2000 – 2005. The findings were that India is more resource seeking compared to other countries.

However in Pradhan's (2009) sample, which covered a slightly longer period between 2001 - 2007, the results were that resource seeking behavior was not important after dividing the sample into two groups: developing and developed. The resource seeking motive was slightly significant in developing countries and it was directed not to oil extraction but to minerals. Pradhan (2009) reasoned that this is indicative that resource-seeking behavior is only important for some companies but it can
not be concluded that in general Indian firms are looking for natural resources.

The descriptive studies of Hong(2011) and Athukorala (2009), both argue that oil and mineral exploitation from the Indian companies is very important. Hong (2011), points out that rising prices of those commodities and the increased energy and oil consumption of India definitely makes the search for natural resources an important motive.

The market-seeking motive seems to be confirmed by all studies but Pradhan (2009) makes a clarification that Indian OFDI was significantly directed to countries with a larger population, predominantly in the developed countries, which could imply that Indian companies are seeking access to developed country markets. Athukirala (2009) finds that market seeking behavior is especially pronounced in pharmaceutical and automotive industries.

There are disagreements on the asset-seeking behavior of the Indian firms, which I find hardly surprising keeping in mind that this point is also pervasive in the the core of the disagreement of the theoretical framework as well. In Hattari and Rajan's (2010) sample, Indian firms were less inclined to invest in countries with higher concentration of R&D activities compared to other countries in the sample. In their study Hattari and Rajan (2010) include many developed countries and then compares them to India. In his sample there are 28 developed countries: 4 NICs and 24 developing so we can see the representation could be slightly disproportionate (this thought is based on Appendix table A1 in Hattari and Rajan (2010) study).

In terms of asset-seeking behavior it was also surprising to find out that when Indian firms are investing in countries, they are not attracted to countries with high innovation capabilities. But on the other hand the investment from Indian firms is highly attracted to an abundance of high skilled labor in a country. A rationale used by Pradhan (2009) is that in the past the Indian firms would have been even more inclined not to invest in countries with high levels of R&D. As Pradhan (2009) mentions: Indian
firms seem to be attracted by knowledge intensive sectors such as IT, Pharma, chemicals, automotive, etc.

Both of the descriptive studies, which are also more recent in type period, stress the importance of increased asset-seeking behavior of Indian firms in recent years. Hong (2011) finds that the knowledge-seeking motive of Indian firms engaged in M&A is indeed very strong which is reflected in their desire to acquire “skills, technology and widen the distribution networks overseas apart from the objective of accessing overseas markets” (Hong 2011:11).

This type of behavior could explain the intensified investment of the Indian firms in the developed world (Hong 2011). Athukorala (2009) finds that for example in metal and metal products the intention was to reinforce global competitiveness rather than to exploit a specific advantage. Athukorala (2009) concludes that the most important drivers were access to technology, sources of raw materials and global presence.

Table 5.3 summarized the findings from Chapter 5 and compares them to previous periods in investment.

<table>
<thead>
<tr>
<th>First Wave - restrictive regimes</th>
<th>Second Wave – transition</th>
<th>Third Wave</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BRAL</strong></td>
<td><strong>Period</strong> – mid 1970 – late 1980</td>
<td><strong>Period</strong> - mid 1990 - up to 2000s</td>
</tr>
<tr>
<td><strong>Destinations</strong> – developing and developed countries</td>
<td><strong>Destinations</strong> - Latin America (heavily in Argentina) and very few incidents of investment in developed in developed countries</td>
<td><strong>Industries</strong> - variety of industries and intensification in more skill intensive industries - such as IT, electronics, pharmaceuticals</td>
</tr>
<tr>
<td><strong>Industries</strong> - manufacturing and skill intensive manufacturing in developed countries such as car components, textiles, compressors and packaging</td>
<td><strong>Companies</strong> - predominantly economic groups /conglomerates</td>
<td><strong>Determinants</strong>: market-seeking, technology exploiting, and knowledge-seeking; desire to obtain global brand recognition; natural resources not strong</td>
</tr>
<tr>
<td><strong>Industries</strong> - 73% were in the top 6 industries mature industries - textiles, f/b, paper, steel and very few knowledge intensive such</td>
<td><strong>Industries</strong></td>
<td></td>
</tr>
<tr>
<td>Period</td>
<td>Destinations</td>
<td>Industry</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>up to 1989</td>
<td>only data for affiliates in developed countries.</td>
<td>different service industries - marketing, purchasing, distribution and transportation</td>
</tr>
<tr>
<td>1990s - early 2000s</td>
<td>neighboring countries with which Russia had close cultural or political ties</td>
<td>different service industries - early 90s manufacturing, late 90s services</td>
</tr>
<tr>
<td>past 2000s</td>
<td>developed countries and emergence of Africa and Asia in the recent years; less to CIS</td>
<td>natural resources and telecommunications natural resources and manufacturing rise in the recent years.</td>
</tr>
<tr>
<td>Period</td>
<td>Destinations</td>
<td>Companies</td>
</tr>
<tr>
<td>--------</td>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>China</td>
<td>1975 – late 1980s</td>
<td>neighboring countries</td>
</tr>
<tr>
<td>India</td>
<td>1979 – 1992</td>
<td>Asia, followed by North America</td>
</tr>
<tr>
<td>Period</td>
<td>Destinations</td>
<td>Companies</td>
</tr>
<tr>
<td>--------</td>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>China</td>
<td>beginning of the 1990s</td>
<td>formation of conglomerates</td>
</tr>
<tr>
<td>India</td>
<td>1991 - 1997</td>
<td>neighboring developing countries; investment into the US started to intensity; beginning of investment into Latina America and Africa</td>
</tr>
<tr>
<td>Destinations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>developed countries</td>
<td>privately owned companies; SOEs in natural resources; conglomerates</td>
</tr>
<tr>
<td>India</td>
<td>everywhere, pronounced increase in Africa and Europe</td>
<td>Extractive and business services; rise of utilities and R&amp;D</td>
</tr>
</tbody>
</table>
Chapter 5
Conclusions and Findings

The starting point of this paper was the puzzle of the unprecedented increase in the share of the outflows from developing countries that reached 20% of world foreign investment flows in the last three years. The first hypothesis was that this could be a result of the global crisis. A closer look revealed that this expansion started to transpire before the recent economic and financial crisis unfolded. Therefore, the research was directed towards uncovering if this new wave is different in nature from the previous incidents of investment from developing countries and if so, what are the characteristics that makes it stand out. The BRICs countries were selected for a more detailed study as they are the leaders of today’s wave.

The first sub question was directed towards uncovering if the overall trends of investment today differ from the characteristics of investment during earlier periods. The findings in Chapter 4 led to conclusions that indeed in contrast to previous waves, firms today are much more inclined to operate beyond national borders and spread out their activities to developed and developing regions alike. In the past investment was much more concentrated in few regions and today it is encompassing poorer and wealthier countries alike. At industry level two trends are pronounced - companies one hand are intensifying activities in the primary sector and on the other entering a larger variety of industries especially those that are more skill and knowledge intensive. However, It can be argued that this trends are a natural continuation of the behavior of the firms from the previous waves. The ability of firms to enter more industries and regions could indicate that they were able to amass skills and knowledge during years of investing abroad in neighboring countries. In this case their behavior could be predicted by the Uppsala school that argues that firms
accumulate knowledge in gradual steps and only after they are strong enough they engage in investment in highly unfamiliar environment. This type of behavior will also imply that during the years of investment companies were able to form an ownership advantage which they would like to further exploit. This behavior will be in line with the dominant theories that place the ownership advantage in the center as an enabling factor for firms to go abroad. Thus in Chapter 4, I discovered that although the characteristics of today's wave differ from the characteristics of previous waves, it could be a natural continuation of the previous two waves.

Chapter 5 looked more closely into the characteristics and the determinants of the investment from the BRICs and uncovered that during the last wave of investment the BRICs are increasingly interested in investing into the developing countries and countries that are farther away. At industry level, there is a highly pronounced investment from the governments and conglomerates in the extractive sector and on the other hand increase of investment in skill intensive knowledge. The companies from all countries seemed to have been attracted to large markets signifying market seeking behavior with the emerging trends of asset-seeking behavior. Efficiency seeking behavior seem not to have been an important factor in the behavior of the BRICs and the importance of cultural and geographical proximity was only important in the case of establishing greenfield investment. Thus in the behavior of the BRICs in the recent years we can see a trend from the past that was leading during the first wave - the important role of the state but with a difference that the state is steering the wheel in different direction. In contrast to before it is pushing the companies to go abroad. Also, firms from China, Russia and Brazil were quite different from their peers during the first and the second wave. Brazil opened up its economy much later than the other neighboring countries. China and Russia were under fully restrictive regimes until the 1990s - a time during which the Asian Tigers were riding the second wave.
of investment from the developing countries. While during the first wave many developing countries were already investing in manufacturing sectors of other countries and were exploiting various advantages, investment from China was non-existent and outward investment from Russia was serving politics. Thus the firms from Brazil, China, and Russia were very late in starting the process of internationalization.

Table 5.3 shows that in a very short period of 20 years, the nature of FDI from Russia and Brazil has changed significantly. In just a little over 10 years Russia's firms that were engaged in outward investment moved from fully state-owned that were supporting trade to fully privatized and now we are seeing the re-emergence of the state again. Brazil's firms were investing in the developed world in the beginning of the 1990s, and then moved predominantly to Latin America and now investment is once again directed towards the European countries.

On the other hand, after the opening up of the economies of the BRICs countries, the Uppsala framework seems to have been able to explain the internationalization process during the first and second waves. For example, with the opening up of the Russian economy the Russian firms started to invest in the CIS countries with which they had cultural ties. Thus, maybe the gradual steps of investment proposed by the Uppsala school are more indicative of the behavior of companies operating longer but not for the ones incepted in the more recent years, which is a trend most interesting but not explored in this paper due to recentness of this trend and difficulty to collect data. Goldstain (2007) also suggests that the Uppsala school fits in explaining the internationalization process of firms operating in mature industries.

The 1990s seem to have been turbulent transition times for some of the BRICs. While other counties that were leading the first and the second wave opened up earlier, when global competition was probably not that strong, the BRICS opened up in the 1990s. As we saw in Brazil and Russia capital flight was a very pronounced motivation for companies to go abroad.
Moreover, those conglomerates seem to have been born and strengthened in turbulent times of economic and political transition as in the case with Lukoil, Tata Group and CITIC group. They were born operating in unfavorable conditions. Russian private multinationals were born in times of political instability when the “oligarchs” were created.

The big question that is in the core of the theoretical debate between the predominant theories such as the internalization and the OLI paradigm and the more recent stream of thinking of Mathews (2006) and Moon and Roehl (2001), is if companies from developing countries are exploiting ownership advantage or if they are augmenting their assets. In this paper, I looked at different studies on the determinants of outward investment and uncovered that many of the studies sowed mixed results, most authors agreed that the asset-seeking motive seems to be transpiring in the most recent years. Of course, if this is a recent trend it will not be captured very significantly by econometric estimations but the more descriptive studies pointed to the increased desire of companies to acquire skills, knowledge along with the motive of desire to establish global presence. This type of behavior is better explained by Mathews (2006) and Moon and Roehl's(2001) framework that states that countries that are newcomers had to compensate their deficiencies by learning as fast and possible - line of thinking supported by the alternative theories. They had to be aggressive - only in this way they are able to operate globally.

Therefore, in summary the findings are that the overall characteristics of today's wave seems to differ from the previous waves and moreover the firms from the leaders of todays wave - the BRICs - seems to have had different internationalization path compared to their peers from other developing countries.
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