

New-Wave Emerging Multinational Companies: The Determinants of Their Outward Foreign Direct Investment

Wladimir Andreff

University Paris 1 Panthéon Sorbonne, Lédignan, France

Focusing on the fast growth of BRICS' outward foreign direct investment (OFDI) and multinational companies during the crisis has left unheeded that some other emerging economies also grow much faster than average in the global economy and has become significant and fast-growing direct investors abroad. A sample of such (thirteen) new-wave emerging countries (NWECS) is gathered on the criterion of being ranked among the most significant foreign direct investors in the global economy. The literature review exhibits only very few articles existing on such a topic so far. Descriptive statistics enable tracing OFDI by NWECS-based multinational companies back to the 1970s, checking its geographical orientation and industrial structure, and assessing the relative importance of cross-border mergers and acquisitions. Econometric estimation exhibits that direct investment moving off the NWECS is explained by so-called push factors such as the home country's GDP, GDP per capita, GDP rate of growth, the share of high-technology exported products in overall export, the number of technological patents registered, and how much inward foreign direct investment stock has previously been hosted. These results are discussed in the light of Dunning's investment development path model and Matthews' linkage-leverage learning hypothesis.

Keywords: emerging countries, multinational companies, outward foreign direct investment, geographical distribution, industrial structure, cross-border mergers and acquisitions, push factors

Introduction

On the brink of the global financial and economic crisis, and during its first years, the focus has been on the BRICS' (Brazil, Russia, India, China, and South Africa) fast growth and resilience to the crisis. One promising dimension of BRICS economic development and successful muddling through the crisis has been stressed as being a dramatic expansion of their outward foreign direct investment (OFDI) and of BRICS-based multinational companies (MNCs) over the past 15 years or so. This is increasingly topical in the international economics and business literature. However, focusing on BRICS' OFDI and MNCs has somewhat left unheeded that some other emerging economies also do grow much faster than average in the global economy and has become significant and fast-growing direct investors abroad. The latter makes up a new wave of

Wladimir Andreff, Emeritus professor at University Paris 1 Panthéon Sorbonne, Honorary Member of the European Association for Comparative Economic Studies, Honorary President of the International Association of Sports Economists and of the European Sports Economics Association, President of the Observatory of the Sports Economy, French Ministry of Sports, Lédignan, France.

Correspondence concerning this article should be addressed to Wladimir Andreff, 61, chemin du Pouget, 30350, Lédignan, France.

emerging economies catching up with the BRICS as regard OFDI achieved by their home-based multinational companies.

A first task is to delineate a sample of emerging economies (excluding the BRICS) which rank among major OFDI home countries in the world. The outcome is a group of 13 New-Wave Emerging Countries (NWECS): Argentina, Chile, Colombia, Egypt, Indonesia, Iran, Malaysia, Mexico, Nigeria, Pakistan, Philippines, Thailand, and Turkey (Section 1). Since such a country sample has never been gathered and studied so far, in particular from the standpoint of OFDI, actually there is no way of finding some food for a directly related literature review. However those few existing articles about OFDI or MNCs from these 13 countries taken individually are covered as a proxy literature review as well as the even fewer econometric studies about their OFDI determinants (Section 2). Then the data collection methodology, the kind of descriptive statistics used and modeling the determinants of OFDI is described (Section 3). Primary data collection and descriptive statistics enable tracing back the emergence of the first OFDI and MNCs from the 13 NWECS, featuring geographical distribution and industrial structure of their investment abroad, and assessing the relative importance of cross-border mergers and acquisitions in the whole process (Section 4). Finally, those factors pushing companies based in the 13 NWECS to invest abroad (push factors) are econometrically tested as being the determinants of their OFDI; the results are discussed in the light of Dunning's investment development path model and Matthews' linkage-leverage learning hypothesis (Section 5)¹. A conclusion follows (Section 6).

Data Sampling: New-Wave Emerging Countries From the Standpoint of Outward Foreign Direct Investment

Selecting a data sample of emerging economies that is methodologically relevant and meaningful from the standpoint of studying their MNCs and OFDI requires that the outcome must be a sample homogenous enough from within and heterogeneous enough when compared to other known country samples such as developed market economies, post-communist transition economies, or rent-dependending countries. The idea is to build up a data base with all countries in the world which significantly invest abroad and then select out of it a relevant sample of emerging economies through a double process: a) cleaning the data base from obviously non-emerging countries such as well-known developed market economies, post-communist countries and so on, on the one hand; b) on the other hand, fixing a set of criteria that can be used to define emerging economies by contrasting them with other countries that significantly invest abroad.

Among all countries in the world, major investors abroad are defined here with the following criterion: a country is a significant OFDI home country if its OFDI stock abroad is bigger or equal to \$1 billion in 2014 according to the United Conference on Trade and Development (UNCTAD) data published in the 2015 *World Investment Report*. With this threshold in mind, 91 countries in the world are kept in the data base. In view of delineating a sample of NWECS, this data base must be cleaned of developed market economies (*DMEs*) defined as having over \$20,000 GNI per capita in 2014; 30 *DMEs* are dropped.

Among the 61 countries left there are the five BRICS. Of course, they are emerging economies; they have even been the leading ones for at least two decades. However they are left aside the sample since they have already been studied as regard their OFDI and MNCs with a same methodology as the one adopted in the

¹ On the analytical framework distinguishing OFDI push factors from pull factors (see Andreff, 2003; Dunning, 2008; Gugler & Boie, 2008).

present article (Andreff, 2013; 2014; 2016a; 2016b). Thus they are not to be included in the NWECS' sample while they are taken as a sort of benchmark to check whether the new wave can compare to some extent to the BRICS. Post-communist transition economies (*PTEs*) must be cleaned off the sample of 56 remaining countries. These economies are not yet developed market economies even though some (Slovenia, the Czech Republic) are rather advanced in their transition to a fully-fledged market economy. They are not former underdeveloped or developing countries either, as emerging countries have been in few decades ago. To the contrary, as former centrally planned economies, they were rather than under-industrialized, and had reached an intermediary level of economic development (though distorted), and had closed their economy to inward and outward FDI for decades. Among significant investors abroad one finds 16 *PTEs* in 2014 (Russia excluded, since it has already been dropped with the BRICS). The sample of potential newly emerging economies is down to 40.

Some countries remaining in the sample have their economic development and consequently their inward FDI and OFDI—very much dependent on rent-extracting activities based on crude products such as oil and gas, or raw materials exploitation, namely, phosphates in Morocco and Togo, copper mining in Zambia, and diamond mining and mineral fuels in Peru. United Arab Emirates, Saudi Arabia, Kuwait, Qatar, Venezuela, Libya, Angola, Oman, Iran, Iraq, Algeria, and Gabon are oil and gas rent-dependant countries (*RDCs*). However, Iran was not always able to extensively exploit its oil rent in the past decades due to sanctions and embargo, and must not be merely retained as an *RDC* given its level of industrialization. A last case in point is Nigeria, an oil producer and exporter. For sure the Nigerian economy is somewhat dependent on the development of its oil industry. However, it is a rather big country which fulfills other criteria of emergence (see below). It is the only one sub-Saharan African country that can be considered as a potential newly emerging economy (beyond South Africa). Eventually, 17 *RDCs* are skipped out from the sample of potential New-Wave Emerging Countries significantly investing abroad.

Among the remaining 23 countries, some are not ranked with the 91 major investors abroad due to their level of economic development (they are not *DMEs*), their former communist regime (they are not *PTEs*) or their rent-dependence (they are not *RDCs*) but due to some specific institutional or geographical feature. This pertains to tax havens, free trade zones or tax friendly countries—tax friendly small economies (*TFSEs*) such as Lebanon, Bahrain, Trinidad & Tobago, Cook Islands, Liberia, Panama, Bahamas, Barbados, Macao, and Mauritius. They are geographically small countries with a small population which is at odds with the BRICS and with the common sense about emerging economies.

Once subtracted *TFSEs* the sample of New-Wave Emerging Countries (NWECS) is left with the 13 following countries ranked according to their OFDI stock: Malaysia, Mexico, Chile, Thailand, Colombia, Turkey, Argentina, Philippines, Indonesia, Nigeria, Egypt, Iran, and Pakistan (Table 1). These 13 NWECS can compare to the BRICS in that they are big countries both in terms of population and GDP, located on wide national territories, and they have enjoyed swift economic development in the past two decades.

Table 2 summarizes the whole data base by country (sub-) samples: *DMEs*, BRICS, NWECS, *PTEs*, *RDCs*, and *TFSEs* ranked with respect to their average OFDI. Such a country sampling is relevant from the standpoint of OFDI since the coefficient of variation s/m (m = mean value, s = standard deviation) is below 0.96 for BRICS and NWECS though higher in other sub-samples and in the whole data base ($s/m = 2.88$); and below 0.65 for the level of economic development (GNI per capita) in BRICS and NWECS while higher in the whole data base ($s/m = 1.01$). The NWECS sample, like the BRICS one, is rather homogeneous. By contrast, *RDC* and *TFSE* groups gather rather different (heterogeneous) countries; the rent is differently extracted from oil, gas, raw materials, etc.,

and from country to country, while institutional or geographical advantages are scattered and diversified in the *TFSE* sample.

Table 1

Outward Foreign Direct Investment Stock and Other Variables: Sampling 13 Newly Emerging Economies

Country	OFDI stock in 2014 \$ billion	Population million	GDP \$ bn 2014	g 2006-10	g 2011-14	GNI/ capita	Geographic. size thkm ²	Inw. FDI stock 2014	OFDI/ GDP	OFDI/ inward FDI
1 Malaysia	135.7	29.9	338	4.5	5.4	11,120	329	133.8	40.1	101.4
2 Mexico	131.2	125.4	1,295	2.0	2.9	9,870	1,944	338.0	10.1	38.8
3 Chile	89.7	17.76	258	3.5	4.4	14,910	744	207.7	34.8	43.2
4 Thailand	65.8	67.73	405	3.8	3.0	5,780	511	199.3	16.3	33.0
5 Colombia	43.1	47.79	378	4.6	5.0	7,970	1,110	141.7	11.4	30.4
6 Turkey	40.1	75.93	798	3.3	4.5	10,830	770	168.6	5.0	23.8
7 Argentina	35.9	42.98	538	5.8	3.2	13,480	2,737	114.1	6.7	31.5
8 Philippines	35.6	99.14	285	4.9	5.9	3,500	298	57.1	12.5	62.3
9 Indonesia	24.1	254.5	889	5.7	5.7	3,630	1,812	253.1	2.7	9.5
10 Nigeria	10.3	177.5	569	7.2	5.2	2,970	911	86.7	1.8	11.9
11 Egypt	6.8	89.58	287	6.2	2.1	3,050	995	87.9	2.4	7.7
12 Iran	4.1	78.14	425	4.9	-0.1	7,120	1,629	43.0	1.0	9.5
13 Pakistan	1.7	185.0	244	3.4	3.8	1,400	771	30.9	0.7	5.5

Notes. g: GDP rate of growth; GNI: gross national income.

Table 2

Comparison Between Country Samples in the Data Base of Major Investors Abroad

Country samples	OFDI stock in 2014 \$ billion	Population million inhabitants	GDP 2014 \$ bn	GDP rate of growth: g			Geographical Size*	Inw FDI st.ock 2014 \$ bn	OFDI/GDP in %	OFDI/ Inw. FDI in %
DMEs (m)	722.8	34.5	1,587.7	1.9	1.9	47,348	1,045,.2	585.6	101.2	135.4
s/m	1.59	1.79	2.03	0.79	0.53	0.40	2.48	1.68	1.21	0.86
BRICS (m)	401.9	752.2	4,151.5	7.0	4.8	8,430	9,274	617.7	12.5	68.6
s/m	0.54	0.77	0.86	0.44	0.54	0.53	0.51	0.53	0.54	0.41
NWECs (m)	45.1	98.7	4,92.5	4.7	4.2	6,646	1,118.6	139.9	10.7	29.8
s/m	0.96	0.65	0.61	0.30	0.29	0.65	0.62	0.60	1.11	0.86
PTEs (m)	25.5	14.8	161.0	4.0	2.8	9,969	863	57.9	8.2	24.9
s/m	3.31	1.92	2.26	0.83	0.57	0.59	3.72	1.47	0.94	1.66
DRCs (m)	16.3	20.8	179.2	5.5	4.7	17,232	845.8	42.6	12.4	46.6
s/m	1.16	0.90	1.02	0.71	0.38	1.35	0.97	1.24	1.10	1.31
TFSEs (m)	5.5	2.0	26.5	5.5	4.1	20,539	22.1	20.0	57.3	31.6
s/m	0.62	0.83	0.72	0.65	0.83	1.01	1.55	0.82	1.41	0.73
SAMPLE (m)	246.0	61.3	776.3	4.1	3.4	22,703	1,159.9	243.3	41.9	64.3
s/m	2.88	3.18	2.75	0.78	0.62	1.01	2.23	2.48	1.97	1.35

Note. * in thousand square kilometers.

Two other interesting features show up in Table 2: on average, BRICS have a huge population (752 million inhabitants) and the biggest average geographical size (9,274 thousands square kilometers). The next biggest

countries in terms of average population are the NWECS (108 million inhabitants). The NWECS are also the second biggest countries on average in terms of geographical size (1,120 thousands square kilometers). Therefore, it can be concluded that the NWECS have some similarities or are not lagging too far behind the BRICS. Moreover, the coefficient of variation is the lowest in the NWECS for the distribution of population, GDP, GDP rate of growth in 2006-2010 and in 2011-2014, meaning that these countries are even more homogenous than BRICS in this respect. The lowest dispersion is witnessed in the BRICS group for geographical size, inward FDI stock and OFDI/GDP and OFDI/inward FDI ratios. However, the second lowest dispersion (and very close to the BRICS' coefficient of variation) is observed in the NWECS sample for geographical size and inward FDI stock. Lower disparity makes sense grouping the 13 selected countries as NWECS. All in all, the NWECS are at least as homogenous a sample as the BRICS one.

The average NWECS in 2014 was a country with a \$48 billion OFDI stock, 107.5 million inhabitants, a \$516.1 billion GDP, a 4.6% growth rate both in 2006-2010 and 2011-2014, a \$7,356 GNI (gross national income) per capita, and a 1,120 thousands square kilometers' geographical size. It is a kind of "small BRICS", eight times smaller in terms of GDP and geographical size, seven times smaller in terms of geographical size, with a GDP rate of growth coming close to the one of BRICS in 2011-2014, and much more stable, that is a country as resilient as a BRICS to the crisis. A nine times smaller OFDI stock than the BRICS' means that the NWECS are only emerging as major foreign investors; thus it makes sense to coin them New-Wave Emerging Countries from the standpoint of OFDI. The same applies to their GNI per capita (\$7,356) rather close to the BRICS' level (\$8,430).

Unheeded in the Literature: Outward Foreign Direct Investment by New-Wave Emerging Countries

There is no literature about the NWECS sample properly speaking and even less so as regard OFDI from these 13 countries. However some references can be found, though unevenly, about OFDI and MNCs from each of the NWECS. The paucity of literature references is even harsher when it comes to econometric testing the determinants of their OFDI.

Data about the NWECS-based MNCs are extremely scattered and scarce in the economics and business literature. Starting with MNCs based in the four Latin American NWECS, the so called *multilatinas*, the Argentine firms' internationalization process has been studied in Prosper Ar and VCC (2009). Their primary motive for OFDI has been the search for new markets (market-seeking strategy). Argentine companies have also been making efficiency-seeking investments abroad—geared toward finding lower costs abroad in order to benefit from economies of scale and/or risk diversification. In some cases, the drivers for investment are competitive advantages, such as highly qualified human resources, or the companies' ability to meet international quality standards.

Turning to Chile (Perez Ludena, 2011; UN-ECLAC & VCC, 2011), 14 out of the 20 largest Chilean MNCs had invested abroad only in Latin America. The three most globalised companies Molymet (the largest world producer of molybdenum) and SQM have also invested in Europe, and ENAP even in Egypt. Most Chilean MNCs have adopted a market-seeking strategy toward Latin American and European markets, a resource-seeking strategy (to secure deliveries of raw materials, gas, oil, etc.) in the primary sector, and an asset-seeking strategy in neighbouring countries (Table 4).

Table 3

The 19 Largest Argentine Firms Investing Abroad in 2008

(\$ million)		
Company	Industry	Foreign assets
Techint Group	Conglomerate	17,406
Arcor	Food products	491
IMPESA	Machiney and equipment	300
Bago Group	Pharmaceuticals	192
Molinos Rio de la Plata	Food products	190
Los Grobo Group	Crop and animal production	175
Cresud	Crop and animal production	68
Roemmers	Pharmaceuticals	58
TECNA	Specialised construction activities	50
Iecsa	Civil engineering	50
San Miguel	Food products	23
BGH	Computer and electronic products	15
CLISA	Waste collection & disposal activities	8
Petroquímica Rio Tercero	Chemicals	8
AssaGroup	IT services	7
Plastar Group	Rubber and plastics products	5
Sancor Coop. Unidas	Food products	3
Havanna	Food and beverage service activity	2
Bio Sidus	Scientific R & D	1

Source: Prosper Ar & VCC (2009).

Table 4

The Top 20 Chilean Non-Financial Outward Investors, 2011

(\$ million)		
Company	Industry	Foreign assets
Cencosud	Retail trade	6,541
CMPC	Forrestry	3,395
COPEC	Forestry-Energy	3,200
Falabella	Retail trade	2,283
CSAV	Transportation	2,210
Masisa	Forestry	1,802
SQM	Mining	1,403
Sigdo Koppers	Manufacturing	1,130
Ripley	Retail trade	941
Embotelladora Andina	Food and beverages	766
ENAP	Energy	684
Sonda	Software	660
CCU	Food and beverages	530
Concha y Toro	Food and beverages	495
LAN	Transportation	483
Molymet	Metallurgy	389
Banmedica	Health services	306
CGE	Energy	288
Madeco	Metallurgy	287
Carozzi	Food and beverages	202

Source: UN-ECLAC & VCC (2011).

Rather neglected in the literature, Colombian MNCs can compare to the Chilean ones. Some of them are “national champions” that is still state-owned enterprises (SOEs) such as Ecopetrol, ISA, EPM, and ETB (Empresas de Telecomunicaciones de Bogota). Colombian companies follow a same internationalization pattern as other multilatinas (Gonzalez-Perez & Velez-Ocampo, 2014; Poveda-Garcés, 2011). These companies had first explored natural markets for them; they had attempted to be established in markets that share psychic features and similar institutional environment, as psychic and physical proximity reduces risk and facilitates foreseen return of investments (Table 5).

Table 5

Main Colombian Multinational Companies in 2009

(\$ million)		
Company	Industry	Turnover
Ecopetrol	Oil and gas	15,511
Terpel	Gasoline and lubricants distributor	3,378
Grupo Nacional de Chocolates	Food and beverages	2,572
Inversiones Argos	Financial	2,518
Empresas Publicas de Medellin	Electricity	2,447
Cementos Argos	Cement	1,934
ISA (Interconexion Electrica)	Electricity	1,854
Grupo Carvajal	Office and paper products	1,724
Bavaria	Food and beverages	1,115
Alpina Productos Alimenticios	Food and beverages	629
Postobon	Food and beverages	395
Corona	Construction	391
Fabricato	Apparel and clothing	311
Ajover	Construction	86
Computec	IT and software solutions	79
Promigas	Oil and gas	60
Gerfor	Construction	53
Procafecol	Food and beverages	44
Supertex	Apparel and clothing	16
Open Systems	Software solutions	12
Consult Soft	Consulting and software solutions	1.3
Zemoga	Office software and marketing	0.5

Source: Poveda-Garcés (2011).

Mexican MNCs rank among the biggest world companies in the services industry such as telecoms and are the most studied as well (Franco-Navarrete, 2011; Kunhardt & Gutiérrez-Haces, 2009; Santiso, 2007; Vargas-Hernandez, Leon-Arias, Valdes-Zepeda, & Castillo-Giron, 2013; Vargas-Hernandez, Lopez-Morales, & Inda-Tello, 2015; Velez-Ocampo, 2013). Cemex, a Mexican giant in the cement industry, had used acquisitions to become the largest cement producer in the United States. It had achieved 40 cross-border mergers and acquisitions (M&As) between 1990 and 2006 and invested in the USA, the UK, Australia, Spain, Egypt, Indonesia, and the Phillipines (Table 6).

Once having captured 80% of the domestic banking market in the 1980s, Bimbo established a greenfield FDI in Guatemala in 1989 whereas in the 1990s this Mexican MNC redirected its foreign expansion toward M&As in Chile, Venezuela, Brazil, and Colombia though still investing greenfield in El Salvador, Costa Rica,

Argentina, and Peru. Since 1998, Bimbo achieved M&As in the USA and Canada, and in China in 2006. In 2013, Bimbo had 114 plants outside Mexico of which 34 in the USA, 25 in Central and South America and two in China (Velez-Ocampo, 2013). America Movil had invested in Guatemala, Ecuador, Argentina, Brazil, Colombia, Venezuela, the USA, Puerto Rico, Mexico, and Spain. Grupo Modelo was established in 150 countries (Santiso, 2007).

Table 6

19 Selected Mexican Multinational Companies in 2008

(\$ million)		
Company	Industry	Foreign assets
Cemex	Non-metallic minerals	40,334
America Movil	Telecommunications	23,610
Carso Global Telecom	Telecommunications	11,768
Grupo FEMSA	Beverages	3,508
Grupo Alfa	Conglomerate	3,439
Grupo México	Mining	2,850
PEMEX	Oil and gas	2,090
Gruma	Food products	1,986
Grupo Bimbo	Food products	1,850
Grupo Televisa	TV & telecommunications	1,614
Cementos de Chihuahua	Non-metallic minerals	952
Industrias CH	Steel & metal products	790
Mexichem	Chemicals & petrochemicals	730
Xignux	Conglomerate	723
Grupo Elektra	Retail trade	520
Corporacion Durango	Paper & paper products	250
Interceramic	Non-metallic minerals	151
San Luis Corp.	Automobile parts	114
Accel	Food products	48

Source: Kunhardt and Gutiérrez-Haces (2009).

MNCs based in Asian NWECS are less focused on market-seeking strategies than *multilatinas*. However, Asian MNCs such as San Miguel, Charoen Pokphand, LKT, and Pentmaster have a market-seeking strategy while Felda, KL Kepong have an efficiency-seeking strategy and Bogasari International an asset-seeking strategy (Hiratsuka, 2006). Goh and Wong's (2011) main findings suggest that Malaysian MNCs predominantly react to market-seeking incentives. More generally, the strategies of Malaysian investment abroad are categorized as market-seeking (Opus International, Telekom Malaysia, Royal Selangor, CIMB, Top Glove, Road Builders, Malayan Banking, and Hong Leong), resource-seeking (Petronas, Kumpulan Guthrie, Sime Darby, and Melewar Industrial Group), and efficiency-seeking (Press Metal and Globetronics). Malaysian OFDI has used offshore financial centers and developed countries as the most important host region for trans-border activity although investments in developing, especially ASEAN countries have shown tremendous growth. Key drivers of OFDI have been to increase efficiency, access resources, and markets (Ariff & Lopez, 2007).

Most Thai OFDI is horizontal corresponding to a market-seeking strategy of Thai MNCs, much less is vertical (efficiency-seeking strategy) and few are conglomerate asset-seeking strategy (Subhanij & Annonjarn,

2016). However, efficiency-seeking is the strategy of MNCs in the Thai garment industry (Passakonjaras, 2012). Focusing on Thai OFDI, Jeenanunta, Rittipant, Chongphaisal, Thumsamisorn, and Visanvetchakij (2013) have investigated the key reasons to invest and the process of knowledge transfer in the case of three Thai MNCs that were successful with strategies including market expansion, resource seeking, and capability augmenting (often through asset-seeking). Thai MNCs also actively looked for a strategic position that favors future market expansion in developing countries and learned the new technological know-how and cutting-edge technology from developed countries.

In an attempt to explain why Indonesian MNCs are not as much dynamic as the Indian and Chinese ones, it was suggested that the apparent absence of Indonesian MNCs is an accounting error, because firms' OFDI is under-reported in official statistics and Indonesian OFDI is impeded by a combination of institutional and firm-level factors that hinder the internationalization of all but the largest firms (Carney & Dieleman, 2011). Asset-seeking Bestway Group (Pakistan) has invested in India and Afghanistan and purchased the Co-operative Pharmacy in the UK.

Among MNCs from other NWECS, the literature basically confines to Turkish MNCs. Their behavior in the past decade has followed a market-seeking pattern (Dinc, 2013). Beyond this dominant strategy, others are resource- or asset-seeking (search for technology and brand names). Erdilek (2008) has found that although different OFDI drivers vary in importance among the eight MNCs, the incremental and peripheral nature of their internationalization fits the Uppsala model (Vahlne & Wiedersheim-Paul, 1973; Johanson & Vahlne, 1990) well. Turkish MNCs preferred majority-owned joint ventures with local partners initially to minimize uncertainty and start-up costs, to cope with bureaucratic obstacles, and to gain access to technology, but they eventually acquired full ownership of their foreign subsidiaries after exhausting the initial benefits from joint venturing. Some 1,500 Turkish enterprises had invested abroad (UNCTAD, 2005). A good number of Turkish MNCs are small and medium-sized enterprises (SMEs).

FBN Holdings (Nigeria), the largest bank in Africa, has invested in whole Africa. One of the biggest African conglomerates, except those based in South Africa, is Dangote Group (Nigeria) which has invested in 14 African countries (Danja, 2012). Nigerian MNCs primarily have a market-seeking strategy, a focus on the banking sector and invest first of all in other Sub-Saharan countries (Agwu, 2014). There is even much fewer published knowledge about MNCs based in Egypt (Bonaglia & Goldstein, 2006; Goldstein & Perrin, 2007; Saleh, 2015), Iran (Sarfaraz, 2002), Pakistan, and the Phillipines.

There is not plenty of literature either about testing the determinants of OFDI from the NWECS. Surveyed econometric studies are classified here in an analytical framework that distinguishes pull factors from push factors (Andreff, 2016a). Pull factors attract and drive FDI into a given country, otherwise coined host country's factors of attractiveness to FDI (Andreff, 1999a). They differentiate host countries. Thus, when analysing OFDI, the explanatory power of pull factors is basically to point out which host countries do attract foreign investment flowing from any home country. Pull factors definitely are determinants of the geographical distribution between host countries of OFDI from (a given set of) home countries. They determine an outward investor's trade-off between host countries, therefore an MNC choice to invest in one host country rather than another on the basis of their attractiveness variables (Michalet, 1997; Andreff, 1999b).

Push factors usually are referred to home country-specific. They basically are drivers for a home country substituting investment abroad to domestic investment; they explain why investment is pushed outwards domestic borders. Push factors such as domestic market size (GDP or population as a proxy) and the level of

economic development (GDP per capita) underlie the investment development path (IDP) model elaborated by Dunning (1981; 1988) and Dunning and Narula (1998) while the home country technological level and industrial structure (distribution of value added across different industries) have been tested as drivers pushing investment outwards as well (Andreff, 2003). Push factors are the determinants of a company's propensity to substitute OFDI to domestic investment and are embedded in the home country's economy, in particular all factors that may depend on domestic industries and markets a company is involved in.

Regarding pull factors of NWECS' OFDI, with a questionnaire addressed to 169 Turkish investors abroad, Anil, Cakir, Canel, and Porterfield (2011) had found the following determinants of their location selection: being the first mover, the host economy's growth, industrial competition, host market size, and low cost inputs. Hashim (2012) used one Malaysian company's experiences to assess the situation through a qualitative analysis. The results show that intense competition in the domestic and global markets had forced firms to move out of their home country and relocated their production centers in China. China offers various factors that entice Malaysian MNCs to escalate their global expansion. These two case of studies stick to pull factors. However, econometric approaches to NWECS' OFDI determinants either encompass push and pull factors or, more often, select only push factors.

Kayam and Hisarciklilar (2009) had studied the determinants of Turkish OFDI with a gravity model. They estimated the impact of traditional gravity variables, as well as openness, labor productivity, infrastructure, institutions, and economic stability on FDI outflows from Turkey to 11 countries, which accounted for approximately 90% of Turkish OFDI stock, over the 1999-2005 period using panel data random effects technique. The results had revealed that Turkish OFDI has a market-seeking pattern with foreign markets being substituted for domestic market by Turkish firms. Moreover, economic instability in Turkey emerged as a major deterrent of FDI outflows. Additionally, the results suggest the possibility of OFDI in vertically differentiated products in host countries by Turkish investors as well as the importance of push factors.

The following studies are mixing up push and pull factors. Das (2013) examines various home country determinants of OFDI from developing economies, which have received limited attention in empirical studies. The role of home country determinants is investigated for a large sample of developing economies in 1996-2010, using panel data econometrics. The results indicate that home country's level of economic development, globalization, political risk, and science and technology investments contribute significantly to OFDI from developing countries. The latter has a need to emphasize improving political governance in order to prevent capital outflow arising out of high domestic political risk. On the flip side, science and technology investments could contribute to higher OFDI, thereby yielding complementary benefits of internationalization in the long-run. A balance between domestic and international investment is crucial for developing countries to harness the benefits of globalization.

Using a gravity model, Teo, Tham, and Kam (2015) have tested that Malaysian OFDI is determined by relative market size and government policies (tax rates and trade liberalization), which is push factors, and distance and cultural proximity of host countries, which is pull factors. Goh and Wong (2011) had estimated the determinants of OFDI from Malaysia by introducing host market size and home government policy on capital outflows using multivariate co-integration and error-correction modeling techniques. The empirical results indicate that there is a positive long-run relationship between Malaysia's OFDI and foreign market size, real effective exchange rate, international reserves, and trade openness.

Cheewatrakoolpong and Boonprakaikawe (2015) have found with a panel regression that Thailand's OFDI is most influenced by host countries' market demand, FDI openness policies, and trade openness policies. The estimation results for Singapore's and Malaysia's OFDI show similar outcomes. Finally, Oxaca-Blinder gap decomposition suggests that difference in national income and implementation of OFDI promotion policy contribute most to the difference between Thailand's OFDI performance and the other two selected ASEAN countries. Thailand still has a low OFDI performance compared with Singapore and Malaysia.

Most studies on NWECS' OFDI are used to privilege push factors as determinants. Kayam (2009) examines the home country factors that determine OFDI from 65 developing and transition countries in 2000-2006. The main tested hypothesis is that the small market size, trade conditions, costs of production, and local business conditions are the main drivers of OFDI. A fixed effects estimation technique is employed using variables that measure income, trade, infrastructure, labor market conditions, and economic stability. Proxies for the institutional environment such as bureaucracy, corruption, and investment risk are also used to reflect both the political and economic push factors on OFDI. The findings reveal that OFDI from developing countries increases with foreign competition in the domestic market augmented by inward FDI. As government stability, investment profile and bureaucracy quality in the home country improve, and outflows of capital decrease. MNCs based in developing countries internationalize as a result of escape response to the economic and political conditions in home countries.

A sample of five Asian countries, including Malaysia, the Philippines, Thailand, studied by Bano and Tabbada (2012), has tested that GDP, GDP per capita, and the rate of savings in the home country are significant determinants of its OFDI. A study by Masron and Shahbudin (2010) has found that home market variables—GDP, home technology, skills, and information—are the most important determinants of Malaysian and Thai OFDI. Econometric testing by Saad, Noor, and Nor (2014) has shown that GDP, the level of inward FDI stock, productivity in the home economy, exchange rate, export, and patents are major push factors of Malaysian OFDI.

Banga (2007) distinguished trade-related drivers from capability-related factors (including inward FDI) and domestic factors of OFDI from Asian developing countries. She has found that inward FDI, bringing in technology, skills, and information, significantly influences OFDI, in line with Matthews' linkage, leverage, and learning—LLL hypothesis (Matthews, 2002). Among the domestic factors, the level of education and real wages, low availability of transportation and communication infrastructure, and a high corporate tax rate in the home economy are significant while the domestic market size is not.

Finally, Al-Sadig's (2013) empirical findings show that OFDI from developing countries reduces domestic investment in the home country. A one percentage point increase in FDI outflows from the home country leads to a 29% decrease in domestic investment as a percentage of GDP. That is, \$10 of OFDI reduces domestic investment by \$2.9 in the short run and \$7.8 in the long run. Moreover, empirical results exhibit that inward FDI crowds in the host countries with domestic investment. A one percentage point increase in FDI inflows stimulates domestic investment by about 55%. Such an empirical evidence again goes alongside with the assumption of linkage, leverage, and learning brought into the home NWECS by previous inward FDI.

Data Collection, Descriptive Statistics, and Econometric Testing of OFDI Determinants

Given that this article presents the first research ever published about OFDI from the 13 NWECS, a first methodological aspect simply consists in information gathering and data collection. A first task is to check the very existence of NWECS-based MNCs that invest abroad. This has been done with a worldwide survey of the

international business literature and those papers surveyed in the literature review above. The outcome can be seen from Table 7 (see below) listing those 359 firms based in the NWECS that were found to be mentioned more than once in the literature as a foreign direct investor. It is clear that the list is not absolutely exhaustive in this inception research on a brand new topic. Consequently, the distribution of MNCs per country must be considered as only slightly representative. UNCTAD official data base and *World Investment Reports* (UNCTAD, 1994) have also been used for checking the dates of emergence of the first MNCs based in each of the 13 NWECS and their first OFDI. UNCTAD and National Central Bank's data from each NWECS have been collected to depict the major features of OFDI stock from the 13 countries in terms of geographical distribution, industrial structure, and the significance of M&As in overall OFDI.

As regard econometric testing, in line with Andreff (2003), Kyrkilis and Pantelidis (2003), Kayam (2009), Masron and Shahbudin (2010), Bano and Tabbada (2015), Das (2013), and Saad et al. (2014), home country determinants of OFDI (push factors) have been retained as potential explanatory variables. From the literature survey, three variables are major candidates to be explanatory as push factors of OFDI from the NWECS: the home country's economic dimension (GDP as a proxy), its level of economic development (GDP per inhabitant), and possibly its economic growth (annual GDP growth). In previous testing (Andreff, 2003), home country's technological level was assessed as determining OFDI. Moreover, in the case of the BRICS (except Russia), OFDI has been boosted, with some time lag, by previous inward FDI: foreign investors have brought them into the BRICS new relationships of local firms with a network of MNCs (linkages), some beneficial impact on domestic competitors, namely, on the productivity of their production processes (leverage) and new technology and know-how (learning) with an impact on local firms' productivity and competitiveness making them robust enough to move outbound and invest abroad. A same assumption is tested in the case of NWECS' OFDI.

Indeed, technological capabilities have often played a role in the expansion of NWECS-based MNCs as it is underlined in the case of Thai MNCs (Pananond, 2004). Long ago, Blomstrom and Wolff (1989) have measured that inward FDI triggered a productivity convergence between local firms and foreign MNCs in the Mexican economy, and that the rate of catch-up of local firms to MNCs was positively related to the degree of foreign ownership of an industry. Even though in the case of Nigeria, inward FDI is appraised as having not contributed to economic growth and development of the host country, Danja (2012) has tested a positive impact of inward FDI on Nigerian domestic industrial production, but has not checked whether such effects may comprise of Linkage-Leverage-Learning relationships between foreign companies located in Nigeria and local firms. Thus, beyond such scattered appraisals of the impact of inward FDI—through LLL—on further home country's OFDI, it is worth testing whether a kind of LLL relationship has been at work in the NWECS. This will be done in regressing OFDI on lagged inward FDI in the NWECS.

Overall, the model that is going to be tested writes for each home country i as:

$$OFDI_{i,t} = f (GDP_{i,t}, GDP/capita_{i,t}, g_{i,t}, Xhightec_{i,t}, Patent_{i,t}, INFDI_{i,t-k}) + u_i \quad (1)$$

where:

$OFDI_{i,t}$ stands for outward foreign direct investment stock from country i in year t ;

$GDP_{i,t}$ gross domestic product of the home country i in year t ;

$GDP/capita_{i,t}$ gross domestic product per inhabitant in the home country i in year t ;

$g_{i,t}$ the annual index of GDP growth in the home country i in year t ;

$Xhightec_{i,t}$ the share of high-technology exported products in overall export of the home country i in year t ;

$Patent_{i,t}$ the number of technological patents registered in the home country i in year t ;

$INFDI_{i,t-k}$ inward foreign direct investment stock hosted in country i in year $t-k$.

Data for outward and inward FDI stock are from UNCTAD and pertain to all years from 2000 to 2014 (and 1997 to 2011 for $INFDI$); statistics about current \$ GDP, GDP per inhabitant (in PPP), GDP growth rate, the number of patents, and the share of high-tech export in overall export have been collected from the World Bank data base for the same 15 years. This makes a data base with 195 observations (15 years \times 13 countries). In fact, some observations being zero, they are dropped in the calculation and then the data base shrinks to 187 observations. For two variables, $Xhightec_{i,t}$ and $Patent_{i,t}$ some data are missing for some years/some countries in the World Bank data base, so that the econometric estimation eventually relies on 174 observations.

Since the share of high-tech export in overall export is not varying that much from year to year in a same country, it has been dealt with as a dummy variable. Each year a country falls in a class one if its ratio x of high-tech export to overall export is between 0% and 5% ($0 < x \leq 5\%$); it falls in class two if the ratio is between 5% and 25% ($5\% < x \leq 25\%$); and it falls in class three if the ratio is higher than 25% ($x > 25\%$). Class one encompasses 72 observations out of 187 pertaining to those NWECS which have not a very much advanced technological level and are not able to export more than 5% of high-tech products in their exports. This class is retained as the reference in econometric testing. With 40 observations, class three gathers those NWECS whose technological level is already high enough to have more than one quarter of their export in high-tech products. Class two (75 observations) encompasses the NWECS with a still rather low technological level though higher than those in class one.

The lagged variable $INFDI$ is a proxy for testing whether inward FDI in a country has had enough linkage, leverage, and learning effects to trigger OFDI by local firms benefitting from these effects one year, two years and three years later.

Therefore, the model to be estimated becomes:

$$OFDI_{i,t} = a.GDP_{i,t} + b.GDP/capita_{i,t} + c.g_{i,t} + d_2.C_2(Xhightec_{i,t}) + d_3.C_3(Xhightec_{i,t}) + e.Patent_{i,t} + f.INFDI_{i,t-k} + u_i \quad (2)$$

It will be estimated first with an OLS test, then using a panel data testing with fixed effects and random effects.

Major Features of New-Wave Emerging Multinational Companies and the Determinants of Their Direct Investment Abroad

OFDI has unevenly emerged far back in the past from the different NWECS. After a brief history of the emergence of NWECS-based MNCs, some features of their OFDI are sketched before econometrically testing push factors which had determined them to invest abroad.

Historical Perspective

The starting point in the development of NWECS-based multinational companies dates back to the 1970s primarily for some Latin American front runners. For most NWECS-based MNCs, their first investment abroad is traced back to the 1980s and to the 1990s for Iranian MNCs. A UN report (ONU, 1978) had pointed at 170 foreign subsidiaries of Latin America-based MNCs, basically from Argentina, Chile, Colombia, and Mexico, established in other Latin American countries in the 1970s². The same report assessed OFDI stock from

² Argentine investors began cross-border production in the first part of the XXth century and were still dominating the geography of Southern American FDI in 1970; now they account for a much smaller share (Aykut & Goldstein, 2007).

Indonesia, the Philippines, and Hong Kong in other South-East Asian countries to be up to \$1.5 billion in 1976. A UN (1988) report had listed \$3.6 million FDI outflows from Colombia and \$1.2 million from the Philippines in 1975; in 1980, FDI outflows were reaching \$105 million from Colombia, \$43 million from Chile, \$6.5 million from Egypt, and \$2.6 million from Thailand while Argentina was already divesting \$110 million previously invested in Latin American countries. OFDI in the services industry was also witnessed from Argentina, Chile, Colombia, and the Philippines. In 1980, OFDI stock was up to \$13 million from Thailand, \$31 million from Pakistan, \$39 million from Egypt, \$42 million from Chile, \$137 million from Colombia, \$171 million from the Philippines, and \$414 million from Malaysia (UNCTAD, 1994).

The same past tendencies are confirmed in a few other publications. Vernon (1977) listed 10 Malaysian companies having invested in Thailand. In 1975-1980, the existence of MNCs based in Argentina, Chile, Colombia, Mexico, Egypt, Turkey, Indonesia, and the Philippines was already pointed out (Andreff, 1982). Indeed, a first wave of OFDI from Argentina dates back to 1900-1930; after a post-war collapse, Argentine OFDI had started up again earlier than 1965 with acceleration in 1969-1980 (Katz & Kosacoff, 1984). Sime Darby (Malaysia) started investing in China, Hong Kong and Singapore in the early 1970s, in the UK in the 1980s, and then in the Philippines and Australia (Ahmad & Kitchen, 2008).

By end of the 1970s, various Latin American companies were known to have invested abroad, namely, PEMEX, Sidermex, and Cydsa (Mexico); YPF, Bunge y Born, Alpargatas, Siam di Tella, Yelmo, Galileo, Fortuny, Roque Vasalli, Wobron, Bago, Giol, Arcor, Elma, and Kapelusz (Argentina); Asian MNCs such as Pertamina and Astra (Indonesia); Petrophil, Manila Electric, and San Miguel (Phillipines); Petronas and YTL (Malaysia); COPEC (Chile), Summit Ind. Corp., and Siam Cement (Thailand); Eregli Demir Ve Celik (Turkey); Cairo General Contracting and Consumers Cooperative Society (Egypt); and the Union Bank of Nigeria. In the early 1980s, 31 Argentine companies had OFDI stock in Brazil, 22 in Uruguay, 10 in Ecuador, 8 in Venezuela, 7 in Chile, 6 in Colombia, 6 in Bolivia, 6 in Paraguay, 4 in Mexico (Katz & Kosacoff, 1984). Gendarme (1981) mentions some Third World MNCs such as PEMEX, YPF, Haci Omer Sabanci Holding, and Koc Holding (Turkey); Codelco-Chile, Alfa, and Valores Industriales (Mexico); and Empresa Colombiana de Petroleos. Aykut and Goldstein (2007) date back to the late 1980s when Chile, Egypt, Malaysia, Mexico, Thailand, and Turkey had become significant direct investors abroad.

Table 7

Identified Multinational Companies Based in New-Wave Emerging Countries

Argentina
Alpargatas, Aguila-Saint, Arcor Group, Assa, Bago, BGH, Bio Sidus, Bunge y Born, Clarin, CLISA, Cresud, Cubika, Elma, Fortuny, Galileo, Giol, Havanna, Idea-Factory, Iesca, IMPSA, Kapelusz, Los Grobo, Molinos Rio de la Plata, Macri Group, Metalfor, Perez Companc, Petroquimica Rio Tercero, Pla, Plastar, Quilmes, Roemmers, Roque Vasalli, Sancor Coop. Unidas, San Miguel, Siam di Tella, Sistemas Estrategicos, Soldati, Techint, TECNA, Tecpetrol, Ternium, Wobron, Yelmo, YPF (44)
Chile
Acero del Pacifico de Inversiones, AFPProvida, ARAUCO, Banco O'Higgins, Banmedica, Carozzi, CCU, Cencosud, CGE, Chilgener-Chilquinta-Pacifico, Compania Manufactura de Papeles y Cartones (CMPC), Codelco, Concha y Toro, COPEC, CSAV, CTC, Embotelladora Andina, ENAP, Endesa-Dnersis-Chilectra, Enersis, ENTEL, Falabella, Farmacias Ahumadas, Gener, LAN, Maderas & Sinteticos, Madeco, Masisa, Molymet, Ripley, SigdoKoppers, Sonda, SQM (33)
Colombia
Ajover, Alpina Productos Alimenticios, Avianca, Bancolombia, Bavaria, Carvajal, Cementos Argos, Computec, Consult Soft, Corona, Ecopetrol (Empresa Colombiana de Petroleos), EPM (Empresas Publicas de Medellin), ETB (Empresas de Telecomunicaciones de Bogota), Fabricato, Gerfor, GNC (Grupo Nacional de Chocolates), Inversiones Argos, ISA (Interconexion Electrica), Open Systems, Postobon, Procafecol, Promigas, Supertex, Terpel, Zemoga (25)

Table 7 to be continued

Egypt
Abu Qir, Akhbar El Youm, Al Chark, Alexandria Minerals Oils, Alexandria Pharmaceutical, Aluminium Co Egypt, Amoun Pharmaceutical, Arab Contractors, ASEC Cement, Dar Al-Handasah, Egypt Air, Delta Industrial, Eastern Co., Egyptian Aluminium Products, Egyptian Cement, Egyptian Iron and Steel, Egyptian Shipping Transport, Egyptian Vehicle Manufacturing, El Mansour Automotive, Ezz Stell Rebars, Lecico Egypt, Middle and West Delta Flour Mills, Middle East Oil Refineries, Misr Insurance, Mobinil, Olympic Group, Orascom, Oriental Weavers Holding, Sidi Kerir Petrochemical, Société Mokhtar Ibrahim, Suez Cement, Sugar and Integrated Industries, Telecom Egypt, United Pharmacists (34)
Indonesia
ABC, Agung Podomoro, Artha Graha, Astra, Bakrie, Barito Pacific, Berca, Bhakti Investama, Bogasari International, BT Bumi Modern, Ciputra Development, Djarum, Elkadharna International, Gajah Tunggal, Gudang Garam, Kalbe Farma, LIPPO, Medco, Mulia, Para, PGN (Perusahaan Gas Negara), Pertamina, Pioneerindo Gourment International, Raja Garuda Mas, Rajawali, Ramayana, Rodamas, Salim, Sampoerna, Saratoga, Semen Indonesia, Sinar Mas, Telekomunikasi Indonesia (34)
Iran
Bandar Imam Petrochemical, IMIDRO Group, Iran Khodro, MCI, National Iranian Oil Company, NICICO, Saipa, SAPCO, Sazeh Gostar (9)
Malaysia
ABRIC, Alpha Biologics, Aman Resorts, Amsteel, Asia-File, Axiata, Berjaya, Bernas, Billadam, Bina Puri, Carso, Catenate, CIMB, Cosmopoint, Delcom, Dewina, Felda, Genting, Globetronics, Golden Hope Plantations, Holiday Villa, Hong Leong Bank, Hui Holding, Hume Industries, IJM, Industrial Concrete Products, IOI Corporation, Iscistech, KLK (Kuala Lumpur Kepong), KNM, Kumpulan Guthrie, Lion Group, LKT, Malayan Banking, Malaya Glass, Malaysia International Shipping, Maltex, Maxis, Mega First, Melewar, MISC, MRCB, Muhibbah, MUI, Nextnation, Opus International, OYL, Pantech, Pentmaster, Petronas, Press Metal, Prosonic, Pulse Group, Ranhill, Renong, Road Builders, Royal Selangor, Samling Group, Sapura, Sime Darby, Sunway, Tanjong, Telekom Malaysia, Top Glove, TRI-Cellular, Triplus Industries, Unisem, Uzma, Wah Seong, YTL (70)
Mexico
Accel, AHMSA, Alfa, America Movil, Bimbo, Celanese, Cementos de Chihuahua, CEMEX, Cintra, Corporacion Durango, Cydsa, Desc, Elektra, Empresas Ica Sociedad Controladora, FEMSA, Fomento Economico Mexicano, Gruma, Grupo Mexicano de Desarrollo, Grupo México, Imsa, Industrias CH, Interceramic, Kuo, Lala, Mabe, Mexichem, Modelo (Grupo), Nemak, Panamco, PEMEX, Salinas, San Luis Corp., Savia, Sidek, Sidermex, Sigma, Televisa, Telmex, Valores Industriales, Vitro, Xignux (41)
Nigeria
Access Bank, Bank of Nigeria, Diamond Bank, Dangote, FBN Holdings, Globacom, GT Bank, HeckingO Group, Industrial and General Insurance, John Holt, NNPC (Nigerian National Petroleum Corporation), Oando, Sahara Group, Transnational Corporation of Nigeria, Union Bank of Africa, Zenith Bank (15)
Pakistan
Abacus Consulting, Al Karam, Attock, Avari Hotels, Bank of Credit and Commerce International, Bestway, Cowasjee, Jahangir Sidiqi, Pakistan Petroleum, Sazgar, Shezan International (11)
Phillipines
Aboitis, Ayala, Manila Electric, Integrated Microelectronics, JG Summit Holdings, Lopez Holdings, Philippine National Oil, San Miguel, SM Prime Holdings (9)
Thailand
Amata, Bangkok Bank, Banpu, Charoen Pokphand, CP Group, EGCO, Loxley, PTT Exportation & Production, Ratchaburi Electricity, Saha Union, Sahaviriya Steel Industries, Siam Cement, S&P, Summit Ind., TCC Group, Thai President Food, Thai Union Food, Union Frozen, TUF, United Communication Industry, Universal Robina (21)
Turkey
Aksan Kalip, Arçelik, Borova, Emsas, Ener Holding, Enka Insaat ve Sanayi, Eregli Demir Ve Celik, Haznedar Refrakter, Koc Holding, Oynurden Kimya, Sabanci Holding, Turkcell Iletisim Hizmetleri, Turkuaz (13)

Surveying the economics and business literature, 359 NWECE-based MNCs have been found which are or have been in operation over the past three decades. Table 7 reports their names and encompasses 70 MNCs from Malaysia, 44 from Argentina, 41 from Mexico, 34 from Indonesia, 34 from Egypt, 33 from Chile, 25 from Colombia, 21 from Thailand, 15 from Nigeria, 13 from Turkey, 11 from Pakistan, and only 9 from the Philippines, and 9 from Iran. Such a list is definitely not a country ranking since the difference in the numbers of MNCs per country is partly due to uneven information. The best information has been collected for the *multilatinas*. Access to information was rather good as regard MNCs from Malaysia, Indonesia, Egypt, and

Thailand. It is common knowledge that in Turkey many MNCs are SMEs and as such they could not have been identified in Table 7, which certainly provides an underestimated view of Turkish MNCs. Information is probably fragmentary and less secure with Nigerian, Iranian, and Pakistani MNCs. In the case of the Philippines, nine MNCs are by far a crude underestimation given the relative significance of Philippine OFDI; this is due to under-information that we have not been able to tackle so far.

Table 8

Outward Foreign Direct Investment Stock From New-Wave Emerging Countries, 1985-1999

	(\$ million)										
NWECs	1985	1990	1992	1993	1994	1995	1996	1997	1998	1999	N*
Argentina	6,079	6,105	n.a.	n.a.	n.a.	10,696	n.a.	7,616	18,184	19,277	3.2
Chile	102	178	713	1,144	2,027	2,815	3,848	5,928	8,860	13,515	132.5
Colombia	301	402	476	476	868	1,028	1,220	1,866	2,381	2,397	8
Egypt	59	131	229	223	254	365	370	499	584	630	10.6
Indonesia	49	25	n.a.	83	96	701	1,295	2,073	2,117	2,189	44.7
Iran	0	0	0	0	0	77	80	138	154	184	2.4**
Malaysia	749	2,283	n.a.	4,516	6,328	8,903	10,809	12,725	15,240	16,880	22.5
Mexico	533	575	n.a.	1,039	2084	4,132	n.a.	5,278	5,825	6,625	12.4
Nigeria	5,334	9,652	n.a.	n.a.	11,197	11,186	11,893	11,516	11,164	11,256	2.1
Pakistan	127	282	n.a.	264	258	266	274	239	244	468	3.7
Philippines	171	154	154	128	155	1,209	1,091	1,527	1,698	1,858	10.9
Thailand	14	398	701	933	1426	2,173	n.a.	1,951	1,978	2,346	167.6
Turkey	161	154	246	260	344	268	371	622	996	1,641	10.2

Notes. * 1985 multiplied by N = 1999; **1999/1995.

Source: UNCTAD, World Investment Reports.

OFDI from most NWECs had started to increase significantly in the 1990s (Table 8). Five front runners: Argentina, Colombia, Malaysia, Mexico, and Nigeria had already invested abroad over \$300 million in 1985. Then the growth of their OFDI stock had been below the average among the NWECs from 1985 to 1999. Three fast growers or catching-up countries, in terms of OFDI, were Chile, Indonesia, and Thailand with the highest OFDI stock growth rates. Egypt, Pakistan, the Philippines, and Turkey were slower movers, though with a small amount of OFDI in 1985 and a slower OFDI growth rate than the catchers-up. Iran is a late comer with its first OFDI appearing in the UN data in 1995.

In 1985, among the 600 largest non-financial MNCs in the world, the UN (1988) report had found one Argentine (YPF), one Mexican (Alfa), one Malaysian (Petronas), and two Turkish (Koc and Sabanci) MNCs. When the UNCTAD started publishing a list of the largest MNCs based in developing countries, in 1993, four Mexican MNCs showed up in the list (Cemex, Televisa, Empresas Ica Sociedad Controladora, and Vitro) together with three Malaysian MNCs (Genting, Sime Darby, and Amsteel), two Chilean MNCs (Acero del Pacifico de Inversiones and Compania Manufactura de Papeles y Cartones) and two Philippine MNCs (San Miguel and Ayala). Since 1994, UNCTAD had listed the top 50 MNCs based in developing countries and had published since 2005 the list of top 100 MNCs from developing countries. From 1994 to 2012, 13 other Mexican MNCs had appeared in the ranking: Desc, Sidek, Panamco, Gruma, Celanese, Savia, America Movil, Imsa, Bimbo, Telmex, FEMSA, Cintra, and Fomento Economico Mexicano; 13 other Malaysian MNCs as well: Malaysian International Shipping, Berjaya, Telekom Malaysia, Carso, Hume Industries, YTL, MUI, Genting, MISC, Kumpulan Guthrie, Maxis, Tanjong, and Axiata; four other Chilean MNCs: CTC, COPEC, Enersis, and

Gener; two other Argentine MNCs: Perez Companc and Ternium; two other Turkish MNCs: Enka Insaat ve Sanayi and Turkcell Iletisim Hizmetleri; one other Columbian MNC: Bavaria; one Egyptian: Orascom; and one Thai: PTT Exportation & Production. In 2001, Cemex the biggest NWEK-based MNC at the moment even showed up in the group of top 100 MNCs in the world overall from which it did not disappear since then; in 2003, Petronas entered the same list and it is still standing there.

In its early stages, OFDI from the NWEKs did not evolve on a smooth path at a regular pace. NWEKs' direct investment abroad was punctuated by a series of economic crises that temporarily halted or sharply slowed down FDI outflows. Such was the case of the 1982 debt crisis that affected the four sampled Latin American NWEKs. The South-Eastern Asian crisis triggered by the collapse of the Thai baht in 1997 hindered OFDI from Thailand, Indonesia, Malaysia, the Philippines, and to some extent, even Argentine (and Brazilian) capital outflows in 1998. After enjoying an oil boom in the 1970s, the Nigerian economy fell into an oil doom in the 1980s hindering OFDI. Turkey suffered from repeated crises, a balance of payment crisis in the late 1970s/early 1980s and three episodes in 1991, 1994, and 1998-1999 (the latter linked to a severe earthquake); such macroeconomic instability put a brake on OFDI. In Iran, the eight-year war with Iraq was an obstacle to both inward and outward FDI. Pakistan endeavored decades of war and social instability and was affected by the Asian financial crisis and international economic sanctions creating an unfriendly climate to inward FDI and OFDI. The aforementioned crises had been followed by all the NWEKs by stabilisation and adjustment policies, for example, the Nigerian economic stabilisation measures in 1982 and the structural adjustment programme in 1986 in the wake of which liberalization, deregulation, and privatization offered new substantial incentives to inward and then outward FDI. Finally, in the 2000's NWEKs' OFDI surged up at a pace that compares to BRICS' OFDI.

OFDI stock from the NWEKs³ had exhibited a fast growth in 2000-2007, though slower on average than BRICS' OFDI. This pertains primarily to Indonesian, Mexican, Turkish, Iranian, Malaysian, Egyptian, and Thai OFDI, which were multiplied by three or more over seven years (Table 9). OFDI stock from the Philippines, Argentina, and Nigeria had only doubled or so. More striking is that OFDI growth had swiftly accelerated during the crisis (2007-2014) from four NWEKs that is Thailand and the Philippines and, to some extent, Colombia and Egypt. In these countries, OFDI seems to be resilient to the current financial and economic crisis impact, thus resembling Chinese OFDI (Andreff, 2016a). OFDI growth had been more than reasonably high in times of crisis from Chile, Iran, Malaysia, Mexico, and Turkey while it remained slower from Argentina, Nigeria, and Pakistan, and its pace sharply decreased in Indonesia. Overall, OFDI flowing from the NWEKs kept a rather high momentum when muddling through the crisis, higher than the one from the BRICS, except China, and much faster than the average growth of world OFDI between 2007 and 2014.

According to the aforementioned Dunning's IDP model, in a first stage of its economic development, a country hosts very few FDI and does not invest at all abroad. In a second stage, it becomes attractive to inward FDI and achieves its very first OFDI, being a net FDI importer. In a third stage, due to its new technological competences and low unit labor cost, the country attracts very significant inward FDI and its MNCs start to substantially invest abroad even though the country still remains net FDI importer. In such analytical framework, emerging economies are supposed to definitely move from the second to the third stage and even to

³ All the data presented and commented here must be taken with a pinch of salt since OFDI statistics in the NWEKs tend to be patchy and sometimes relatively unreliable. Some of those countries that had invested abroad did not clearly identify FDI outflows (Iran for example) while most others started seriously reporting OFDI data only since the 2000s. See Aykut and Goldstein (2007).

come close to a fourth stage when a country is assumed to be a developed one and invest more outwards than it is invested by inward FDI; its FDI balance becomes positive.

Table 9

Outward Foreign Direct Investment Stock From New-Wave Emerging Countries, 2000-2014

	(\$ billion)												
NWECs	2000	2002	2005	2007	2008	2009	2010	2011	2012	2013	2014	N1*	N2**
Argentina	20.2	19.4	22.6	26.9	28.7	29.4	29.8	31.3	32.9	34.1	35.9	1.33	1.33
Chile	18.3	13.4	21.3	32.5	31.7	41.2	49.8	69	97.1	101.9	89.7	1.78	2.76
Colombia	3.8	3.8	8.9	10.4	13.1	16.2	22.8	31.1	31.6	39	43.1	2.74	4.14
Egypt	0.6	0.7	1	1.8	3.7	4.3	5.4	6.1	6.3	6.6	6.8	3.00	3.78
Indonesia	2.3	2.6	13.7	21.4	27.2	30.2	1.7	9.5	11.6	16.1	24.1	9.30	1.13
Iran	0.4	5.3	0.2	1.5	1.9	2.2	2.6	2.9	3.3	3.7	4.1	3.75	2.73
Malaysia	15.9	20.2	44.5	58.2	67.6	75.6	96.8	106.2	120.4	134	135.7	3.66	2.33
Mexico	8.6	12.4	28	44.7	45.4	53.5	66.2	112.1	137.7	143.9	131.2	5.20	2.94
Nigeria	4.1	4.6	5	5.5	6	6.4	5	5.9	7.4	8.6	10.3	1.34	1.87
Pakistan	0.5	0.6	0.8	1	1.3	2.2	1.7	1.4	1.5	1.7	1.7	2.00	1.70
Philippines	1.9	1.4	2	5.6	5.8	6.1	6.6	6.6	9	13.2	35.6	0.92	6.36
Thailand	2.4	2.7	3.9	7	10.9	16.3	25.5	33.2	52.6	58.6	65.8	2.92	9.40
Turkey	2.5	4	8.1	12.2	13.9	14.8	23.8	24	30.5	32.8	40.1	4.88	3.29

Notes. N* = 2007/2000; N** = 2014/2007; (+) FDI outflows.

Source: UNCTAD World Investment Reports.

Econometric testing (Andreff, 2003) had verified that IDP model was fitting with the first stages of OFDI emergence in transition, emerging and developing economies. Moreover, countries were classified in the first, second, and third steps of IDP model according to the fact that they were meeting pre-defined thresholds for their OFDI/GDP and outward/inward ratios. An OFDI/GDP ratio higher than 5% was assumed to be required for a country to be in the third step of the model as well as an outward/inward FDI stock ratio of 25%. Looking at Table 10 with reference to these two ratios, most NWECs' OFDI is still lagging behind BRICS' OFDI in 2014. With an OFDI/GDP ratio below 5% and an outward/inward FDI stock ratio below 25% in 2014, Egypt, Indonesia, Iran, Nigeria and Pakistan were still in the second stage of IDP model. Turkey was on the brink of reaching the third stage in 2014 while Argentina, Chile, and Malaysia had reached it in 2000, and Colombia, Mexico, the Philippines, and Thailand in 2014. In terms of flows, for the first time Thailand's OFDI had outpaced inward FDI in 2011 (Chirathivat & Cheewatrakoolpong, 2015).

Malaysian OFDI deserves a special comment: it easily compares with BRICS' OFDI due to an OFDI/GDP ratio over 20% already in 2000 and over 40% in 2014, and an outward/inward FDI stock ratio higher than 30% in 2000 and 100% in 2014 (in fact since 2008). From an OFDI standpoint, Malaysia in 2014 has nearly reached the fourth stage of IDP model (the stage which stands for developed market economies), even ahead of the BRICS; Brazil and Russia reached the first 5% ratio in the early 2000s while India and China attained such step only by 2011; with the second 25% ratio, all the BRICS stick to the criterion since 2007, with only Russia having met it in 2000 like Malaysia.

In most NWECs both ratios are growing from 2000 to 2014. However, due to the current financial and economic crisis, OFDI/GDP ratio decreased in Argentina, Iran, Nigeria, and Pakistan as well as outward/inward FDI stock ratio in Iran, Nigeria, and Pakistan; in these countries, OFDI has been less resilient to the crisis than in other NWECs.

Table 10

Comparative Features of Outward Foreign Direct Investment From the NWECS

NWECS	(in %)					
	Outward FDI stock/GDP			Outward/inward FDI stock		
	2000	2007	2014	2000	2007	2014
Argentina	7.3	10.2	6.7	29.9	40.8	31.5
Chile	15.7	19.8	34.8	40.0	30.8	43.2
Colombia	3.8	6.0	11.4	33.9	18.5	30.4
Egypt	0.7	1.4	2.3	3.0	3.0	7.7
Indonesia	1.6	5.0	2.7	9.2	36.3	9.5
Iran	1.3	0.5	1.0	15.4	2.8	9.5
Malaysia	20.8	31.2	40.1	30.2	75.9	101.4
Mexico	1.9	5.0	10.1	7.1	16.8	38.8
Nigeria	8.5	3.3	1.8	17.2	8.8	11.9
Pakistan	0.9	0.7	0.7	7.2	5.0	5.5
Philippines	2.1	3.9	12.5	13.8	29.5	62.3
Thailand	2.0	2.9	16.3	7.8	8.2	33.0
Turkey	1.8	1.9	5.0	13.3	8.4	23.8

Source: Calculated from UNCTAD and World Bank data.

Geographical Distribution

It is rather difficult to find comprehensive data about the geographical distribution of OFDI from all the 13 NWECS. A first survey has been able to detect that, just like BRICS-based MNCs, NWECS-based MNCs primarily invest in neighboring countries and in some tax havens, then in developed countries. Asian NWECS-based MNCs tend first to invest close to their home country, in neighboring countries (Hiratsuka, 2006), and in countries where they have some familiarity through trade, ethnic and cultural ties. It is only after such a leap forward around the corner that they have started investing in the rest of the world. For instance, the major host country of Thai OFDI, in 2005-2009, was Singapore, a tax haven; it was followed by several neighboring Asian countries such as Indonesia, Malaysia, the Philippines, Cambodia, Laos, Myanmar, Vietnam, China, and finally EU countries and the USA; in 2003-2005 the list was completed with Switzerland, Hong Kong, Japan, and Australia (Wee, 2007). The top first host countries of OFDI from Malaysia in 2003-2011 were Singapore, Indonesia, Australia, Mauritius, the UK, Virgin Islands, Vietnam, Thailand, Cayman Islands, Hong Kong, China, Taiwan, Germany, the Netherlands, and India (Teo et al., 2015). The main destinations of Indonesian OFDI (1994-2006) were China and Singapore, then India, the Philippines, Malaysia, Vietnam, the EU, and the USA (Carney & Dieleman, 2011).

Host countries of Mexican OFDI were in 2008 first Latin American countries (Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama), then the USA, Europe (mainly Spain, Austria, Hungary, Italy, and the Czech Republic), the Caribbean (Bahamas, Bermuda, Cayman Islands, Haiti, Jamaica, Puerto Rico, Dominican Republic, and Trinidad & Tobago), Canada, Australia, and Egypt. Chilean MNCs invest first in Argentina, then in other South American countries, in Caribbean countries, in Europe, and a few OFDI in North America (concentrated in Mexico). In 2010, the main recipient economies of Colombia's OFDI flows included Bermuda (\$2.1 billion), the British Virgin Islands (\$1.4 billion), Guatemala (\$661 million), the UK (\$631 million), Panama (\$414 million), the USA (\$375 million), Peru (\$307 million), Chile (\$ 282 million), and Brazil (\$189

million). There is no specified economic activity in the case of Bermuda and the British Virgin Islands other than financial, suggesting a possible outflow of capital to avoid home-country taxes. Also, it is difficult, on the basis of existing data, to determine how much of this capital has returned to the country as “round-tripping” FDI (Poveda-Garcés, 2011).

After the collapse of the Soviet Union, Turkish firms started investing in Turkey’s former Soviet neighboring countries, i.e., Azerbaijan, Kazakhstan, Kyrgyzstan, Turkmenistan, and Uzbekistan, with 1,482 Turkish firms for \$4.9 billion in 2002. Host countries of Turkish OFDI were in 1997-2004: the Netherlands, Azerbaijan, the UK, Germany, Kazakhstan, Luxembourg, the USA, Russia, Romania, Virgin Islands, France Switzerland, Cyprus, Bulgaria, Turkmenistan, Belgium, Hungary, Austria, Bahrain, Ireland, Georgia, Malta, Algeria, Kyrgyzstan and Uzbekistan (UNCTAD, 2005).

Industrial Structure

The paucity of data is even worse with NWECS’ OFDI industrial⁴ than geographical distribution. Overall OFDI from the NWECS is highly concentrated on the services and extractive sectors. However, among the front runners and catching-up countries, the share of the manufacturing industry is rather significant. Latin American MNCs have a presence abroad in activities such as beverages, petrochemical, petroleum, mining, steel, cement, pulp and paper, textiles, and agribusiness whereas little or no presence in technology intensive products like automobiles, electronics, telecommunication equipment, and chemicals.

Argentine companies’ overseas investments were achieved primarily in basic metal products, food products, pharmaceuticals, and crop and animal production. The rest ranges over a number of industries, including civil engineering, computer and electronic products, chemicals, IT services, waste collection and disposal, and R&D activities (Prosper Ar & VCC, 2009). Chilean OFDI is concentrated on natural resources and services that are in retail trade, forestry, transportation, food and beverages (in particular wineries), energy, mining, software, metallurgy, machinery, and health services. From 1990 to 2013, Argentina was the second host country of Chilean OFDI with a cumulative amount of \$16.8 billion and about 400 Chilean companies involving having invested 40% in the services industry (trade, real estate, transportation, and communications), 29% in the manufacturing industry (pulp and paper, food and beverages, metallurgy, machinery, and chemicals), 19% in the energy sector, 6% in agribusiness, and 6% in mining, and hiring 75,000 workers in 2013.

Malaysian OFDI is focused mainly on services (finance, banking, insurance, and tourism) and natural resources (oil and gas) with manufacturing a distant third. The largest portion of Malaysian OFDI stock is in mining and quarrying (including oil and gas) followed by financial services, which account for approximately 23% to 30% of total OFDI stock respectively each year. Thai OFDI in 2003-2005 was concentrated on the manufacturing industry (food, electrical appliances, machinery and equipment, chemicals, metallurgy, and textiles), then in services, trade, finance, and mining (Wee, 2007). As of December 31, 2004, Turkish OFDI stock was settled first in the energy sector, then in manufacturing followed by banking, financial services, trade, telecoms, tourism, construction, mining, transportation, and insurance (UNCTAD, 2005).

Cross-Border Mergers and Acquisitions

As regards their mode of entry, NWECS-based MNCs had invested abroad through both greenfield investment and cross-border mergers and acquisitions (M&As). It must be noticed that some of these MNCs, just

⁴ Most of the 13 central banks have not published a detailed industrial breakdown of OFDI data so far.

like the ones from the BRICS, were used to take part into big deals—over \$1 billion or so—for acquiring companies abroad in a resource-seeking or asset-seeking strategy (Table 11). The most active in this business over the past 20 years had been America Movil, FEMSA, Telefonos de Mexico, and Bimbo from Mexico; YTL Power International and Petronas from Malaysia; San Miguel from the Philippines; and Orascom from Egypt until it was itself acquired by Vimpelcom (Russia) in 2011. Big Mexican MNCs like Bimbo, Cemex, and Modelo mainly resorted to cross-border M&As for their foreign expansion. Some cross-border M&As are clearly resource-seeking such as BT Bumi Modern over Gallo Oil, Petronas over Egyptian LNG, Industrial Minera Mexico over Asarco, Banpu over Centennial Coal and Borneo Lumbung over Vallar, Pertamina over ConocoPhillips Algeria, and Pacific Rubiales over Petrominerales. Other M&As are more asset-seeking like Marley Industries over Brierley Investments, Tenaris over Maverick Tube, and PTT over MinMet.

Table 11

Significant Cross-Border Mergers and Acquisitions by NWEBC-Based Multinational Companies

(1995-2014)						
Acquiring company	NWEC	Acquired company	Target country	Industry	Value \$billion	Year
United Com. Industry PLC	Thailand	Intercity Paging Service	Sri Lanka	Telecom	2.8	1995
Malex Industries	Malaysia	Brierley Investments	New Zealand	Banking, finance	1.4	1996
Metro Vermoegensverwaltung	Malaysia	ASKO Deutsche Kaufhaus	Germany	Construction	6.3	1996
Panamerican Beverages	Mexico	Coca Cola Hitt Venezuela	Venezuela	Food	1.1	1997
Investors	Iran	Telecom Eireann	Ireland	Trade & telecom	4.4	1999
Grupo Mexicano de Desarrollo	Mexico	ASARCO	USA	Construction	1.1	1999
BT Bumi Modern	Indonesia	Gallo Oil	USA	Petroleum & gas	1.3	2000
America Movil	Mexico	Telecom Americas	Brazil	Telecom	2.3	2002
FEMSA	Mexico	Panamerican Beverages	USA	Soft drinks	3.7	2003
Petronas	Malaysia	Egyptian LNG	Egypt	Petroleum & gas	1.8	2003
Malaysia International Shipping	Malaysia	American Eagle Tankers	Singapore	Transportation	1.1	2003
Lion Diversified Holdings	Malaysia	Parkson Venture	Singapore	Conglomerate	0.1	2004
San Miguel	Philippines	Thai Amarit	Thailand	Food & beverages	0.1	2004
Telefonos de Mexico	Mexico	Techtel Telecomunicaciones	Argentina	Telecom	0.1	2004
YTL Power International	Malaysia	Jawa Power	Indonesia	Electric services	0.1	2004
Telefonos de Mexico	Mexico	Embratel Participaciones	Brazil	Telecom	0.4	2004
America Movil	Mexico	Cia de Telecomunicaciones	El Salvador	Telecom	0.3	2004
Telefonos de Mexico	Mexico	ATT Latin South American	Brazil	Telecom	0.2	2004
Weather Investments	Egypt	Wind Telecommunications	Italy	Telecom, finance	12.8	2005
Grupo Techint	Argentina	Hylsamex	Mexico	Steel	2.1	2005
San Miguel	Philippines	National Foods	Australia	Food & beverages	1.5	2005
Orascom	Egypt	Hutchison Telecom Internl	Hong Kong	Telecom	1.3	2005
Tenaris	Argentina	Maverick Tube	USA	Steel, pipes	3.1	2006
Orascom	Egypt	Weather Investment	Italy	Telecom, finance	2.6	2006
America Movil	Mexico	Verizon Dominicana	Dominican Rep	Telecom	2.1	2006
Cemex	Mexico	Rinker Group	Australia	Cement, hydraulic	14.2	2007
NNS Holding	Egypt	Lafarge	France	Conglomerate	4.1	2008
Bimbo	Mexico	George Weston	Canada	Food	2.5	2009
YTL Power International	Malaysia	PowerSeraya	Singapore	Electric services	2.4	2009

Table 11 to be continued

Industrial Minera Mexico	Mexico	ASARCO	USA	Copper ores	2.2	2009
Integrated Healthcare Holding	Malaysia	Parkway Holdings	Singapore	Health services	2.4	2010
Aval Acciones y Valores	Colombia	BAC Credomatic GECF	Panama	Banking, finance	1.9	2010
Banpu PCL	Thailand	Centennial Coal	Australia	Coal	1.6	2010
Televisa	Mexico	Univision Communications	USA	Broadcasting stations	1.2	2010
Petronas	Malaysia	Altas, Lily & Katha	Canada	Petroleum & gas	1.1	2011
LAN Airlines	Chile	TAM	Brazil	Air transportation	3.4	2012
Petronas	Malaysia	Progress Energy Resources	Canada	Petroleum & gas	5.4	2012
Investor Group	Argentina	Usinas Siderurg. Minas Gerais	Brazil	Steel	2.8	2012
Thai Beverage	Thailand	Fraser & Neave	Singapore	Beverages	2.2	2012
Charoen Pokphand Foods	Thailand	C.P. Pokphand	Hong Kong	Food	2.2	2012
PTT PCL	Thailand	MinMet PLC	Ireland	Petroleum refining	1.9	2012
Anadolu Efes Biracilik	Turkey	SABMiller	Russia	Beverages	1.6	2012
Investor Group	Chile	Banco Santander Colombia	Colombia	Banking, finance	1.2	2012
Borneo Lumbung Energi	Indonesia	Vallar PLC	UK	Coal	1.0	2012
Investor Group	Thailand	Ping An Insurance	China	Conglomerate	9.4	2013
Thai Beverage	Thailand	Fraser & Neave	Singapore	Beverages	6.9	2013
Bancolombia	Colombia	HSBC Panama	Panama	Banking, finance	2.1	2013
FEMSA	Mexico	Spaipa	Brazil	Beverages	1.9	2013
Pertamina	Indonesia	ConocoPhillips Algeria	Algeria	Petroleum & gas	1.8	2013
Pacific Rubiales Energy	Colombia	Petrominerales	Canada	Petroleum & gas	1.6	2013
Enersis	Chile	Codensa	Colombia	Electric services	1.3	2013
Investor Group	Malaysia	Spire Healthcare	UK	Conglomerate	1.1	2013
Bimbo	Mexico	Canada Bread	Canada	Food	1.7	2014

Source: UNCTAD.

A mega-deal (\$12.8 billion) like the purchase of Wind (Italy) by Orascom (Egypt) received considerable attention when it occurred in 2005 (Goldstein & Perrin, 2007). Bonaglia and Goldstein (2006) have stated that between 1996 and 2003, a total of 17 M&As were made by Egyptian companies. The MENA (Mediterranean) region had a total of six deals; Asia had three deals; and Gulf area had only one deal. That is why the authors had contended that most of Egyptian M&As were done in other Islamic nations. Among other exemplary deals, the Chilean Sigdo Koopers acquired the Belgian Magoteaux in 2011 and Concha y Toro (Chile) bought Fetzer Vineyards in the USA. From 2008 to 2010, Colombian MNCs have achieved 21 cross-border M&As over firms in Chile, Panama, Guatemala, Peru, El Salvador, Argentina, Mexico, Brazil but also in the USA, the UK, Ireland, Norway, and the Netherlands Antilles. Most Colombian firms preferred the consolidation in host markets through M&As instead of using greenfield investments or joint ventures. From 1990 to 2005, Thai MNCs acquired or merged 76 companies abroad.

Econometric Results and Discussion

Turning now to the analysis of the OFDI determinants in the case of NWECS as home countries, equation (2) above has been estimated first with an OLS model, then using a panel data model with fixed effects and random effects (Table 12); econometric results are nearly the same with both tests. Significant Breusch and

Pagan tests verify that random effects⁵ are at play in determining OFDI with push factors.

Table 12 exhibits that the economic size (GDP) is a significant explanatory variable of NWECS' OFDI, with a negative sign, confirming Kayam's (2009) results. The smaller an NWECS, the smaller its overall market size, the more urgently its firms have to substitute OFDI to domestic investment in a small home market. The level of economic development (GDP/capita) clearly is a significant push factor that determines OFDI. The higher an NWECS' level of economic development, the more it invests abroad. This result is absolutely in tune with Dunning's IDP model. To a lesser extent this applies to GDP rate of growth (significant but not at a 1% threshold). Fast growing NWECS home economies are more likely to invest abroad, though this relationship is not as tight as the two previous ones.

Table 12

The Determinants of Outward Foreign Direct Investment From New-Wave Emerging Countries

Dependent variables	OLS			Panel data					
				Fixed effects			Random effects		
	H1: LLL t-1	H2: LLL t-2	H3: LLL t-3	H1: LLL t-1	H2: LLL t-2	H3: LLL t-3	H1: LLL t-1	H2: LLL t-2	H3: LLL t-3
GDP	-0.195**	-0.182***	-0.202***	-0.522***	-0.431***	-0.436***	-0.291***	-0.237**	-0.250***
GDP per capita	3.013***	3.092***	3.199***	5.321***	5.332***	5.452***	3.829***	3.955***	4.108***
GDP growth rate	76.258*	101.058**	52.9998	74.692*	97.075**	45.256	72.215*	96.278**	44.230
C2 X high tec	4.023	3.568	3.469	-3.271	-2.997	-3.589	1.444	1.212	0.831
C3 X high tec	9.478***	9.213***	8.829***	-4.755	-3.457	-4.709	2.719	3.208	2.585
Patent	-0.286***	-0.315***	-0.293***	-0.242**	-0.295***	-0.293***	-0.265**	-0.311***	-0.303***
INFDI t-1	0.255***			0.262***			0.269***		
INFDI t-2		0.282***			0.272***			0.283***	
INFDI t-3			0.310***			0.306***			0.315***
Constant	-102.357**	-128.864***	-78.925**	-108.755**	-133.905***	-80.506**	-101.918**	-128.757***	-75.349*
σu				15.165	13.969	13.732	8.814	8.663	8.240
σe				14.052	13.719	13.236	14.052	13.719	13.236
ρ				0.538	0.509	0.518	0.282	0.285	0.279

Notes. σu is the standard deviation of the country-level random effects; σe is the standard deviation of the pure error term; ρ is the proportionate contribution to total variance by the panel-level variance component; *** significant at a 1% threshold; ** at 5%; * at 10%.

Technological variables are also explanatory of NWECS' OFDI. The latter decreases with an increase in the number of registered patents in the home economy, and the relationship is significant. NWECS-based MNCs do not take advantage of a domestic technological gap to invest abroad; only few of them, in few industries, are on the global technological frontier. The result rather suggests that they invest abroad in view of seeking technological assets (absent in the home country) while using less sophisticated technologies than the brand new ones (based on the last patents registered) and probably technologies more adapted to the economic environment of their neighboring emerging or developing countries.

⁵ In fixed effects models, two countries with the same observable characteristics have, given a constant difference, a same level of OFDI. In random effects models, country specific effects are considered as random which enables to take on board variables with a constant value over time (under the assumption that individual specific effects are not correlated with independent variables).

As regards the share of high-tech products in overall export, the interpretation goes as follows. There is no significant difference between class 1 and class 2 countries between exporting less than 5% high-tech products and from 5% to 25% such products in overall exports with regards to determining OFDI. On the other hand, when a country breaks through the threshold of one quarter of its exports in high-tech products, these so-called class 3 countries significantly differentiate from the two other classes in that high-tech exports determine OFDI. Class 3 countries have reached a domestic technological level that is high enough to become a comparative advantage which local firms can rely on in view of investing abroad. However, the latter determinant of NWECS' OFDI revealed with the OLS model is not that much robust since it vanishes with panel data testing, due to $X_{hightec_{i,t}}$ having been defined as a dummy variable divided into classes.

Finally, the strong and significant relationship between OFDI and lagged inward FDI suggests that a kind of LLL process must be at work so that the coefficient for this relationship is increasing with the time lag (when one goes from inward FDI one year before up to three years before). It takes time for LLL relationships to materialize and thus for previous inward FDI to become a stronger determinant of OFDI.

Overall the results confirm those found (Andreff, 2003) for a quite bigger sample of transition and developing economies meaning that basically the level of economic development is a major determinant of OFDI while the home country's technological level plays a secondary (and mixed) role in the process. The good news is that opening a country to inward FDI is also a rocket pad for its further OFDI.

Conclusion

Beyond the BRICS, a new wave of emerging countries, the NWECS, have become significant foreign direct investors in the global economy during the past two decades, first before the global financial and economic crisis, and most of them have remained in this position throughout the crisis. A sample of 13 NWECS has been statistically selected on criteria of being emerging as major foreign direct investors and other economic dimensions that they share with the BRICS, and on the fact that they have invested at least \$1 billion of outward FDI stock in 2014.

The paper has shown that most NWECS started investing abroad 40 years ago or so. A golden age of their OFDI growth is found in the early 2000s, just like with the BRICS. NWECS-based MNCs happen to resort to cross-border mergers and acquisitions to materialize their OFDI, again like the BRICS-based MNCs. Some similarity with BRICS' OFDI is noticed in the geographical distribution of NWECS' OFDI (primarily in neighboring countries, tax havens, and developed countries) and more or less in its OFDI industrial structure. Econometric estimation exhibits that push factors are significant determinants of OFDI from the NWECS that is the home country's economic size negatively, and positively the level of economic development and the rate of economic growth. Technological capability is a mixed explanatory variable. Previous inward FDI also appears to be a facilitating factor of outward FDI from the NWECS.

References

- Agwu, E. M. (2014). Foreign direct investments: A review from the Nigerian perspective. *Research Journal of Business and Management*, 1(3), 318-337.
- Ahmad, S. Z., & Kitchen, P. J. (2008). Transnational corporations from Asian developing countries: The internationalization characteristics and business strategies of Sime Darby Berhad. *International Journal of Business Science and Applied Management*, 3(2), 21-36.

- Al-Sadig, A. J. (2013). Outward foreign direct investment and domestic investment: The case of developing countries, international monetary fund. *IMF Working Paper*, WP/13/52.
- Andreff, W. (1982). *Les multinationales hors la crise*. Paris: Le Sycomore.
- Andreff, W. (1999a). The global strategy of multinational corporations and their assessment of Eastern European and C.I.S. countries. In V. Tikhomirov (Ed.), *Anatomy of the 1998 Russian crisis* (pp. 9-53). Melbourne: Contemporary Europe Research Centre, The University of Melbourne.
- Andreff, W. (1999b). Peut-on empêcher la surenchère des politiques d'attractivité à l'égard des multinationales? In A. Bouët and J. Le Cacheux (Eds.), *Globalisation et politiques économiques. Les marges de manœuvre* (pp. 401-423). Paris: Economica.
- Andreff, W. (2003). The newly emerging TNCs from economies in transition: A comparison with third world outward FDI. *Transnational Corporations*, 12(2), 73-118.
- Andreff, W. (2013). Deux types de capitalisme d'Etat: les firmes transnationales russes et chinoises. *Questions Internationales*, 63, 56-63.
- Andreff, W. (2014). Outward foreign direct investment by Brazilian and Indian multinational companies: Comparison with Russian-Chinese multinationals. In S. Balashova and V. Matyushok (Eds.), *The trajectory of growth and structural transformation of the world economy amid international instability* (pp. 252-297). Moscow: Peoples' Friendship University of Russia.
- Andreff, W. (2016a). Maturing strategies of Russian multinational companies: Comparison with Chinese multinationals. In D. Dyker (Ed.), *Foreign investment*. London: Imperial College Press/World Scientific. In *The World Scientific Reference on Globalisation in Eurasia and the Pacific Rim: Investment, Innovation, Energy, Migration and Development*, 1, 77-120.
- Andreff, W. (2016b). Outward foreign direct investment from BRIC countries: Comparing strategies of Brazilian, Russian, Indian and Chinese multinational companies. *European Journal of Comparative Economics*, 12(2), 79-131.
- Anil, I., Cakir, O., Canel, C., & Porterfield, R. (2011). A comparison of inward and outward foreign direct investment determinants in Turkey. *International Journal of Business and Social Science*, 20(2), 141-155.
- Ariff, M., & Lopez, G. P. (2007). *Outward foreign direct investment: The Malaysian experience*. Kuala Lumpur: Malaysian Institute of Economic Research.
- Aykut, D., & Goldstein, A. (2007). Developing country multinationals: South-South investment comes of age. *Industrial Development for the 21st Century: Sustainable Development Perspectives*, 85-116. United Nations Department of Economic and Social Affairs, New York.
- Banga, R. (2007). Drivers of outward foreign direct investment from Asian developing countries. *UNCTAD-India*, 195-215.
- Bano, S., & Tabbada, J. (2015). Foreign direct investment outflows: Asian developing countries. *Journal of Economic Integration*, 30(2), 359-398.
- Blomstrom, M., & Wolff, E. N. (1989). Multinational corporations and productivity convergence in Mexico. *NBER Working Paper*, 3141.
- Bonaglia, F., & Goldstein, A. (2006). Egypt and the investment development path: Insights from two case studies. *International Journal of Emerging Markets*, 1(2), 107-127.
- Carney, M., & Dieleman, M. (2011). Indonesia's missing multinationals: Business group and outward direct investment. *Bulletin of Indonesian Economic Studies*, 47(1), 105-126.
- Cheewatrakoolpong, K., & Boonprakaikawe, J. (2015). Factors influencing outward FDI: A case study of Thailand in comparison with Singapore and Malaysia. *Southeast Asian Journal of Economics*, 3(2), 123-141.
- Chirathivat, S., & Cheewatrakoolpong, K. (2015). Thailand's economic integration with neighboring countries and possible connectivity with South Asia. *Asian Development Bank Institute Working Paper Series*, 520.
- Danja, K. H. (2012). Foreign direct investment and the Nigerian economy. *American Journal of Economics*, 2(3), 33-40.
- Das, K. (2013). Home country determinants of outward FDI from developing countries. *Journal of Applied Economic Research*, 7(1), 93-116.
- Dinc, G. (2013). Effects of global financial crisis on location decisions of Turkish multinational enterprises' foreign direct investments (Master Thesis, Amsterdam Business School, Universiteit van Amsterdam).
- Dunning, J. H. (1981). Explaining the international direct investment position of countries: Towards a dynamic or development approach. *Weltwirtschaftliches Archiv*, 119, 30-64.
- Dunning, J. H. (1988). *Explaining international production*. London: Unwin Hyman.
- Dunning, J. H. (2008). Space, location and distance in IB activities: A changing scenario. In J. H. Dunning and P. Gugler (Eds.), *Foreign direct investment, location and competitiveness*. Amsterdam: Elsevier.

- Dunning, J. H., & Narula, R. (1998). The investment development path revisited: Some emerging issues. In J. H. Dunning and R. Narula (Eds.), *Foreign direct investment and governments. Catalysts for economic restructuring* (pp. 1-41). London: Routledge.
- Erdilek, A. (2008). Internationalization of Turkish MNEs. *Journal of Management Development*, 27(7), 744-760.
- Franco-Navarrete, A. (2011). *Outward foreign direct investment: The case of Mexico*. Mexico: Facultad de Economía. Universidad Nacional Autónoma de México.
- Gendarme, R. (1981). *Des sorcières dans l'économie: les multinationales*. Paris: Editions Cujas.
- Goh, S. K., & Wong, K. N. (2011). Malaysia's outward FDI: The effects of host market size and home government policy. *Journal of Policy Modeling*, 33(3), 497-510.
- Goldstein, A., & Perrin, S. (2007). Orascom telecom: Une multinationale arabe. In M. Mezouaghi (Ed.), *Trajectoires d'insertion dans l'économie numérique: le cas du Maghreb*. Paris: Maisonneuve & Larose.
- Gonzalez-Perez, M. A., & Velez-Ocampo, J. F. (2014). Targeting one's own region: Internationalization trends of Colombian multinational companies. *European Business Review*, 26(6), 531-551.
- Gugler, P., & Boie, B. (2008). The emergence of Chinese FDI: Determinants and strategies of Chinese MNEs, Conference "Emerging Multinationals: Outward Foreign Direct Investment from Emerging and Developing Countries". Copenhagen: Copenhagen Business School.
- Hashim, F. (2012). Outward internationalization and FDI: Motives for Malaysian MNEs moving into China. *Review of Business & Finance Studies*, 3(2), 89-102.
- Hiratsuka, D. (2006). Outward FDI and intraregional FDI in ASEAN: Trends and drivers. *IDE Discussion Papers*, 77. Institute of Developing Economies, Japan External Trade Organization (JETRO).
- Jeenanunta, C., Rittipant, N., Chongphaisal, P., Thumsamisorn, A., & Visanvetchakij, T. (2013). Knowledge transfer of outward foreign direct investment by Thai multinational enterprises. *Asian Journal of Technology Innovation*, 21(1), 64-81.
- Johanson, J., & Vahlne, J. E. (1990). The mechanism of internationalisation. *International Marketing Review*, 7(4), 11-24.
- Katz, J., & Kosacoff, B. (1984). Les multinationales de l'Argentine. In S. Lall (Ed.), *Les multinationales originaires du Tiers Monde* (pp. 179-269). Paris: Presses Universitaires de France.
- Kayam, S. S. (2009). Home market determinants of FDI outflows from developing and transition economies. Eskisehir: Anadolu International Conference in Economics, June 17-19.
- Kayam, S. S., & Hisarcikilar, M. (2009). Determinants of Turkish FDI abroad. *Topics in Middle Eastern and North African Economies*, 11.
- Kunhardt, J. B., & Gutiérrez-Haces, M. T. (2009). *First ranking survey of Mexican multinationals finds great diversity of industries*. Mexico and New York: Institute for Economic Research, National Autonomous University of Mexico (UNAM) and Vale Columbia Center.
- Kyrkilis, D., & Pantelidis, P. (2003). Macroeconomic determinants of outward foreign direct investment. *International Journal of Social Economics*, 30(7), 827-836.
- Masron, T. A., & Shahbudin, A. S. (2010). Push factors of outward FDI: Evidence from Malaysia and Thailand. *Journal of Business & Policy Research*, 5(1), 54-68.
- Matthews, J. E. (2002). *Dragon multinationals: Toward a new model for global growth*. New York: Oxford University Press.
- Michalet, C. A. (1997). *Strategies of multinationals and competition for foreign direct investment: The opening of Central and Eastern Europe*. Washington D.C.: World Bank.
- ONU. (1978). *Les sociétés transnationales dans le développement mondial: un réexamen*. New-York: Nations Unies.
- Pananond, P. (2004). Thai multinationals after the crisis: Trends and prospects. *ASEAN Economic Bulletin*, 21(1), 106-126.
- Passakonjaras, S. (2012). Thailand's outward foreign direct investment. *ASEAN Economic Bulletin*, 29(2), 101.
- Perez Ludena, M. (2011). The top 20 multinationals in Chile in 2010: Retail, forestry and transport lead the international expansion. *ECLAC Serie Desarrollo Productivo*, 192.
- Poveda-Garcés, A.-M. (2011). Outward FDI from Colombia and its policy context. *Columbia FDI Profiles*. Vale Columbia Center on Sustainable International Investment, Columbia University.
- Prosper Ar & VCC. (2009). *First ranking of Argentine multinationals finds diversified successes in internationalization*. New York: Prosper Ar and Vale Columbia Center.
- Saad, R. M., Noor, A. H. M., & Nor, A. H. S. M. (2014). Developing countries' outward investment: Push factors for Malaysia. *Procedia—Social and Behavioral Sciences*, 130, 237-246.
- Saleh, D. (2015). FDI and economic growth in developing countries: A cross comparison between Egypt and Turkey. Ankara: EY International Congress on Economics II "Growth, Inequality and Poverty", pp. 5-6.

- Santiso, J. (2007). The emergence of Latin multinationals. *OECD Emerging Market Network Working Paper*, 4. Paris: OECD Development Centre.
- Sarfaraz, L. (2002). Economic reforms and foreign direct investment in Iran. *MRPA Paper*, 1480.
- Subhanij, T., & Annonjarn, C. (2016). Horizontal, vertical and conglomerate OFDI: Evidence from Thailand. *Journal of Applied Business Research*, 32(3), 747-764.
- Teo, Y. N., Tham, S. Y., & Kam, A. J. Y. (2015). Re-examining the determinants of Malaysia's outward FDI. *Pertanika Journal of Social Sciences & Humanities*, 23(S), 173-188.
- UN. (1988). *Transnational corporations in world development: Trends and prospects*. New York: United Nations.
- UN-ECLAC & VCC. (2013). *A snapshot of Chile's 20 largest multinational enterprises in 2011: Sustained growth in South America*. Santiago and New York: United Nations. Universidad de Chile, Vale Columbia Center.
- UNCTAD. (1994). *World investment report: Transnational corporations, employment and the workplace*. Geneva: United Nations.
- UNCTAD. (2005). *Case study on outward foreign direct investment by enterprises from Turkey* (pp. 5-7). Geneva: UNCTAD.
- Vahlne, J. E., & Wiedersheim-Paul, F. (1973). Economic distance: Model and empirical investigation. In E. Hornell, J. E. Vahlne, and F. Wiedersheim-Paul (Eds.), *Export and foreign investments* (pp. 81-159). Uppsala: University of Uppsala.
- Vargas-Hernandez, J. G., Leon-Arias, A., Valdes-Zepeda, A., & Castillo-Giron, V. (2013). Strategic internationalization of Mexican emerging multinationals. *Journal of Technology Management and Technopreneurship*, 1(1), 37-69.
- Vargas-Hernandez, J. G., Lopez-Morales, J. S., & Inda-Tello, C. M. (2015). Exploration of internationalization patterns in Mexican multinational firms. *Journal of Emerging Trends in Economics and Management Sciences*, 6(5), 324-332.
- Velez-Ocampo, J. (2013). Internationalization process of a developing country multinational: The outward foreign direct investment decisions in Bimbo Group. *Pensamiento & Gestion* (Mexico: Universidad del Norte), 34, 54-68.
- Vernon, R. (1977). *Storm over the multinationals*. Cambridge, Mass.: Harvard University Press.
- Wee, K. H. (2007). Outward foreign direct investment by enterprises from Thailand. *Transnational Corporations*, 16(1), 89-116.