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EMERGING MULTINATIONAL COMPANIES INVESTING IN DEVELOPED COUNTRIES: AT ODDS WITH THE HOS THEOREM?

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Abstract: The paper takes stake of the new trend of outward foreign direct investment (FDI) by multinational companies from emerging countries into developed countries to criticize the Heckscher-Ohlin-Samuelson theorem. A literature review exhibits that labour costs do not play any relevant role in the first attempts to provide an analytical framework for understanding this new trend. A HOS equation, emended in order to encompass FDI, is used to explain outward FDI (production relocation) from developed to developing and emerging countries based on differences in labour endowment and thus in wage rates. Step by step, the equation takes on board technological gap and government policies. Then it is shown that such equation is absolutely at odds with explaining outward FDI from emerging to developed countries. One has to turn the HOS theory ups and down in order to understand the latter FDI outflows in a sort of “reverse-HOS” equation. Since the paucity of data is a major hindrance to any econometric testing of the reverse equation so far, the last section provides empirical evidence that labour matters and a lower wage rate is a decisive comparative advantage for Indian and Chinese multinationals investing in developed countries. Additional evidence exhibits that technological gaps, catching up and home country’s government policy matter as well.

Keywords: emerging multinationals, outward foreign direct investment, China, India, HOS theorem, labour costs, wage differentials, skilled and unskilled labour, technological gap, government policies

JEL: F21, F23, O53

Emerging multinational companies investing in developed countries: at odds with the HOS theorem?

Wladimir Andreff and Giovanni Balcet¹²

Introduction

The growth of outward foreign direct investment (FDI) from emerging countries has accelerated in the past decade and has been less markedly affected by economic crisis in 2009 than overall FDI in the world. On the top of this, multinational companies (MNCs) from emerging countries have developed various strategies; one of the most striking is to invest abroad in developed countries. This is the focus of the present paper since it is not common that less developed countries undertake significant outward FDI in more developed countries. The economic literature is more used to analyse FDI flows that go the other way round from developed to less developed countries. However, in the past recent years, a series of articles have suggested analyses about the determinants of outward FDI from emerging to developed countries, primarily focusing on technological catching up process. We have found that no one of them has clearly demonstrated so far that such a ‘reverse’ FDI flow – compared with standard theories – is, together with technological catching up, basically due to lower labour costs in home countries like India, China and other emerging countries. When such assumption is mentioned, it is just in passing (Milleli *et al.*, 2010). Why is it so?

Our guess is that outward FDI by MNCs from emerging to developed countries is so much at odds with the analytical framework of standard theory that no one has attempted to go up to the very last consequence of this ‘reverse’ FDI flow, *i.e.* that explaining it compels to contradict or to reverse the standard theory itself. This is the major contention of the present paper.

The paper is organized as follows. We start with a brief coverage of outward FDI from emerging countries with regards to the most recent empirical evidence (1) and we survey the literature that has attempted to explain or interpret this new trend (2). Then, starting from a

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very simplified standard Heckscher-Ohlin-Samuelson approach emended in such a way as to integrate FDI, we demonstrate first that labour cost matters as a determinant of outward FDI from emerging to developed countries and, second, that the implication is that the standard model is at odds with its usual assumptions about international capital flows between developed and less developed emerging countries (3). In a last section, we provide some empirical evidence and examples of our reverse-HOS explanation for Indian and Chinese FDI in developed countries, in particular the role played by lower skilled labour costs (4).

1. Multinational companies from emerging countries: an overview

The literature on “Third World multinationals” during the 1970s and 1980s (Lall, 1983) concentrated on South-South operations, mainly within regional (e.g. Asian) strategies, even if some cases of early South-North foreign direct investment (FDI) existed. It was namely the case of some international operations promoted by South Korean enterprises. During the 2000s, however, the South-North trend became much more intense and global in its orientation, and the attention of scholars and analysts has been attracted by the emerging country multinationals, their drivers, outcomes and impact. “Emerging multinationals”, especially from Asian countries, became a new and very dynamic actor on the global scene (UNCTAD, 2006; Goldstein, 2007; Gammeltoft *et al.*, 2010).

On the other hand, a hot debate still surrounds the notion and definition of emerging countries. It must be stressed that this is a dynamic and evolutionary concept, just like the notion of “transition” used with regards to post-communist market economies, that constantly needs to be up-dated: therefore, the list of emerging countries should be related to a given time period.

We start with underlining the dramatically strong momentum of outward FDI from emerging countries in the 2000s, until 2007, then their better reaction to economic crisis in 2008-2009. Four major countries are known as BRICs: Brazil, Russia, India and China. In fact, fourteen emerging countries are common to all the suggested definitions (samples)³, i.e. the four BRICs plus Argentina, Chile, Egypt, Hungary, Indonesia, Malaysia, Mexico, Poland, Thailand and Turkey. We also keep five of those countries which are usually admitted as emerging by all except one of the sources mentioned in the footnote: South Africa, often recruited to create BRICS (S being for South Africa); Slovenia and the Czech Republic since

³ Namely those emerging country groups provided by the IMF, Boston Consulting Group, Standard & Poor's and BNP Paribas (Brière, 2009).

they are ahead of Hungary and Poland in terms of economic development. South Korea and Taiwan, still considered as emerging countries by official international sources such as UNCTAD, can be assessed as fully-fledged developed market economies from several points of view, including technology levels, industrial dynamics, infrastructure and wages, and definitely as front runners with regards to outward FDI. Hong Kong is a special case, playing a crucial role in supporting the multinational growth of Chinese firms (outward FDI data for mainland China and Hong Kong are not distinguished in Table 1).

Table 1 – Outward FDI stock from selected emerging countries
(million \$)

Country	2000	2007	2008	2009	2007/2000	2009/2007
Argentina	21141	26873	28749	29428	1.27	1.10
Brazil	51946	129840	162218	157667	2.50	1.21
Chile	11154	32469	31728	41203	2.91	1.27
China	27768	95799	147949	229600	3.45	2.40
Czech Republic	738	6971	9913	13871	9.45	1.99
Egypt	655	1781	3701	4272	2.72	2.40
Hungary	1280	18282	14179	17494	14.28	0.96
India	1733	29412	61765	77207	16.97	2.63
Indonesia	6940	21425	27233	30183	3.09	1.41
Malaysia	15878	58175	67580	75618	3.66	1.30
Mexico	8273	44703	45389	53458	5.40	1.20
Poland	1018	19644	21814	26211	19.30	1.33
Russia	20141	255211	202837	248894	12.67	0.98
Slovenia	768	6123	8650	8745	7.97	1.43
South Africa	32325	54562	62325	64309	1.69	1.18
South Korea	26833	66220	95540	115620	2.47	1.75
Taiwan	66655	158361	175140	181008	2.38	1.14
Thailand	2203	7025	10857	16303	3.19	2.32
Turkey	3659	12210	13865	14790	3.34	1.21
BRICs	101588	510262	574769	713368	5.02	1.40
Emerging	301108	1045086	1191432	1405881	3.47	1.35

countries						
World	7967460	15602339	16205563	18982118	1.96	1.22
BRICs / World (%)	1.3	3.3	3.5	3.8		
EC / World (%)	3.8	6.7	7.4	7.4		

Source : UNCTAD (2010).

Outward FDI stock of our sampled emerging countries has tremendously spread abroad during the 2000s, up to the 2008 crisis. While the value of world's outward FDI has nearly doubled from 2000 to 2005, it has been multiplied by 3.5 in our sample of emerging countries, and 5 times when it comes to BRICs. An outstanding momentum of growth is noticed for Polish, Indian, Hungarian, and Russian outward FDI stock. The share of emerging countries in the outward FDI stock world total has risen from 3.8% in 2000 up to 6.7% in 2007, whereas the corresponding percentage is up from 1.3% to 3.3% with regards to BRICs. The current financial crisis triggering a serious economic recession in 2008-2009 has less affected the outward FDI stock from emerging countries than the average: between 2007 and 2009 the world's outward FDI stock total has been multiplied by 1.22, by 1.35 in emerging countries and 1.40 in BRICs. So that the share of emerging countries in the world's FDI stock has still augmented throughout the crisis, from 6.7% to 7.4% and this pertains also to BRICs (from 3.3% to 3.8%). For emerging country multinationals, the crisis has created new opportunities for acquisitions abroad. Such trends are better understood with a look at FDI outflows (Table 2).

Table 2 – FDI outflow from selected emerging countries

(million \$)

Country	2000	2007	2008	2009	2007/2000	2009/2007
Argentina	901	1504	1391	679	1.67	0.45
Brazil	2282	7067	20457	-10084	3.10	-1.43
Chile	3987	2573	7988	7983	0.65	3.10
China	916	22469	52150	48000	24.53	2.14
Czech Republic	43	1620	4323	1340	37.67	0.83
Egypt	51	665	1920	571	13.0	0.86

Hungary	620	3737	1161	-6886	6.02	-1.84
India	509	17233	18499	14897	33.86	0.86
Indonesia	150	4675	5900	2949	31.17	0.63
Malaysia	2026	11280	14988	8038	5.57	0.71
Mexico	984	8256	1157	7598	8.39	0.92
Poland	17	5405	2921	1294	317.94	0.24
Russia	3177	45916	56091	46057	14.45	1.00
Slovenia	66	1802	1366	868	27.30	0.48
South Africa	271	2966	-3134	1584	10.94	0.53
South Korea	4999	15620	18943	10572	3.12	0.68
Taiwan	6701	11107	10287	5868	1.68	0.53
Thailand	349*	2850	2560	3818	8.17	1.34
Turkey	870	2104	2532	1551	2.42	0.74
BRICs	6884	92685	147197	98870	13.46	1.07
Emerging countries	32096	168849	221500	146697	5.26	0.87
World	1186838	2267547	1928799	1100993	1.91	0.49
BRICs / World (%)	0.6	4.1	7.6	9.0		
EC / World (%)	2.7	7.4	11.5	13.3		

Authors' calculation based on UNCTAD data.

* in 1999

If we put aside Poland and the Czech Republic where FDI outflows were only in the starting blocks in 2000 (Andreff, 2003), between 2000 and 2007, the most significant increases in FDI outflow are witnessed for India, Indonesia, Slovenia, China and Russia. Since the latter is a very specific strategic foreign investor (Andreff, 2011), Slovenia is a small economy, and Indonesian is less known so far in the literature, the rest of the paper focuses on Indian and Chinese outward FDI and MNCs. The value of world's FDI outflow has nearly doubled from 2000 to 2007 whereas it has been multiplied by 5 in emerging countries, by 13 in BRICs (due to three countries except Brazil), by 25 in China and 34 in India. As a result, the share of emerging countries in the world's FDI outflow has augmented from 2.7% to 7.4% between 2000 and 2007 (from 0.6% to 4.1% for BRICs).

FDI outflows have been dramatically affected downwards with the current crisis: their value at the world level has dropped by roughly 51% from 2007 to 2009. A similar drop is only

13% on average across emerging countries, and one observes no drop for BRICs taken together; the drop in Brazilian FDI outflow is more than compensated by the growth in Chinese and Indian FDI outflows, whereas Russian FDI outflow which dropped in 2008 has recovered in 2009. Here lies another reason for focusing on Indian and Chinese outward FDI and MNCs: they have been more resilient to the crisis, which also offered them new opportunities for acquiring foreign companies in OECD countries. This resilience is due to some sort of competitive advantage that this paper is looking for. Overall, with the crisis, the share of emerging countries in world's FDI outflows total has increased from 7.4% in 2007 to 13.3% in 2009 (and from 4.1% to 9.0% for BRICs).

New emerging MNCs such as the ones from India, China, Brazil, Argentina, possibly Thailand, have adopted strategies of South-North FDI. South Korean and Taiwanese MNCs had already adopted quite similar strategies since the mid-1980s. Empirical evidence (Richet and Ruet, 2008; Balcer and Bruscheri, 2010a; Gammeltoft *et al.*, 2010) exhibits that they have embarked on outward FDI geared towards developed economies, after previous stages of growth, including exporting to market developed OECD countries, acquiring technology through international partnerships, imitation and domestic mergers and acquisitions, and investing abroad in other developing countries. This last and most recent trend implies that host countries for FDI are more developed than the home country. We think this new trend is at odds with the Heckscher-Ohlin-Samuelson (HOS) theorem, even with its emendation by Mundell (1957).

Exports from emerging countries like India and China towards developed OECD markets may be considered as being in tune with the HOS theorem, since these exporters benefit from lower production costs at home, namely lower labour costs, even though technological upgrading of manufacturing exports, their growing skill-intensity and the role of advanced services cannot easily be explained through a static factor-endowment approach retained in HOS theory. When some MNC from a developed market economy invests in Asia in order to use this country as an export base (production relocation to Asia), this may be indirectly reconciled with HOS in arguing with Mundell that FDI (more generally international factor mobility) is a substitute to trade (international products mobility). Such is the case of the relocation theory with a prerequisite that is production fragmentation (Mouhoud, 2008)

The new observed facts regarding Indian and emerging MNCs is that now they seem to rely on their lower labour cost comparative advantage to invest in developed countries in which labour costs are quite higher. This is definitely contradictory to any version or emendation of the HOS theorem including the Mundell FDI/trade substitution assumption. What is

witnessed is production relocation by Indian, Chinese and emerging MNCs based on their labour cost comparative advantage in the production of intermediary products at low cost. The production fragments which are relocated to developed countries are mainly assembly lines and R&D centres for the production of final (finished) products.

2. Explaining emerging country multinationals: theoretical approaches

The phenomenon of FDI originated in developing countries is not a new one, even if its pattern, geographical destinations and drivers have changed over time. Different theoretical explanations have been proposed for outward FDI from emerging countries. Some authors extend and adapt more general, received theories to this case whereas new and specific explanations have been proposed, in the past decade, to analyse the drivers and dynamics of these new actors.

2.1. Adapting traditional theories: which specific advantages behind Third World multinationals?

Since the late 1970s, the spread of multinationals from developing countries and South-South FDI flow stimulated theoretical approaches, raising the key question of which specific competitive advantages characterized these companies. The idea was that, in any case, MNCs must possess competitive advantages over domestic firms strong enough to overcome the initial disadvantages they face in the host country.

Applying the product-life-cycle model and the technological accumulation theory: In 1979, Raymond Vernon, acknowledging that his 1966 model had lost part of its power in explaining FDI among industrialized countries, maintained that it could still be applied to FDI undertaken by developing countries - DCs (Vernon, 1966; 1979), referring to South-South FDI. In the same vein, Wells (1983) argued that some LDC firms carried out foreign investments in other developing countries, exploiting their absorptive capacity and skills in imitating and adapting to local conditions both the products and the processes: one example is the adaption of large scale technologies to small scale production.

Lall (1983) gave a remarkable contribution to the comprehension of Third World multinationals. In his view, FDI from DCs was based on a range of technological advantages which were not necessarily confined to the imitation or adaptation of imported technology,

but could originate in innovation, following a process of technology accumulation. Technologies and products were not only appropriate for the developing countries' factor prices and quality conditions, and efficient at a smaller scale, but also matched the local needs and tastes⁴. Lall's empirical work on India showed that the upgrading of DC firms' technological capabilities could place them in a position to invest also in industrialized countries.

The eclectic paradigm: developing countries within the investment development path: After introducing the well-known OLI paradigm, explaining foreign production on the basis of ownership, localization and internalization advantages, John Dunning (1988) argued that the emerging phenomenon of outward direct investment by DCs could also be explained by his eclectic theory of international production. Along with GNP per capita increases, countries pass through different stages of an investment development cycle. Their inward and outward FDI flows and balance are linked to their development stage. The existence of a positive correlation and a J-shaped relationship between net outward investment and GNP per capita is assumed. Dunning therefore argues that the ownership advantages of DC MNCs tend to reflect the structure of their countries' resource endowments, such as capital, labour, natural resources, individual entrepreneurship, and ability to adapt imported know-how and technology, as well as their better knowledge of other DCs' markets, a better mastering of technologies and skills that are particularly suitable for these countries and a shorter institutional distance (Dunning, 1986)⁵.

From the point of view of these established theories, three main drivers may explain the multinational expansion of firms, including those based in developing countries:

- resource seeking motivations (targeting natural resources, energy and agricultural goods);
- market seeking motivations (aiming at the access to new markets);
- asset seeking motivations, in the case of acquisitions targeting in the first place technology, knowledge, brands and skills incorporated in a foreign company.

Cantwell and Tolentino (1990) and Dunning (2008 *et al.*) himself admit that increasing EC MNCs' activity directed towards industrialized countries may be explained not only by market seeking or natural resource seeking motivations, but also by the need of augmenting,

⁴ In this respect, Lall develops some ideas proposed in the wide and policy-oriented debate of the 1970s and 1980s on the "intermediate technologies" or "appropriate technologies" for DCs (Balcer, 1981).

⁵ These kinds of advantages can be exploited in other DCs, in sectors requiring intermediate or mature technology and semiskilled labour, and where economies of scale are less relevant.

rather than exploiting, their ownership advantages, by accessing technological resources in industrialized countries. Significantly, Dunning refers to these kinds of FDI as “asset-augmenting” rather than “asset seeking” investment.

This group of scholars argue that explaining the new trend of South-North FDI requires the extension and development of the theories introduced by Lall and Dunning, as general theories based in the historical experience of Western MNCs, if properly adapted, still work (Buckley 2010 ; Rugman, 2010).

2.2. Theories specific to emerging country multinationals: asset-seeking motivations as a key explanation

Another train of thought raised serious doubts about the assumption that a MNC always must possess competitive advantages over domestic firms strong enough to overcome the initial disadvantages they face in the host country, as the companies based in emerging countries, lacking monopolistic advantages, may go abroad just to acquire the resources they lack at home. Therefore, these scholars stress the need for new specific theoretical explanations.

The imbalance and springboard approaches: Moon and Roehl (2001) point out that – paradoxically - a firm may go abroad to overcome its own disadvantages, such as the lack of technology or management know how, or a limited market share on domestic market. However, they admit that some ex-ante ownership advantages are needed also in the case of asset seeking FDI.

With a same research orientation, Luo and Tung (2007) argue that EC multinationals use outward investments “as a springboard” to acquire strategic assets, sophisticated technology as well as brands, managerial skills and access to new markets. Dwelling upon empirical evidence, these scholars highlight that the competitive advantages were not originally possessed by the investing companies in question, but were mainly generated through their participation in international alliances. The linkages with foreign partners allow these companies to upgrade technological and management skills, to develop learning experiences, and to be integrated into the internal network of their foreign partners. Luo and Tung (2007) point out that emerging multinationals show a leapfrog attitude: as latecomers they tend to internationalize rapidly, not gradually through incremental steps, to catch up the incumbents, undertaking simultaneously risky and costly operations in several countries.

The linkage, leverage and learning theory: Starting from a resource-based view of internationalization, Mathews developed a popular theory to explain “Dragon Multinational Enterprises”, known as the “linkage, leverage and learning” (LLL) theory. He stresses that emerging MNCs are keen on establishing linkages, including alliances and joint ventures with incumbent firms, leveraging resources, learning and imitating (Mathews, 2002 and 2006). Latecomers acquire and absorb foreign resources and improve their competitive position through multinational growth. They enter outsourcing networks. They are able to *leverage* resources from the strengths of others via technology licensing contracts, imitation and reverse engineering (Mathews, 2006). However, this strategy involves high risks and uncertainties.

Networking abilities characterize emerging multinationals: it is the case of the Chinese GuangXi, or “bamboo networks” (Tolentino, 2008). To this respect, the theory of international joint ventures and alliances (Contractor and Lorange, 2002; Balcet and Bruschi, 2010a), provides useful insights, by suggesting that partnerships can be interpreted as an institutional device created in order to implement complex transactions, or as a learning instrument in a broad sense.⁶

Acceleration characterizes the internationalization process of emerging country MNCs, reaching in a few years a wide geographical coverage and a leadership position in some specific market segments (Mathews, 2006; Luo and Tung, 2007).

Notwithstanding their different views, both approaches converge in highlighting some common features of emerging multinationals:

- the importance of asset-seeking motivations, vis-à-vis the standard market-oriented and natural resources-oriented motivations;
- the capacity of absorbing, assimilating and adapting foreign technology as a pre-requisite for multinational growth;
- the role of networking and international alliances;
- the accelerated pace of international growth;
- the role of domestic institutions, including the conglomerate governance (Indian model) and the State ownership (Chinese model);
- the role of political support from their home government.

⁶ Dunning (1995) included among the ownership advantages those that a firm gets from being part of alliances.

The last two features are at the origin of relevant country-specific competitive advantages for emerging multinationals (Goldstein, 2007).

All these theories put to the fore useful insights about the drivers and industrial dynamics associated to the new multinationals based in emerging countries. However, surprisingly enough, they do not include labour cost advantages in their conceptual framework while empirical evidence suggests that the cost of both skilled and unskilled labour deeply influence the international competitiveness of these firms.⁷ In the rest of this paper, we shall therefore assume that labour costs matter and explore the analytical consequences of this assumption.

3. A reverse-HOS explanation of emerging FDI in developed countries

In the above-surveyed literature about FDI from emerging countries, namely their outward FDI to developed market economies, one crucial variable remains widely unheeded, that is labour cost. Does this mean that labour cost does not play any role as an explanatory variable of outward FDI from developing to developed countries? We do not think so. Or is it due to labour costs lower in developing than developed countries clashing with the conventional wisdom in which such labour cost differentials usually do trigger an investment flowing from developed to developing countries, and not the other way round? This paper stresses that labour cost differentials still matter when explaining emerging companies' FDI in developed countries even though it is at odds with the mainstream theory in international economics.

3.1. Extending an HOS framework to foreign direct investment from developed to developing countries

Since Ricardo, relative (labour) production costs have been analysed as the drivers of nations' international trade specialisation. With the Heckscher-Ohlin-Samuelson (HOS) theorem, the latter is explained by nations' relative endowment in labour and capital. Usually, it is assumed that a developed country is relatively better endowed with capital and a developing (emerging) country is better endowed with labour. This translates into a lower capital price (interest rate) in a developed than a developing country while the labour price (wage rate) is lower in a developing than a developed country. One problem with the HOS

⁷ Rugman (2010) includes the abundance of cheap labour among the competitive advantages of Indian and Chinese multinationals, along with economies of scale and cheap money. But he does not dig deeper into the theoretical implications of this assumption.

theorem is that, since it assumes a perfect international immobility of factors of production, including capital, there is no room for explaining FDI flows. However, since Mundell (1957) has introduced tariff barriers in this standard analysis, it is demonstrated that hindrances to trade such as tariff barriers – or some other governmental interferences - will trigger a flow of foreign (direct) investment substitutive to international trade – a so-called tariff-jumping FDI. Taking stake of these old theories, and using an equation in line with the recent literature on econometric testing of FDI determinants, we can express the explanatory variables of classical FDI flowing from developed to developing (emerging) countries as follows:

$$FDI_{ij} = a + b (w_i - w_j) \cdot L_j + c \cdot G_j + d \cdot D_{ij} + u_{ij} \quad (1)$$

with: $w_i > w_j$, thus: $w_i - w_j > 0$,

where i stands for any developed country investing in any developing (emerging) country j .

The explanatory variables of this FDI flow are:

w_i : the wage rate⁸ of (unskilled) labour in country i ,

w_j : the wage rate of (unskilled) labour in country j ,

L_j : the volume of employment in the subsidiaries of developed countries' MNCs located in a developing country j ,

and: $w_i - w_j > 0$ reflecting a Ricardo/HOS dimension in equation (1).

With these two variables, FDI is explained by a wage rate differential between developed and developing countries. Moreover a tariff jumping aspect of FDI is encompassed through G_j ($G_j > 0$) which stands for any governmental interference on international trade, namely tariffs – to take on board a Mundell's dimension in equation (1). We have given to equation (1) the shape of a gravity model that is now currently used not only for empirical testing of foreign trade determinants but also, increasingly, to provide econometric modelling of FDI determinants⁹. A gravity dimension is introduced through D_{ij} which stands for the geographical distance¹⁰ between a developed and a developing country.

Now, let us distinguish, following one explanation of the Leontief paradox, between skilled and unskilled labour (L), S standing for skilled labour. A developed country is usually assumed to be better endowed with skilled labour than any developing country. However,

⁸ The variable that investors actually take into account in their foreign direct investment decision making is the unit labour cost and not the wage rate *per se*. This means that investors are aware of reverse labour productivity differentials that may (or may not) compensate for wage rate differentials. Of course, there is no room for such a consideration in a pure HOS world where labour productivity is not directly compared between countries; it is only indirectly captured through country relative factor (labour) endowment.

⁹ For instance, see Altomonte (2000), Altomonte and Gugliano (2003), Buch *et al.* (2003), Carstensen and Toubal (2004), and many others.

¹⁰ In empirical testing, such variable can only stick to a number of miles, but can also be enlarged in such a way as to pick up – with a dummy variable – a cultural, linguistic or institutional distance.

contrarily to relative capital endowment, this will not derive into a higher wage rate for skilled labour in developing than developed country. One reason is that domestic skilled labour remuneration is constrained by overall wage formation and the level of economic development in a developing country so that it is lower than in a developed country. Another reason may simply be that skilled labour specifically requested by MNCs is not available on the developing country's labour market. Then there is no actual wage rate for skilled labour in j and the outcome is that tasks requiring such high skills are fulfilled by expatriates working in the developing country's subsidiary but hired by the mother company on its developed labour market. Thus equation (1) transforms into equation (2):

$$FDI_{ij} = a + b (w_i - w_j) \cdot L_j + c (r_i - r_j) \cdot S_j + d \cdot G_j + e \cdot D_{ij} + u_{ij} \quad (2)$$

with: $w_i > w_j$, thus: $w_i - w_j > 0$,

and : $r_i > r_j$, thus: $r_i - r_j > 0$,

r_i : the wage rate of skilled labour in country i ,

r_j : the wage rate of skilled labour in country j ,

S_j : the volume of skilled employees in the subsidiaries of developed countries' MNCs located in a developing country j ,

and : $r_i - r_j > 0$ reflecting a Leontief dimension in equation (2).

However, our assumption here is less complex than reality, assuming that skilled workers are found in a developing country and hired by MNCs' subsidiaries at the domestic wage rate r_j . In fact, the absence (or lack) of skilled labour in developing countries may play as a relative hindrance to outward FDI from developed to developing countries. Then, as a consequence, some proportion of skilled workers may be expatriates, hired in a developing country i (at a r_i wage rate) and sent to a MNC's subsidiary located in a developing country j ; then S_j should be partly replaced or supplemented with S_i for which the expected sign of the coefficient is negative in equation (2).

Finally, let us assume that there is a technological gap between developed and developing countries which is considered since Vernon (1966) and others as one determinant of outward FDI from developed countries handling advanced technology to developing countries that are lagging behind in terms of technology. This can be introduced in the previous equation in such way as to obtain (3):

$$FDI_{ij} = a + b (w_i - w_j) \cdot L_j - c (r_i - r_j) \cdot S_i + d \cdot (T_i - T_j) + e \cdot G_j + f \cdot D_{ij} + u_{ij} \quad (3)$$

with: $w_i > w_j$, thus: $w_i - w_j > 0$,

and : $r_i > r_j$, thus: $r_i - r_j > 0$,

and: $T_i > T_j$.

T_i and T_j , respectively the technological level of developed and developing countries, could be assessed at a nation or country level, with indices such as the ratio of gross domestic R&D expenditures to GDP, the number of patents per year in each country, and the number of engineers and scientists per 1,000 inhabitants (Andreff, 2003).

With equation (3), we reach a rather satisfying explanation of outward FDI flowing from developed to developing countries in a standard theoretical framework that says that inward FDI is attracted into developing countries by a lower wage rate of unskilled labour, tariff barriers (or other governmental barriers to trade), a lower wage rate of skilled labour despite the absence or lack of skilled labour in developing countries, and a technological gap that benefits to foreign investors (MNCs) based in developed countries.

A last point must be made about the type of products manufactured in MNCs' subsidiaries located in developing countries. The most common assumption with regards to FDI flowing from developed to developing countries due to wage rate differentials is usually coined as international production relocation in the context of the fragmentation of production (Mouhoud, 2008; Andreff 2009). The corresponding subsidiaries are created in an efficiency seeking strategy *à la* Dunning (1988). On the one hand, they may manufacture low-tech intermediary products, parts and components which are to be re-exported from developing to developed countries in order to integrate a final product to be assembled at the parent company (or at an assembly line subsidiary in another developed country). On the other hand, foreign subsidiaries in developing (emerging) countries may assemble high-tech components imported from the parent company or from other subsidiaries located in developed countries (as for i-phone production in China whose high value added components come from the USA, Japan and Taiwan).

3.2. Explaining foreign direct investment from emerging to developed countries puts HOS ups and down

Given the above-described analytical framework, could we adapt it now to analyse a reverse FDI flow, the one flowing from developing, here emerging, countries to developed countries? Our intuition is that the main variables which may explain such a paradoxical FDI (for the standard theory) from less developed emerging to more developed countries are the same as those mobilised to understand FDI from developed to developing economies but they interplay in a different way that contradicts the aforementioned emended HOS theory. Of course, a number of variables have evolved between the first period when MNCs from

developed countries were investing in the low labour cost manufacturing industries in developing countries (from the 1960s to the 1980s) and the current period (2000s) when MNCs from emerging countries are investing in developed countries: for instance, skilled labour has significantly augmented in emerging countries, and the technological level has upgraded including due to technological transfers by MNCs from developed countries in the 1960s-1980s. Moreover, the interference of emerging countries' governments has changed with less tariff barriers and more direct support to outward FDI. However, even if the wage rate differential for unskilled labour ($w_i - w_j$) has shrunk meanwhile, it still remains significant and the reversal of FDI flows (now from emerging to developed countries) cannot be due to a reversal in neither the unskilled labour wage rate gap nor in the skilled labour wage rate gap. It is exactly because the wage rate differential has only slightly diminished that the above-emended HOS theorem becomes irrelevant in the face of FDI by emerging MNCs in developed economies. Here there is a room for elaborating on a rather different explanatory scheme in which lower wage rate ($w_j < w_i$ and $r_j < r_i$) is used by local producers (MNCs) from emerging countries j as their comparative advantage, not only to export, but to invest in developed countries i as well. Then the HOS approach logically falls up and down and the reverse FDI flow calls for a reverse-HOS theoretical explanation. Let us first keep on board most assumptions adopted above as fitting with the current situation of outward FDI from emerging (j) to developed (i) countries, that is:

$$w_i > w_j, \text{ thus: } w_j - w_i < 0$$

$$r_i > r_j, \text{ thus: } r_j - r_i < 0$$

$$T_i > T_j \text{ and finally } G_j^* > 0.$$

We still use G_j to refer to some governmental interference, but we add a star to mean that it is no longer (or not primarily) an interference based on tariffs. The added star basically refers to governmental intervention in the area of FDI, namely state support (like in India, China) to outward FDI undertaken by domestic (Indian, Chinese) companies or simply the fact that a number of MNCs from emerging countries are state-owned and run (China). Then we have equation (4) as our basic model for emerging countries FDI in developed market economies:

$$FDI_{ji} = a + b (w_j - w_i) L_j + c (r_j - r_i) S_j + d (T_j - T_i) + e G_j^* + f D_{ji} + u_{ji} \quad (4)$$

What is the story told by equation (4)? First, the distance plays a role, whatever interpreted, in geographical, cultural or linguistic terms, let us say it is less easy for an Indian firm to invest in France or Germany than in Sri Lanka, Pakistan, Bangladesh or the UK. There are other strong determinants of emerging FDI in developed countries. One is a push factor which is institutional, to put it this way, and consists of a number of incentives and supports

G_j^* provided by the home emerging country's government to its domestic companies investing abroad (examples are given below for India and China). Then more curious determinants of emerging outward FDI in developed countries reveal if we keep the standard theoretical framework. In equation (4), there is a sort of reverse technological gap effect triggering outward FDI to developed countries, as if technologies in China or India were more elaborated, sophisticated or performing than in Europe and North America. Of course, it is not credible as such: there is not an overall gap beneficial to emerging countries' technology so far. However such statement must be qualified industry by industry. On the other hand, $(T_j < T_i)$ may capture a main determinant of FDI from India and China, as highlighted by empirical works and literature on technological catching up¹¹ (Matthews 2002; Goldstein 2007) and the asset-seeking motivation for mergers and acquisitions in Europe and the USA.

With skilled labour, it remains cheaper when hired in emerging countries and the wage rate gap appears now to be a determinant of emerging countries' FDI in developed countries, at odds with our previously emended HOS standard model. The strangest explanatory variable of emerging countries' FDI in developed countries is about unskilled labour remuneration. Equation (4) says that, for instance, MNCs from emerging countries take advantage of a lower wage rate in their domestic economies to invest in higher wage rate countries in Europe. In other words, emerging MNCs *rely on lower wage at home, i.e.* on a negative wage differential, *to spread their FDI to developed market economies.* We are definitely at odds with the HOS theorem, even if emended accurately. The standard theory cannot do the job of explaining the reverse flow of FDI from emerging to developed countries since it states that a positive wage rate differential ($w_i > w_j$) triggers FDI from i to j which is not consistent with the idea that a negative wage differential ($w_j < w_i$) triggers FDI from j to i . Or, put otherwise, a same wage rate differential ($w_i > w_j$) cannot trigger FDI both ways, from emerging to developed as well as from developed to emerging countries. This outcome is inconsistent with any version of a factor endowment-based model. Thus, to understand FDI by emerging MNCs in developed countries, no other way than to skip out the standard HOS theory. What is suggested here is a reverse-HOS explanation in which a company can rely on a domestic lower labour cost, taken as a home (and not host) country advantage, to invest abroad in countries where labour cost is higher. It remains to show below (section 4) how it can work.

¹¹ Note that a technology-based advantage may be consistent with a skilled labour cost advantage since an innovation process usually resorts to highly-skilled labour.

Let us now assume that, in specific industries, the technological gap between some emerging countries and developed economies has been nearly closed by technological development or imitation in the former (so that $T_i = T_j$). This has often happened in emerging countries as the outcome of technological transfer and improvement through previous inward FDI by American, European and Japanese MNCs, as well as through licensing, imitation or reverse engineering. On the other hand, a number of FDI achieved by emerging MNCs in developed countries had resulted from mergers and acquisitions (ex: Geely over Volvo, Mittal over Arcelor). These are typical of an asset seeking strategy conducted by emerging MNCs to step in developed countries, with a particular focus on acquiring those technologies which are on the knowledge frontier. This also paves the way to $T_i = T_j$. With such assumption we reach the purest reverse-HOS model of FDI:

$$FDI_{ji} = a + b (w_j - w_i) L_j + c (r_j - r_i) S_j + d G_j^* + e D_{ji} + u_{ji} \quad (5)$$

Eventually, we are left with a major explanatory variable which is that outward FDI by emerging countries in developed countries is based on a reverse wage rate differential, for both skilled and unskilled labour, compared to what is usually contended by the standard theory. *A lower wage rate than abroad is, overall, a home market relative advantage to invest abroad in the case of emerging countries.* Of course, it could also benefit from governmental support G_j^* and we show below that Indian and, to a larger extent, Chinese MNCs' relationships with their governments are cases in point.

Let us examine our major result a little bit further. How can a lower wage rate be a relative advantage for investing abroad in a higher wage rate country? A first response can be that workers employed in Indian (Chinese) subsidiaries located in developed countries are waged at the Indian (Chinese) rate so that Indian (Chinese) MNCs are extremely cost-competitive on, say, the French, German or Italian markets. But this is unlikely, in particular if Indian (Chinese) subsidiaries employ non Indian (non Chinese), *i.e.* domestic workers in their host countries. Even with employing Indian (Chinese) expatriates, their wages must be close to the average wage of the host country, for them to survive in high purchasing power markets, and also due to wage competition and the domestic labour market legislation¹² in host country.

Another explanation, which is the accurate one given the evidence provided below for Indian and Chinese MNCs, is that the lower labour cost advantages $w_j < w_i$ and $r_j < r_i$ are integrated in the production of intermediary products manufactured in India or China and

¹² And, possibly sometimes, some trade unions' pressures.

then transferred (intra-firm transfer) as a very cheap and competitive input supply to those Indian (Chinese) subsidiaries located in developed countries. This is what makes Indian (Chinese) subsidiaries cost-competitive on developed markets and triggers their FDI to such markets. There is one implication here. This means that Indian (Chinese) MNCs basically do not have FDI in developed countries to manufacture labour-intensive intermediary products. They invest there to manufacture final products primarily geared toward developed countries' markets. In some sense, emerging companies' FDI in developed countries is the reverse to former FDI by MNCs from developed countries in order to use Asia (China, India) as a platform or a workshop for manufacturing, at a lower labour cost, inputs to be re-exported to their assembly lines located in their home countries.

We now underline why we have not taken on board any demand variable¹³ in our explanation. This could have been done by introducing a right-hand variable such as GDP or population in the host country i , as a proxy for its market size, and/or GDP per inhabitant as a proxy for the host country's market wealth or development like Milleli *et al.* (2010) do it. We did not do that first because our first focus is on whether the standard theory derived from HOS keeps any explanatory power in the face of FDI from emerging to developed countries. Since it is not disturbed by demand side variables, the response is clearly: no. On the other hand, most FDI are undertaken with a market seeking strategy everywhere in the world even though it is not the only one objective of a MNC. In the existing literature, more than two-thirds of case studies and econometric tests come up with the conclusion that foreign market size is a significant determinant of FDI though together with other variables: the latter are of interest here. For instance, in another specific group of emerging countries, that is post-communist transition economies, though a lower labour cost is a significant determinant of inward FDI, testing the market size provides even more often a significant result (M. and W. Andreff, 2005). Finally, if we had introduced a demand side variable such as the market size, we would have left a discussion led in the framework of supply side theories which, from Ricardo to HOS and Leontief, look at comparative advantages in relative production costs and endowment in factors of production. We do not intend here to check whether emerging MNCs' investment in developed countries does or does not fit with demand theories of

¹³ Another crucial variable is omitted, as it has been stressed by one of our commentators, which is the exchange rate - absolutely a case in point with the Chinese yuan and Indian rupee undervaluation. However, there is no such a thing as an exchange rate in the realm of the HOS theorem. Moreover, while an undervalued currency is boosting exports, it is a brake on to outward FDI. With an undervalued yuan and Indian rupee the labour cost comparative advantage of Chinese and Indian MNCs investing in developed countries must be even more significant than otherwise.

international specialisation (Linder, 1961; Lancaster, 1980) or with the so-called new theory of international trade (Helpman and Krugman, 1985).

Before providing evidence of the reverse-HOS explanation of emerging FDI in developed countries, three final comments must be made. Probably, some cultural, linguistic and institutional dimensions may be at work in triggering outward FDI from India and China to developed countries as suggested in Milleli *et al.* (2010). In future empirical testing of our reverse-HOS equation (4), it could be dealt with appropriate dummy variables associated with – or complementing – our Dji variable. We have not taken them on board in order to stick to those variables encompassed with the standard theory and not dilute our argument with secondary variables neglected by standard international economics.

All the statements above are steps into the direction of a refurbished economic theory of FDI capable to encompass FDI from emerging to developed countries on a pathway which diverges from, or even contradicts, the HOS-inspired standard approach. Of course, we have no available data base to empirically test equation (4) so far. The first and major reason is that a matrix of bilateral FDI flows (FDI_{ji}) between emerging and developed countries is not available. This is the reason why we do not proceed with econometric testing and resort instead to exhibiting some evidence taken from case studies on Indian and Chinese MNCs.

4. Some empirical evidence about the reverse-HOS explanation of Indian and Chinese foreign direct investment in developed countries

The above analysis has been developed within a static country-level framework consistent with our main goal to critically re-assess the HOS-inspired explanation of FDI flows from emerging to developed economies. Now we briefly attempt a preliminary confrontation between the right-hand variables of equation (4) and some empirical facts.

Those specific theories on MNCs from emerging countries, reviewed in 2, provide useful insights on asset seeking motivations, networking and technology transfer, adaptation and assimilation, but do not refer to labour cost differentials as a major competitive advantages for emerging MNCs. We contend that labour costs matter and that they should be integrated into the determinants of why MNCs from emerging countries invest in developed countries.

Although they are not the crucial focus of this paper, two other determinants of outward FDI by emerging MNCs have to be checked: the comparative technological level of Chinese and Indian MNCs and institutions. Empirical evidence also suggests that institutions and policy matter: private conglomerate groups characterised the multinational growth process in India

while more specialized, smaller and state-owned companies (*i.e.* under central State administration, provinces or municipalities supervision) are representative of new Chinese MNCs (Richet and Ruet, 2008). With regards to policy, it is not only liberalisation processes which are concerned (in China since 1978, in India primarily since 1991) but also industrial policies during the previous import-substitution decades. Both had laid industrial and technological bases for the following growth stages shaping production structures and the pattern of multinational growth.

Turning now to a brief collection of empirical facts that go in line with our reverse-HOS scheme, we stick to providing some examples of the skilled and unskilled labour cost advantage, government support to emerging MNCs, and attempts to close the technological gap through asset seeking mergers and acquisitions geared toward handling the most recent technologies.

4.1. Labour costs matter

At a firm's and industry's level, does some convincing evidence exist about $w_j - w_i < 0$ and $r_j - r_i < 0$? Empirical field research shows that labour cost advantages are crucial to understand the rapid evolution of India, China and other emerging countries from a situation of host to home countries for FDI (UNCTAD, 2006; Richet and Ruet, 2008; Balcer and Bruschi, 2010a and b; Gammeltoft *et al.*, 2010). But how does a Chinese or Indian MNC exploit its home country lower cost advantage? First, in a pre-multinational stage, this advantage allowed the corporate growth through exports and throughout the domestic market. Abundant supply of low cost labour, both skilled and unskilled, generated high profit rates at home. This first outcome, mainly related to export performance, can still be consistent with an HOS-oriented view.

A second hypothesis – crucial for our argument - is that during the multinational expansion stage, this labour cost advantage can be exploited abroad. As we have pointed out, it is not plausible that Indian and Chinese subsidiaries located in developed countries are paying lower wages. However, the competitiveness of Indian and Chinese subsidiaries located in developed countries may be based on systematically importing - tangible and intangible – inputs and intermediary products from their homeland where the latter are manufactured at a lower labour cost. Thus, we have to point at such intra-firm (intra-MNC) transfers from emerging to developed markets. Exports of intermediate goods and components from India and China, based on low labour cost, to foreign subsidiaries are a means to improve their

profitability. This is true in particular with goods and components, or intangible assets such as patents and know-how that incorporate skilled labour, a major source of competitive advantage for Indian and Chinese industrial groups going multinationals. Mechanical and electronic engineers, designers, computer scientists, research workers and technicians are all cases in point.

In other words, the abundance of skilled labour at low costs directly affects the innovation process, reducing the costs and duration of design and product development process, and therefore impacting the speed, direction and characteristics of the innovation process. The latter includes creative recombination and original development of acquired technology, incremental product development and adaptation to different contexts and applications. Innovative products and processes may be transferred abroad to foreign subsidiaries, enhancing the multinational growth of the firm (Kumar, 2007).

The automotive industry gives us some examples. The product development costs at Tata Motors were estimated to be one third of the same costs for Western carmakers (Ruet, 2009), whereas Mahindra & Mahindra developed a SUV project with a team of 120 engineers whose yearly remuneration was estimated to be 8 to 10 times lower than the one of a Western manufacturer (Balcet and Bruschi, 2010 b). In the Indian pharmaceutical industry located in Europe, there is evidence that active drug components are exported from Indian laboratories to the European final assembly plants (Balcet and Bruschi, 2008). Chinese electronic and ICT industries offer examples of innovation process and synergies between innovation and multinational growth. Indian software companies, including Infosys and Wipro Technologies have set up numerous offices and development centres across Europe (Milleli *et al.*, 2010), interacting and creating synergies with their Indian headquarters and with the technological clusters in India, like in Bangalore.

Summing up, low cost skills not only accelerate the acquisition and creative assimilation of foreign technology but also support multinational growth of Indian and Chinese firms. Therefore, labour costs advantages for skilled labour, much more than for unskilled labour, significantly contribute to explain the multinational growth of Indian and Chinese multinationals. However, much more research is needed on the relationships between subsidiaries in developed countries and parent companies in the homeland and flows of intermediate goods – both tangible and intangible - between headquarters and foreign subsidiaries of emerging MNCs.

4.2. *Technology matters*

A closing technological gap between Indian and Chinese MNCs and their competitors in developed countries is a next evidence, in favour of equation (5), since it gives some ground to $T_i = T_j$. It is clearly exhibited in case of scale intensive, traditional and medium technology goods, including segments of mechanical engineering, as well as electronics consumer goods and components in China and pharmaceutical and software in India (Kumar, 2007). Widespread evidence shows that the technological catching up in many industries has been rapid in both countries, dramatically improving their knowledge and capabilities.

However, technological gaps persist in some industries, giving ground to $T_j < T_i$. This is fully consistent with the asset seeking motivation of many acquisitions in developed countries by Indian and Chinese MNCs, widely reported in the empirical literature. One basic driver of Indian firms' acquisitions in the UK and other developed countries is to acquire technological know-how and patents in high tech industries such as computers, pharmaceuticals, military and biological industries, but also in the automotive industry. Some examples are the Indian carmaker Tata Motors' operations in 2002 in the UK with MG Rover, and in 2004 in South Korea, targeting the Daewoo Commercial Vehicle Division, that became a wholly owned subsidiary, including a relevant R&D unit. Other two important acquisitions took place in 2005, concerning design and engineering centres: for cars in the UK, for buses in Spain. In 2009, the acquisition of Jaguar and Land Rover followed, again including a R&D centre (Balcet and Bruschi, 2010a).

One must note that the motivations of asset seeking operations usually include the access to both new technology and internationally recognised brands. In China, SAIC (Shanghai Automobile Industry Corporation, local government-owned) made asset seeking and technology seeking operations in the UK and in South Korea. Among recent acquisitions by Chinese carmakers, the takeover in 2010 of Swedish Volvo (previously controlled by Ford Motors) by Geely emerges given its magnitude (1.8 billion USD). In 2007 and 2009 the same company had concluded other asset seeking FDI in the UK (vehicles) and in Australia (transmissions). Geely is a private company, but the deal was supported by Chinese local governments. After passing under Chinese ownership, Volvo brand has been expanding in China through a huge investment plan, including greenfield factories, R&D and training centres, located in those provinces that co-financed the deal (Balcet et al., 2011b). China Southern Railway has assimilated the Japanese Shinkansen fast train technology in its subsidiary Nanche Sifang Locomotive since 2004, and China Northern Railway has benefited from Siemens technology.

Finally, in specific technology niches Indian and Chinese firms may have developed areas of specialisation, original incremental innovations, and consequent competitive advantages also on more advanced markets, giving ground to $T_j > T_i$. This is consistent with a relocation model of R&D centres, that are increasingly located in emerging countries (UNCTAD, 2005), namely in some innovative districts, as Bangalore in India for software or Shanghai in China for electronics. After attracting inward FDI by MNCs from developed countries for a long period of time, these innovation clusters have also stimulated the rise of original knowledge and technological advantages for domestic firms that exploit them overseas (Kumar, 2007). Huawei is now a technological leader (at the edge of the knowledge frontier) in mobile phones and telephone appliances, thanks to R&D achieved in its Swedish, Californian and Shenzhen research laboratories (Boston Consulting Group, 2011). Suntech Power is now a world technological leader in manufacturing solar panels. In the automotive industry, the accumulation of know-how in specific areas recently originated opportunity of technological leapfrogging: one example is the very low-cost vehicle (the Nano model) designed by Indian R&D and engineering centre of Tata Motors; another example is the move of several Chinese firms, including BYD, a world leader in the battery sector, towards full-electric vehicles (Balcer *et al.*, 2011a).

4.3. Policies matter

A significant, sometimes crucial, State support to the multinational growth of domestic firms (captured by G^* in our equations 4 and 5) is especially evident in the case of China, where many new multinational actors are State-owned enterprises (including both central government and local, province and municipality governments). One example is the big Chinese state-owned industrial consortia in the railways construction industry (China Northern Railway, China Southern Railway), that have invested in building fast train railways in Great Britain (from London to Scotland) as well as in Turkey, Venezuela, Poland, Saudi Arabia, Russia and Brazil. State support often takes the form of governmental credits. For example, the Chinese Eximbank and the State-owned Energy Conservation Investment Corporation have invested together with Suntech in solar energy projects in Spain, Italy and Germany. The acquisition of Volvo by Geely in 2010 is classified as a private FDI, but more than 40 % of capital has been provided by Chinese provinces and central government. Sometimes, however, being too close to the government may have negative externalities, because of protectionist reactions by the host country governments. Huawei missed acquiring

a technology for networking computers from 3Leaf Systems (USA), in 2011, because the US Committee on Foreign Investment assessed the Chinese company as having a weak governance transparency due to its privileged relationships with the Chinese government.

In India, where a different transition process towards a market economy took place, the main multinational actors are private family-controlled groups. The supporting role of government in the internationalisation process is less direct, but sensible in financial and diplomatic support to Indian firms.

Conclusion

Outward foreign direct investment by emerging multinational companies to developed countries appears to be an undeniable new trend in the global economy that is not likely to be hindered with the current crisis – quite the contrary. Our first result is that such empirical evidence clashes with one major assumption of the standard theory, because the latter cannot explain, in terms of labour cost, that capital in the form of FDI flows from less developed to more developed countries. The second result is that we suggest a reverse-HOS explanation of outward FDI from emerging to developed countries that may become an alternative platform for further empirical testing in this area. At the current stage of this research work, and given the paucity of required data, a third result is to provide some preliminary non exhaustive evidence that lower (primarily skilled) labour costs are a basic advantage for emerging MNCs which invest in developed countries, together with the role of evolving technological gaps and governmental policies.

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