WORLD FDI, THE "TIP OF THE ICEBERG"

Dalina ANDREI[*], Liviu.C. ANDREI[**]

Abstract. *The FDI origin was once about three groups of theories, the (a) international trade based one (i.e. works of David Ricardo and Neoclassic Synthesis/HOS), the (b) product life cycle one (i.e. works of Raymond Vernon[1]) and the so-called (c) "eclectic paradigm" (i.e. John Dunning[2]) treating from the viewpoint of enterprise (i.e. microeconomic) development up to its internationally implemented stage. Then, the last might have continued on a large diversity of theories on multinationals. Or, these theories taken as a whole do suggest at least a diversity of the FDI "substance". Here, in our paper we use a proper empirical approach to finally demonstrate the contrary: there are not too many international capital sources.*

Keyconcepts: *foreign direct investments (FDI), direct investments abroad (DIA), external balance of payments (EBP).*

JEL Classification: *J29*

1. Introduction

Actually, it is about two '*tips of the iceberg'*, see Table 1 for the ***narrow*** one – just 4 world entities, countries and the Euro-zone region – and the other figures for the ***large*** one: Figure 1 with country-entity picking criteria and Graphs 1 and 2 identifying these 16 entities – individual countries plus the regions of Euro zone and 'Other developed Europe'[1]. See just ten of our most important conclusions[3]:

A profound *'irregularity'* – that means the *uneven FDI&DIA distribution among world countries* – accompanies an important regularity – just *the same world top entities* on both FDI/inflows and DIA/issues.

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[*] Economic Forecasting of the Romanian, Senior researcher the 3rd degree at the Institute of Economic Forecasting of the Romanian Academy of Sciences in Bucharest

[**] National University of Political and Administrative Studies, Senior lecturer at the National University of Political and Administrative Studies, Faculty of Public Administration, in Bucharest

[1] Actually, this makes a total number of 66 countries of a total of 215 data reporting countries to UNCTAD.

2. Data and results

2.1. Actually, again, this is similar from all viewpoints within the world area – e.g. among continents (6)[2], among regions (16)[3] and within all individual regions among member countries. Actually, the world capital flows landscape might be compared to a *'crystal structure'* in which all larger and smaller pieces smashed keep a(lonely) similar shape. Or, this is the structure of FDI&DIA *top/leader countries* with capital majority, versus *the rest of/third countries* all over/ at all world geographic levels.

Table 1.

The world FDI/DIA 'narrow(er) tip of the iceberg'

Ranking position	Country /region	stocks 2015		
		millions of US$	% of total	% cumulative
	Inflows /FDI			
I	Euro-zone	5 178 913.2	21.8	21.8
II	United States	3 949 711.0	16.7	38.5
III	China	1 724 670.9	7.3	45.8
IV	United Kingdom	1 557 942.5	6.6	52.3
	Outflows DIA			
I	Euro-zone	7 240 413.0	31.1	31.1
II	United States	4 842 484.0	20.8	51.8
III	United Kingdom	1 791 033.8	7.7	59.5

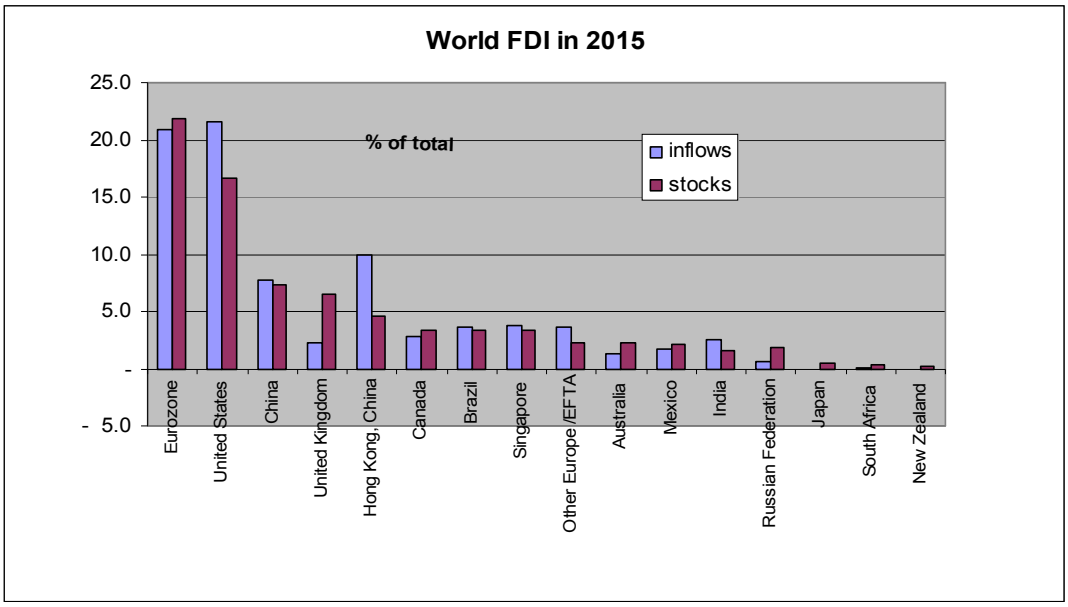
Data source: [4]

[2] Europe, Asia, Africa, Latin America, Caribbean and Oceania (South Pacific).

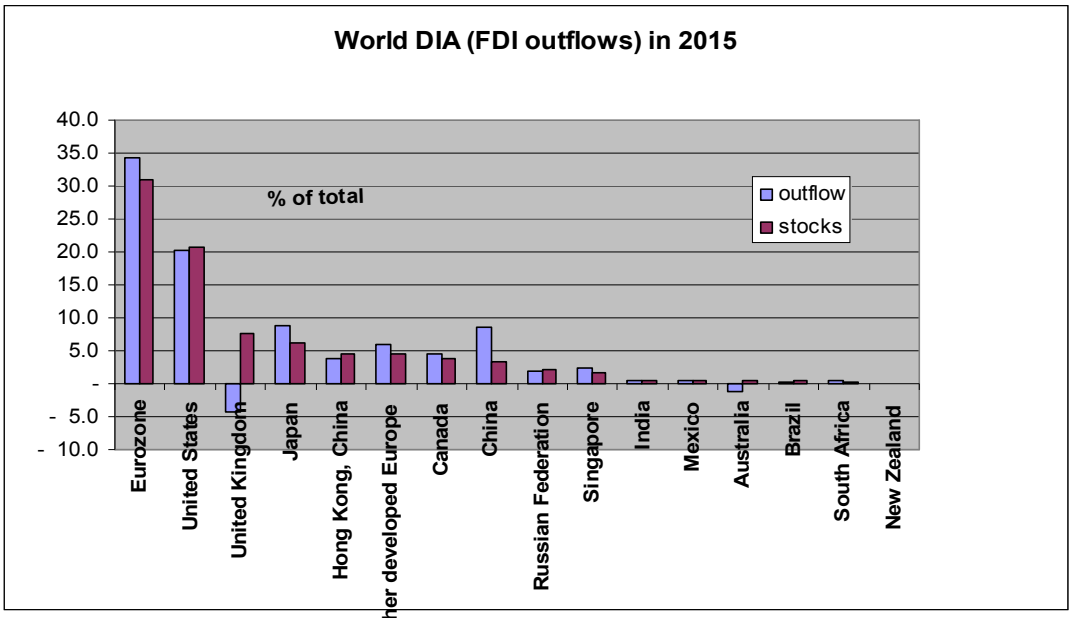
[3] That were chosen by [4] as relatively homogenous for economic and non-economic criteria.

Figure 1. The top-16 countries picking criteria:

(1) These will be the top FDI/inflows receivers and DIA/outflows investor countries, certainly in decreasing amounts' order.
(2) These countries& entities stay all in top-16 for both total direct international investments stocks and corresponding flows during the 1990-2016 years interval; in other words, each of these top-16 entities stays in during all these years interval (1990-2015) considered.
(3) The top-16 entities' FDI/inflows amounts, on the one hand, and DIA/outflows, on the other, cumulate both strong majorities and stable (nearly constant) weights in total world FDI/DIA stocks.
(4) Concomitantly, top-16 includes country-entity actors of FDI playing down to 0.2% of the total world stocks for *inflows* and 0.1% of the total stocks for *outflows,* as individually,



Graph 1



Graph 2.

2.2. Here there is a detail that, despite the FDI theories[4], seems to indicate that the world FDI sources are much less than previously thought – i.e. this international capital is like '*a game played among the few*[5]' FDI&DIA top and leader countries that then just skip some 'pieces' of capital to the rest of the world. See Table 2, in context.

Table 2.

Individual top-16 countries' FDI stock balances in ranking for 2015

Ranking position for FDI stocks balance	Country ranking	FDI stocks Balance		Converse ranking of negative balances
		Millions of US$	% of total stocks	
I	China	894684	3.8	-
II	Brazil	670278	2.9	-
III	Australia	398895	1.7	
IV	Mexico	365062	1.6	-
V	Singapore	246972	1.1	-

[4] Theories that try to indicate the FDI sources.
[5] As an old quick definition for the oligopoly [5].

VI	India	226556	1.0	-
VII	South Africa	34567	0.1	-
VIII	New Zealand	32663	0.1	-
IX	Hong Kong, China	-23819	-0.1	VIII
X	Russian Federation	-60363	-0.3	VII
XI	Canada	-87275	-0.4	VI
XII	United Kingdom	-259701	-1.1	V
XIII	Other developed Europe	-516298	-2.2	IV
XIV	United States	-960234	-4.1	III
XV	Japan	-1331036	-5.7	II
XVI	Euro-zone	-2149956	-9.2	I
-	**subtotal 16**	**-2519005**	**-10.8**	-

Data computed after [4]

Or, these in the Table are the same entities of the *larger tip of the iceberg* differently viewed – i.e. for the *FDI stock balance,* equaling the FDI-DIA difference per world entity for the same 1990-2015 year interval, through which most of the world top entities (see especially the 'narrow tip') make '*the mirror*[6]*',* except for China, that so comes back on top of FDI stock balances. Or, even more important than this top-16's restructuring would be its negative –10.8% of world FDI&DIA stocks result. This last mentioned FDI&DIA amount does identify the FDI off the top-16 and world popular movement of this last quarter of century – addressed to emergent economies and to the whole Third World. Let us remind that this movement historically comes after that *external debt crisis* of the seventies-eighties affecting especially the same Third World. Or, the same world image still requires some adjustments and contour lines, like the followings:

2.3. Another *regularity* would be that the world top FDI&DIA countries are the ones of negative *FDI stocks balances*. As for *international capital formation*[7] this is coming out of crowded enough capital in the home area to be then invested abroad. This is the opposite of

[6] See in the Table also the converse ranking for negative balances' last column.

[7] That might be compared to the manuals' explaining about just capital formation [5].

less developed countries that are likely to be *positive FDI stocks balance.* Entire world regions see themselves positive balance, so they do not self-fuel with investments, but receive these flows from world top FDI entities. However, even the world top-16 includes countries of positive FDI stocks balances as of significant impact economic emergency[8].

2.4. Concomitantly, the same uneven FDI&DIA(international capital) world distribution makes room to the opposite truth – i.e. 143 countries, of the total of 215, come to the opposite end of the FDI&DIA ranking scale, in the sense of negligible performing[9] or of *'not yet joining the capitalist way'* of developing. In other words, international capital already proven significant for the present world economy, but it is equally true that significantly more that the half of world countries stay off its practice. Other details equally prove relevant this way – e.g. the whole African continent that comprises a number of 43 countries (the highest number of countries on a continent) receives less FDI/inflows than individual countries' DIA/outflows like UK and Canada; the little island country that is British Virgin Islands of Caribbean[10] carries more FDI&DIA than the large Russian Federation, that stays in its turn the FDI&DIA heavy center of a large world emergent-developing region that is the CIS countries group.

Recall the above assertion about regional FDI flows structure similar to the continental and world ones – i.e. which sees FDI top-leader countries versus the rest of countries. However, to be also figured out that the deeply uneven international capital distribution is supposed to extend its effects to some of 'qualitative order' – e.g. the number one FDI country in the region might be different than the corresponding one on the DIA side; the FDI&DIA country leader comes to be replaced by a smaller group of countries; FDI/inflows on countries lower their differences among; top FDI countries in the region might keep insignificant FDI and/or DIA stocks in world terms.

[8] E.g. China, Brazil, Singapore, Australia, Mexico, Russian Federation, New Zealand, South Africa [3].

[9] i.e. lower than 0.2% of world stocks for FDI/inflows and lower than 0.1% of world stocks for DIA/outflows.

[10] Not here included in our world top 16 FDI&DIA countries.

3. Discusion and conclusions

Another set of conclusions regards this unique story that is the *individual country joining the international capital*. This is rather the same world-wide, except for a small number of country-exceptions[11] which's international capital carried stays negligible world-wide – i.e. as reiterating that and how 'exceptions do confirm a general rule'. All country entering international capital starts with *massive FDI inflows until they meet a (kind of) 'ceiling'* of these[12], then this country starts investing abroad (DIA/outflows) – i.e. so becoming a new international investor country, a *significant investor* (country) and this is pretty inevitable. There is no any world country experiencing significant FDI/inflows then not becoming an international investor country, in its turn, except for just transitory periods[13].

But this international capital story doesn't end here. It is also true that not all countries might join the world FDI top ones. These last perform as such even while affording either *negative FDI stocks balances* (see the above Table 2, once more) or *lower than the world average dynamics* for both FDI/inflows and DIA/outflows – i.e. also fulfilling the '*black hole'* type symptom (like in Tables 3 and 4) together with *the mirror* on both [3].

Countries that do not join the world FDI top country group go on playing with FDI&DIA – international capital *in-* and *out-flows* – once they successfully have reached their informal, but *significant international investor* status. Their DIA/outflows might symptomatically overpass corresponding FDI/inflows for a good while, but then the two sense flows might 'play with each other' as similarly as in the previous 'incepting' period – e.g. FDI/inflows might come back speeding up while DIA/outflows, on the contrary, slow down for another while, e.g. when DIA stocks accounted get significantly high(er), together with the corresponding country's FDI stocks deficit. But, once more, this 'new' phenomenon is expected as temporary as its opposite flow responses and as all the others that had been earlier or would be coming later on. This is the example of *converse effect on the opposite flow* – i.e. on both its hypostases [3].

[11] E.g. South Korea, Kuwait, United Arab Emirates, Libya [3].

[12] Further FDI deepened studies could be revealing specific highs of such a ceiling for diverse economies.

[13] Romania is an example of such a (transitional) circumstance/economic state, but it is sure that won't persist for much longer, see [6]; [7].

Table 3.

World FDI inflows dynamics on the 1994-2015 interval

Ranking position for dynamics	Country ranking x	% of total stocks	Converse ranking of negative dynamics	Ranking position in top-16:		
				1994	2015	Dynamic between
-	**top 16**	**1.8***	-	-	-	-
I	Brazil	2.6	x	XII	VII	up
II	Hong Kong, China	2.2	x	IX	V	up
III	Russian Federation	1.6	x	XIV	XII	up
IV	India	1.4	x	XV	XII	up
V	Singapore	0.8	x	VIII	VIII	no move
VI	Other developed Europe	0.63	x	X	IX	up
VII	Canada	0.58	x	V	VI	down
VIII	South Africa	0.1	x	XVI	XIV	up
IX	Japan	-0.2	VIII	XIII	XIII	no move
X	Australia	-0.4	VII	VII	X	down
XI	Mexico	-0.6	VI	VI	XI	down
XII	New Zealand	-0.7	V	XI	XV	down
XIII	China	-0.8	IV	IV	III	up
XIV	Euro-zone	-1.4	III	**I**	I	no move
XV	United Kingdom	-1.9	II	III	IV	down
XVI	United States	-2.0	I	II	III	down

* Subtotal 16 here shows a positive dynamic in total world FDI terms.

Data computed after [4]

Table 4.

World DIA Outflows' Dynamics Ranking for the 1994-2016 year interval

Ranking position for dynamics	Country in ranking	% of total stocks	Converse ranking of negative dynamics	Ranking position in top-16:		
				1994	2015	Dynamic between
-	**Top-16**	**- 3.2***	-	-	-	-
I	China	2.4	-	viii	viii	no move
II	Russian Federation	1.9	-	xiv	ix	up
III	Canada	1.2	-	vii	vii	no move
IV	Singapore	0.9	-	ix	x	down
V	Other developed Europe	0.7	-	vi	vi	no move
VI	India	0.6	-	xvi	xi	up
VII	Mexico	0.4	-	xv	xii	up
VIII	Brazil	0.2	-	xiii	xiv	down
IX	Hong Kong, China	0.1	-	v	v	no move
X	South Africa	- 0.1	vii	xii	xv	down
XI	Australia	- 0.2	vi	x	xiii	down
XII	New Zealand	- 0.4	v	xi	xvi	down
XIII	United States	- 1.2	iv	ii	ii	no move
XIV	United Kingdom	- 1.8	iii	iii	iii	no move
XV	Euro-zone	- 2.8	ii	i	i	no move
XVI	Japan	- 5.1	i	iv	iv	no move

* Subtotal 16 here shows a negative dynamic in total world FDI terms.

Data computed after [4]

Here recalling the 'old *theories*' on FDI[8], our calculus equally found some more general features. The *long way flows* – i.e. here defining the top investor countries' and regions' feeding the Third World regions hardly reach about 24%[14] of total world FDI&DIA flows. The rest of 76% of the same total flows includes what we might call *cooperation capital* and this works on two floors: (i) firstly, among world developed economies and (ii) secondly, within the world regions, as *self feeding*. Part of the last was found as filled by FDI&DIA *full investment leader countries* in their

[14] i.e. this percentage number including FDI&DIA of some of the top-16 world entities[3].

own regions, a part that entirely covers the FDI/inflows of the rest of region[15]

Predominance of *cooperation capital* in the total world FDI&DIA flows[16] proves at least that the today FDI&DIA look aiming differently than mainly searching for joining the Third World's natural and/or labour resources to put into value. Moreover, accepting that this part of the international capital once started as the '*game among the few'*, the theory of '*production factors looking for each other'* – i.e. equally within the international space – or the one resulting from the *international trade theory* might be hardly(not priory) confirmed in context by our empirical study – i.e. international investments not only work between neighbouring countries first, the same as the international trade, but equally priory for developed economies' projects.

Let us equally have some interesting country cases for this part of international capital during the 1990-2016 years interval here analyzed. China and Japan, nearly neighbouring at the east of Asia, make an interesting contrast. China met a huge FDI/inflow during just the 1990-1994 interval, when she came up to the '*narrow tip of the iceberg'* of Table 1, then working hard to speed up DIA/outflows – i.e. so complying to another above mentioned rule related to individual countries joining the FDI&DIA process. But instead of making its DIA over-passing FDI, China yet keeps the highest FDI stocks balance world-wide (Table 2). And paradoxically, while being one of the FDI world country leaders, China wasn't able to become such a full country leader in its own East Asia [9].

And while China means huge *FDI/inflow progress*, its neighbouring Japan seems to be the country of comparable *step back on its previously highly significant DIA* – i.e. being the most important world investor country on other continents (*long-way flows*) in early nineties and now restricting these DIA/outflows to South America and Oceania territories.

India (in South Asia) and Mexico (Central America) succeed to be full investors around while both remaining *positive FDI stocks balance*. On the contrary, Russian Federation became a world top investor country while covering all about FDI/inflows in the rest of CIS countries and meeting a proper negative FDI stocks balance; and these while the CIS region stays positive FDI stocks balances as cumulated.

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[15] i.e. see the examples of: Russian Federation (CIS), Switzerland (Other developed Europe), India (South Asia), British Virgin Islands (Caribbean) and Mexico (Central America). cumulating between 6.6% and 9.9% in world FDI&DIA stocks during the 2010-2015 year interval[3].

[16] Actually, stocks of the same 1990-2015 year interval here studied [3].

Last, but not least, we found that the whole *Eurasian continental block*[17] looks self-feeding, in its turn, by international directly invested capital the way that the Euro-zone and Other Developed Europe do cover by their cumulating DIA/outflows the FDI/inflows all around [3].

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[17] Meaning: the 4 regions of Europe, the 3 regions of Asia, plus the CIS and Near East regions [3].