Foreign Direct Investments (II)

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Paper abstract:

Our ever surviving obsession running our undertaking from its start – i.e. previously to the basic study, published in 2019 and 2020 – like a 'red thread' is that one single scientific truth about foreign direct investments (FDI) vis-à-vis plenty of theories, models and empirical studies in which these – actually, what is here called international directly invested capital – are seen so differently acting in different countries and regions of the world. So, first, this must be about the whole world at once. Then, it simply must be about a number of countries/ entities for which all capital entries (FDI) equal all capital issues (directly investments abroad/DIA) and so the FDI stock balances of these countries make the null sum. Then, our previous and basic paper was for a comprehensive picture drawn about our world through the amounts of directly invested capital flows in work between nations. We found the uneven capitals distribution throughout the world – i.e. obvious and the most obvious at the first sight --, accompanied by a curious trend of FDI and opposite DIA equalizing on each world country. So, about half of the world total amount of capital developed by just four-five countries and regions, then, a top-17 of countries and regions with the overwhelming capital majority on both FDI(entries) and DIA(issues). We also found the flows' developing dynamic that looks somehow different than the basic 'static' image – e.g. hierarchy of the same top entities changes. Then, there was a by regions description of the world of capital flowing between nations – and we'll be a bit back to in this text below – deepening the primary view on the tops of countries-regions – i.e. not too much structural difference between the total world and each of regions. The annexes of that previous paper brought some specific concepts in – i.e. new in the field, not yet to be found in specific dictionaries --, the common features of individual country's evolving through joining this international capital part, classification of 215 world countries according to their contribution to international directly invested capital – i.e. classifications for FDI, DIA, FDI stock balances and dynamics of FDI and DIA, all these for all countries -- and finally there were a few words for each country in context.

In this paper below it will be staying on international flows of capital among countries and on regions, as previously, but more deeply on flows identifying and classifying, here basing on our first, primary and ever basic model(theory) assumptions: 'capital is world belonging, then distributes among countries' . It will be here below to find exactly where the same capital comes from, how many sources are there to talk about for a world picture imagined this way.

All these below that are text, model and empiric analysis will carry with them a new theory about foreign direct investments in the field.

Contents

[1] See Annex 6 for all our research results both by regions and by sections.

[2] See the same Annex 6, point 2.

1. Introduction: the basic approach

Basically, that 'one/single basic truth' of FDI -- i.e. international capital directly invested – was our searching for[3]. See, at world level:

(1) Σ FDI = Σ DIA

With immediate consequence of:

(2) Σ FDI Stck.Bal.Cntr(i) = 0

For which :

FDI Stck.Bal.Cntr(i) = FDI Cntr.(i) - DIA Cntr.(i) $\neq$ 0

Our approach sees: (i) FDI&DIA flows/stocks as the object and (ii) individual countries, as subjects of the FDI process -- i.e. differently than some of the FDI theories -- e.g. the firm (Dunning), the individual good life cycle (Vernon), multinationals and so on… Our basic conclusions at their time were:

(1) The double conclusion: (a) the unequal/uneven distribution of FDI in/out-flows world-wide, together with: (b) equalizing trend between FDI and DIA flows for each individual country -- as imitating the world-wide situation.

(2) The two FDI&DIA tops of countries:

/a top-3-4: Euro-zone, US, UK, China: more than 50% of world FDI-DIA transactions (during the 1990-2015 period analyzed);

/ top-17 FDI&DIA world leader countries, both tops on both FDI and DIA[4].

(3) Situation on world multi-country regions:

-1- Among other things, situation on individual regions stays basically similar to the world FDI top situation.

-2- And to which considering what is left of the previous top-17 a 'top-6[5]', which is: US, UK, Canada, Japan, Australia, New Zealand.

-3- A kind of reply to the above world top-17 then came with the final classifying that includes countries and regions and finally go to 100% of world / international directly invested capital[6].

Remark: Our previous paper equally develop the static, vs. dynamic FDI situations, an aspect that doesn't work for our (below) current paper.

2. The current approach

It will be a triple one:

i/ cooperation capital and long-way flows -- a new FDI theory

ii/ world FDI(and DIA) sections -- added to what were above: FDI top-countries and multi-country regions

iii/ deepening international capital flows identifying.

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[3] See, basically, our previous paper, 'Foreign Direct Investments', LAP Lambert, 2019.

[4] Euro-zone, US, China, UK, Brazil, Mexico, British Virgin Islands, Russian Federation, Hong Kong China, Singapore, India, Canada, Australia, West Europe, Japan, South Africa, New Zealand.

[5] i.e. that actually isn't the real countries top any longer.

[6] i Euro-zone, ii West Europe, iii CEE countries, iv SE Europe, v CIS member countries, vi Near East, vii East Asia, viii SE Asia, ix South Asia, x North Africa, xi Middle Africa, xii Southern Africa,xiii South America, xiv Central America, xv Caribbean, xvi Oceania & Bermuda Islands

2.1 Methodology. The new model approach

See first the assumptions in Annex 1(I).

2.1.1 Basically

Let it be the [a] (type) transaction world-wide / in a region between countries X1 and X2:
a (X2) = a(X1)
meaning that country X1 invests the a amount in country X2 -- i.e. there might equally be possible that country X1 invests the same amount broken down and shared by countries X2, X3, X4,… Results will come up in the accounting table below that will be used for all FDI transactions from now on.

Basic accounting table

Chapter \ Country	**X1**	**X2,X3,X4,…**	**Total**
Entries (FDI)	-	a1, a2, a3,…	a
Issues (DIA)	a	-	a
FDI flows balance*	(-)a	a1, a2, a3,…	0
Turnover (Tv)**	a	a	a = ½ (Tv_{X1}+TvX2)
Cooperation capital(Ccp)	a	-	a
Residual difference(Rd)	-	-	-

In which, naturally: a = a1+a2+a3+…
The accounting table is here, in our model, intended to:
a/ detect capital that is formed in the world to be invested overboard;
b/ turn the primary binary/dual evaluation of international capital -- i.e. FDI, versus DIA -- into just one side (positive) evaluation system -- with its specific concepts that will be: cooperation capital (Ccp), long-way flows(Lwf), turnover (Tv) and others.
Turnover (Tv) basically accounts for all FDI-DIA transactions world-wide/here, within the region entries and issues cumulated in module numbers on each of columns.
Remark: Turnover (Tv) is here met as the primary expression of/in this new/alternative international capital evaluation system. Then cooperation capital (Ccp) and long-way flows(Lwf) will come besides and so the primary binary/dual FDI-DIA evaluation system's sizes will be deeply altered by the new system ones for each country and multi-country region[7].

2.1.2 Development

2.1.2.1 The [a] type transactions (bilateral capital formation and Ccp)

The [a] type transactions are called *bilateral* due to that they limit to direct two parts transactions between countries of the region, transactions in which one country part is (called) the investor/ donor of the a amount, then the other part -- that might be one or more member countries of the same region invests back in the investor country after a (middle-long) time. This [a] type of transactions defines a region in which there is

[7] See also Annex 2.

working one strong investor country -- i.e. a small group of countries --, versus the rest of countries.

Theorem 1: *The world-/region-wide turnover is the half of cumulated turnovers of individual member countries.*

The *residual difference (Rd)* is the one resulting from cooperation capital and then also long-way flows deducted from turnover:
Rd= Tv- (Ccp+Lwf)
Residual difference (Rd) will be here made to search for other presumable components of FDI-DIA (turnover) here available -- i.e. Rd to be significant, as mathematically. Rd limits to regions and world total -- i.e. not here significant for individual countries. However, this case is unique the way that it might represent the first FDI/DIA transaction world-wide. The current situation is different -- i.e. all world multi-country region currently account both this a type FDI/DIA transactions (within the region) and the same resulting from long-way flows previously received by country X1 from out of region investor countries. Then:
c(X1) = c(W)
See Accounting table 2 in Annex 3. In which, note that cooperation capital (Ccp) finally is non-null, but this (only) when also long-way flows (Lwf) come up, as well.

Theorem 2: *Long-way flows (Lwf) (also) accounts for its half for the investor country/region and recipient region.*

Then, equally the order of transactions (i.e. [a] and [c]) changes and [c] (Lwf) comes first, the [a] type transaction series (Ccp) results directly from turning previous Lwf into Ccp:
a (Ccp) = a (Lwf)
and so we have Lwf turning into Ccp at region (R1) level, as seen in Accounting Table 3 of the same Annex. Which means the ambiguity of the [a] transactions series here staying provisory long-way flows for countries X2, X3, … The next step of our analysis includes the Ccp specific replies of both:
/ the X2, X3, … against the investor country X1 by the [ai'] amounts invested back;
/ country X1, against its out of region (R1) investor country (W), so:
a'(X1) = ai'(X2, X3, X4,…)
c'(W) = c'(X1)
all with results in Accounting table 4. So to be here remarked:
i/ cooperation capital will be different within the region for country X1 -- for which this is [a] --, versus countries Xi -- for which this is [ai'] amounts;
ii/ as for [c']:
/ this is cooperation capital that is inter-regional -- as opposite to [ai] and [ai'] that are intra-regional;
/ this inter-regional Ccp [c'] here is the issued Ccp, [c'] and it will become Ccp inter-regional entered [c] for the recipient country W.
This capital flow:

(a) remakes the trajectory of the previous back [c] amount as Lwf, and so it makes reduction of the initial Lwf, i.e.: [c-c'];
(b) reciprocally, turns into Lwf and so:
(b1) instead of remaking the given trajectory of previous [c] flow, it changes it;
(b2) instead of adjusting given Lwf [c] -- i.e. from [c] to [c-c'] -- it makes new Lwf [d]
Remark: While Lwf are just one category of flows, as inter-regional, Ccp are both short way -- intra-regional [a. a']-- and long way -- inter-regional[c'].

The final transactions in this series will be that of countries of region R1 investing (long-way flows) in other regions[d], coupled with back inter-regional Ccp reply flow[d']. Meaning that:
d(V) = d(Xi)
d'(Xi) = d'(V)
like in Accounting table 5.
Finally, note that the [a] type transactions make [a] type region in which there is one strong investor country/a small group of strong investor countries, versus the rest of countries. In this type of regions the Lwf entries target the strong regional investor(s) and are decisive for the rest (Ccp) within region transactions.
Region examples – i.e. for one single strong investor country in the region -- : South Asia (with India), CIS countries (with Russian Federation), Central America (with Mexico) and Caribbean (with British Virgin Islands); for several strong investor countries in the region: East Asia (with China &Hong Kong), South-East Asia (with Singapore, Malaysia, Indonesia), Near East(with Saudi Arabia, Turkey, Israel and United Arab Emirates), Southern Africa (with South Africa and Mozambique) and South America (with Brazil, Chile, Argentina and Colombia).

2.1.2.2 The [b] type transactions (multilateral Ccp)
There are two specific aspects to talk about for the [b] type transactions and regions.
Specific 1. The Ccp transactions within the region. The difference between this type of transactions and the previous [a] one is regarding just their basics. Here there is about a real set of transactions just concomitantly. Let us assume n member countries in region R1 and the same number of flows invested from them in the rest of countries as such; and also that b1›b2›b3›...›bn. In such conditions, let us assume the below two waves of an FDI-DIA series of transactions. As for the first (primary and intermediary) wave:
b1(Y2)=b1(Y1)
b2(Y3)=b2(Y2)
b3(Y4)=b3(Y3)
…
b(n-1)(Yn)=b(n-1)[Y(n-1)]
bn(Y1)=bn(Yn).
And these come to account below, as the primary wave with its specific [b] type transactions accounting table. The primary residual difference (Rd) equals the largest difference of amounts invested in this type or region. Then, it is about the bilateral reaction delayed to the first wave of transactions (here, the second wave), as follows:
b1'(Y1) = b1'(Yn)

b2'(Y2)=b2'(Y3)
b3'(Y3) =b3'(Y4)
…
bn'(Yn)=bn'(Y1)

In which, of course, there are concomitantly: b1›b1'; b2›b2'; b3›b3'…bn›bn' and b1'›b2'›b3'›…bn' that make stock balances signs as in the specific accounting table. And when cumulating numbers of the two accounting tables, results are like in the final table.

In this [b] type transactions & regions the Lwf work similarly to the other above [a] type transactions & region, except for not (here) being similarly dominant and decisive for the course of the CCp transactions. Lwf could occur to each country in the region as both entries (FDI) and issues (DIA) and inter-regions Ccp transactions are also here assumed to belong to countries previously recipient of Lwf entries.

While in the [a] type regions the [a] type transactions (above) seemed not to engender residual difference, this last looks susceptive to result from this other [b] type transactions-regions. Nevertheless, residual difference in [b] type transactions-regions:

1) appear as a potential / theoretical issue -- i.e. verifying the model on world regions -- doesn't quite lead to obvious residual differences, as such, but this part of model will also apply to long-way Ccp in world capital sections, i.e. for Eurasia (Section I);
2) come up concomitantly with possible negative FDI stock balances -- i.e. as also in theory, but contrary to the Ccp definition;
3) concretely, they result as the largest primary amounts invested difference within the region adjusted (diminished) by the largest difference between the reply investments to the primary ones. Result that roughly indicates the lowering trend of such residual, so once more strengthening our theory of all international directly invested capital formed just by Ccp and Lwf (and nothing else than these);
4) our model result in the form of this above residual difference might be read/learned as 'no negative FDI made by Ccp, but just a residual difference like this which might be negative'.

These [b] type world regions might be: Euro-zone and West Europe, but equally the Eurasia (Section I) territory – i.e. by regions, instead of individual countries.

Remarks:

(1) The [b] type regions seem to be not only the ones of high and contradictory Ccp behaviour, but equally those for which the [c] Lwf entries might be low or negligible as compared to [d] that are highly significant -- i.e. it might be on the Ccp basis that these regions get over-national investor entities.

(2) This model indicates a contradictory behaviour of Ccp -- i.e. in both region and inter-regions areas:

Specific 2: The inter-regional Ccp's intrusion. It is this [b] regions type that makes besides the investor countries and so even regions in the world area -- the inter-regions/out of region investor countries meet their [c] transactions turning into the higher level -- i.e. inter-regional -- of Ccp, as well [c'], as back investments to them. Besides, the [c'] transactions might be not only 'back flows' to the original investor country/region, but equally new Lwf -- i.e. Ccp turning into Lwf, as alternative. As also here *concluding* for a divergent evolving of the [b] type regions that would be assumed as selective intrusion of the [c'] inflows back to primary investor countries -- i.e. for the previous [c] DIA.

2.1.2.3 The rest of world regions[e]

And besides the above [a] and [b] types of regions there is to be mentioned the whole rest of the Third World, including emergent economies: CEE Europe, SE Europe, North and Middle Africa and Oceania. Specific for these regions isn't any (new) type of transactions, but the hard domination of Lwf entries[c] on Ccp -- i.e. these regions are FDI fed by strong investor countries from other regions or included in the world top-6 investment leader countries. Besides their Lwf as entirely entries[c], their FDI stock balances are entirely positive and Ccp stay entirely intra-region and low enough.

2.1.2.4 Finally

This [a], versus [b] and [e] types of regions classification -- i.e. according to criteria of (i) more or less strong investor countries existent and (ii) Ccp behaviour in the region -- might be accompanied by another one -- i.e. according to the strength of Lwf entries, versus issues. Euro-zone and West Europe come on less significant Lwf entries (especially as compared to their Lwf issues) side and classify as net FDI donors; the rest of regions do classify in the other groups -- i.e. the ones of net FDI recipient regions.

But finally, once more, this other world regions classification, as well as classification diversity here suggested, does not influence the residual difference amount significance -- i.e. actually, its non-significance.

2.1.3 The international capital sections

A capital section -- as here defined -- is:

/a multi-region or a one or more investor countries with one or more regions that are FDI recipients.

/with FDI-DIA type transactions amongst

/the way that the involved countries' FDI stock balances tend to the null sum,

/all these above, as equally here defining a true autonomous capital market space within the world area.

So, there is just one rule of world FDI-DIA detecting -- that is the all countries' FDI stock balances cumulate nearly zero amount.

Remarks:

(i) For these world sections the overall FDI stocks balance is just tending to zero amount, but never is zero amount itself, once considering quasi- and not the totality of transactions done by these countries among themselves. This is once more for here considering approximation and estimation instead exact -- here just zero -- results, to get used to.

(ii) The international capital section is always and compulsorily more than a region -- i.e. as here understood according to 'WIR 2016', as either restricted and economically homogenous multi-country area -- and behaviour rather similar to the one perceived at the world territory level. Or, this is enough for here figuring out and understanding a behavioural diversity, instead of a 'block of countries' type one.

Moreover, look at Annex 4, with a comparing scheme of the world capital section to the total-world area as such. There are three world capital sections to be described below:

Section I -- the Eurasia (multi-region) land;
Section II -- US, UK, Canada, Australia, Central America, Caribbean, African regions.
Section III -- Japan, South America, Oceania, New Zealand,
primarily as in a decreasing order of amounts traded and further on with a list of structural differences to be found amongst.

2.2 The model applied

First of all, just reiterate that our undertaking will be for international capital (FDI&DIA) flows detecting in the world area, basing on:
/ available data given by *'WIR 2016'*;
/ the above model items.
Then, just have back from above the basic model items in Annex 5. Then, let us have the 'visible' (available) data/information in the following Diagram:

Diagram -Primarily available items

	item	calculated/ converted as:
1	FDI	c+[a+a']/[b+b']+d'
2	DIA	c'+(a+a')/(b+b')+d
3	FDI stocks balance	[c-c'] -- for the country, when it is positive
		[d-d'] -- for the country, when it is negative
		FDI-DIA= [c-c']-[d-d'] -- for the region
4	Ccp (the same as in Annex 4)	the lower amount of those of FDI or DIA accounted-- for the individual country
		Ccp = a/b+a'/b' + c'+d' -- for the region
5	Lwf	long-way flows [Lwf]:
	(the same as in Annex 4)	the country's positive [c-c']/negative [d-d'] FDI stocks balance
		the region's positive[c-c'] and negative [d-d'] FDI stock balances, cumulated as half amounts and all amounts as positive
6	Tv (the same as in Annex 4)	turnover[Tv]:
		all cumulated FDI-DIA traded amounts of all areas
		FDI and DIA of a country cumulated in module numbers
		the half of cumulated Tv of countries in a region (Theorem 1)
		the half of Tv accounted by a country (see Tv+FDI+DIA above) that does not belong to a region -- i.e. an international investor country (Top6)

Then, let us also have back the working assumptions in Annex 1 (II) -- i.e. besides those ten basic model ones.

2.2.1 Conversion table between the two international capital evaluation systems[8]

This table will then be the essential working tool[9] -- i.e. specific to our model -- to obtain the new evaluation of world FDI-DIA by its (new, again) concepts -- e.g. cooperation

[8] See Annex 6 for all our research results by both regions and sections.

capital, as total (Ccp) and its components that are the one of investment leader countries (a/b), the same for the rest of the region (a'/b'), and the inter-region components (c'), long-way flows(Lwf) and turnover(Tv). And this tool will be shaped for regions, world sections and, of course, the whole world. Such a conversion is so expected to result into obviously different numbers between the two systems by the same country, region and not only -- i.e. the systemic control keys will come up for total world amounts and amounts on sections only. FDI and DIA amounts, together with their FDI stock balances by countries -- i.e. that belong to the primary evaluation system -- will 'translate' into Ccp, Lwf and Tv -- i.e. the other evaluation system --, on respective columns, firstly as 'never negative' numbers. Then, after cumulating on columns, the primary and double accounting key will come up to verify:
(1) FDI + DIA = Tv
(2) 1/2 Tv = Ccp + 1/2 Lwf
Specification: This last (2) equality complies with both model's Theorems. Nevertheless, these half amounts of Lwf and Tv(the two Theorems) are to apply only once during our calculation works, i.e. at the region level -- i.e. after that, when the same Table applied to section and world level, the equation will become:
(2') Tv = Ccp + Lwf
Then -- back to the region -- checking on this region's type, and primarily checking on:
/ presence, versus absence of investment leader countries -- i.e. an this last as / / / such an individual country, versus collective leader countries. There is any investment leader country/group of countries when:
Ccp /leader countries/ ≥ FDI/cumulated for the rest of countries
Remark: The Ccp amount is here used to serve for its below split into intra-region and inter-regions, but equally due to the DIA's split intro its Ccp and Lwf parts, as explained in the above Diagram -- i.e. Ccp is included in both DIA and FDI and the Lwf issues part sees itself distinct in the negative FDI stocks balance of the country.
And then:
/ investment leader country/countries does/do exist and this way the region is the [a] type one, as in our above described model;
/ this aspect equally takes into account that specific region ratios -- i.e. the Ccp/Tv and the intra Ccp ones that will be explain below -- might be manoeuvred by such regional leaders to easy compare to the ones of [b] type regions -- e.g. both high ratios.

2.2.1.1 The region's cooperation capital

Then, as already mentioned above, the difference between the region's investment leader's Ccp and FDI of the rest of countries in the region will be found as the inter-regions Ccp issued [c'] and as retracing the previous region's [c] FDI amounts received.
And the pair of this inter-regions Ccp[c'] amount calculated as issued from the region will be the equally inter-regions Ccp amount entered [d'] -- the reply of previous [d] DIA made. However, this last part of inter-region Ccp will come up later on, with final calculous on sections and on world situation -- i.e. total section/world [d'] amounts are supposed to equal total section/world [c'] amounts. Then, on total section or world amounts:

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[9] i.e. that might be here admitted as corresponding to the accounting tables of Annex 3, now in the pragmatic context of calculations directly on the world situation.

[c'] =[d']
Remark: Both inter-regional Ccp flows [c' and d'] will be exclusively assigned to the region's investment leader countries, when / where these are -- i.e. in the [a] and [b mixed] type regions.
The other part of total Ccp here is the intra-region one, that is formed by the [a] and [a'] amounts, see for this region:
Ccp = [a+a'] + [c'+d']
Or, the [a] amounts here come from investment leader countries -- as already shown above -- on their way to the rest of this region. In the other types of regions [b and e] -- i.e. without investment leader countries -- the [a] amounts invested are assumed without the [a'] back-flows replies.
Back to the [a] type regions, there will also be calculated the ratio of reply between [a'] and their native [a] amounts -- i.e. the replying ratio of intra-region's Ccp (see below).

2.2.1.2 The region's long-way flows
The Lwf, in their turn, are divided into entries -- i.e. that make positive FDI stock balances -- and issues -- i.e. that, conversely, make negative FDI stock balances. Actually, these amounts explicitly noted by individual countries in the column of FDI stock balances will then:
1) let the individual country with just positive or just negative Lwf;
2) and just the region with both,
3) and then the two components of Lwf will interact separately with [c'] and [d'] as respectively.
Actually between regions as well as for the FDI stock balances these amounts won't be 'pure Lwf', but [c-c'] and [d-d'], as respectively. The same as above, for inter-regions Ccp that are [c'] and [d'], here we have at section and world levels:
c-c' = d-d'
Remarks:
[1] Interesting in context remains that [c-c'] amounts do associate Lwf -- i.e. halved by Theorem 2 -- with Ccp -- i.e. not halved since Ccp means by definition equal in- and out-flows.
[2] While [c-c'] and [d-d'] are transparent amounts in this Table, [c'] is to be directly computed, [d'] comes to be found together with [c] and [d] of the section and geographical trajectories of [c'], [d] and [d'] remain to be estimated.

2.2.1.3 The international capital turnover
Let us recall from above what the turnover (Tv) is in and/or against the FDI-DIA terms:
/in mathematical terms, it is /comes up just to convert the binary FDI/DIA accounting system into the new unique accounting system -- i.e. total world turnover equals total FDI=DIA, despite that situation on each region looks quite differently between FDI-DIA and Ccp-Lwf-Tv; for international capital sections total Tv approximates total FD and DIA that are not perfectly equal either;
/ which does translate in real common sense terms by our model Assumption /7/, in which the same amount of capital primarily belongs to the world, then distributes among countries through specific transactions that will then doubly account for each pair of countries involved in one individual transaction.

Just reiterating that for the region:
Tv = 2Ccp + Lwf
and for all over the regional level (e.g. continental, sectional, world ones) it is:
Tv = Ccp + Lwf
Plus, what makes Tv different than this sum might be the residual difference (Rd), according to the model and what makes the same Tv different than FDI and DIA at world and/or sectional levels might be some error.

2.2.1.4 The 'full'/initial long-way flows[c]

Recall from model basics the primary [c] and [d] amounts respectively -- i.e. [c] is for initial/basic capital entries in all type of regions and [d] is for amounts invested from the region in the rest of the world. Here to be noted that:
[1] These two seem to be detectable at regional level only -- i.e. not for individual countries in this model.
[2] The capital entries computing formula from above is:
[c] = FDI - Ccp
of which, certainly, [a'/b'] will miss for the cases of no investment leader countries in the region and [d'] will miss for no DIA long-way flows. As well as the capital issues of the region's basic computing is:
[d] = DIA - Ccp
as both for the region -- i.e. totals of columns in the Table -- and by countries -- i.e. where [d] might equally be zero. In which:
[3] At world level [c]=[d] and at the one of sections [c] and [d] do approach their levels, while by regions the [c-d] differences do meet the FDI stock balances.

2.2.1.5 Subsidiarily: the specific ratios

These ratios will be of two categories:
-1- the [a'/b'] back intra-region Ccp flows related to initial [a/b] equally intra-region Ccp flows from investment leader countries to the rest of the (country) region. Of course, this is for some measuring of FDI impact within the region -- i.e. of course, an incomplete one, but equally revealing behavioural diversity world-wide;
-2- total Ccp related to Tv and Lwf related to Tv, as correspondingly. Then, intra-region Ccp [a+a'] related to total and correspondingly inter/extra-region Ccp to total.

2.3 Research done for capital sections and for world capital[10] (directly invested, as international)

2.3.1 Preliminarily: ensuring full correctness of results

This will be for the following order of operations -- i.e. once the basic keys ensured for each region of the section: Tv=Lwf+2Ccp
1/ Centralizing, listing and totalizing data of all regions and off region countries for: (a) FDI, (b) DIA, (c) FDI stock balances, (d) Ccp(total), (e) Lwf, (f) Tv. (g) [c-c'] entries, (h) [d-d'] issues, (i) [c'], for [c'] = [d'] on regions,
2/ Then calculating and doing the same for: (i) total capital entering region [c] and (ii) total capital invested off the region [d].

[10] See the same Annex 6, point 2.

3/ Checking on totals for the equality/proximity: Tv = FDI=DIA and/or confronting proximity with the FDI-DIA difference of amounts for the section.
4/ Then, checking on totals for the equalities/proximity (for the sections): c-c'=d-d', c'=d', c=d.
5/ Additionally: here, the intra-region amounts resulted for [a/b] and [a'/b'] to help testing FDI and DIA recalculation according to corresponding above given formulae.

2.3.2 Finally: flow estimations within sections

And this will be:
i/Checking on the FDI relationship of investment leader country/region in the section -- i.e. the same as inside regions, comparing DIA of the leader with cumulated FDI of the rest of regions; similarly for leader entities in group. When the FDI leader is this way confirmed it will be for here founding the simple bilateral relationship as the very structure of this section's international capital: the leader versus the rest of regions/entities.
ii/As for the alternative non-individual or collective investment leader in the section -- i.e. a more complex description of -- there are to be considered the last two working assumptions(see also the Annex):
16/The amounts' 'matching' principle between entities: basing concomitantly on:
/ Assumption 1/ of our above described model (Annex 1);
/ what might be called 'investment (already) done' reality.
17/ Strictly connected with previous Assumption 16/, the principle of: 'highest / higher Lwf amounts invested (DIA/d) by the investor entity for highest/higher Lwf amounts received by recipient entity'.
18/ The same 'matching principle' might then go down on the amounts exposed, but the same decreasing order as quantitative will be a decreasing order of certainty for estimations to be here done -- e.g. not entirely matching amounts look more realistic on the ground, it clears the way for presumptive international investments off schemas etc.
Remark: Presumptive inter-sections transactions couldn't be higher than the FDI-DIA world amount here found as, possibly, residual differences (Rd) or just errors.
19/Finally, the flow estimation is supposed to reconcile at least: (i) the matching principle -- with its applicable limitations; (ii) the principle of inter-regions Ccp flows retracing the previous Lwf [c] ones' direction(s), -- to its applicable extent, as well.

3. Research results

Keeping on the same Annex 6 for the moment, these results will be of two kinds, in their turn (see Diagram).

Diagram -Research results: a classification

certain data/information		**estimations**	
name	**note**	**name**	**details**
capital received by region	[c]	flows' location & evaluation	by amounts & entities
capital invested off the region	[d]	world sections' international capital entities	location, size (amounts traded)

cooperation capital	Ccp		flow structure
long-way flows	Lwf		FDI&DIA relationship types
capital turnover	Tv		
intra-region cooperation capital	[a+a']/ [b+b']		
inter-regions cooperation capital	[c']/[d']		
residual differences	Rd		

3.1 Description by regions

Our below analysis will focus on sizes of the three categories included in Annex 7.

Euro-zone[11]

Together with its neighbouring West Europe countries group, the Euro-zone looks like the investor region/international entity – more than grouping a number of individual investor countries – in Eurasia and world-wide. This region's capital received was 1007217 million US$ that is 4.1% of world capital stocks, as estimated from East Asia – i.e. South Korea, Taiwan, Hong Kong and, of course, China, but this last apparently just for its impressive Ccp issues [c'] that is 1595434 million US$, so 6.6% of world capital stocks. Symptomatically, the Euro-zone's Ccp is high percentage in its turnover (84.6%) – the same as in the West Europe region case. Apart our here feasible estimations, it is true that the [c'] transactions' distribution within the EU member countries yet cannot be quite found out (identified, actually calculated), unless that Germany's, Netherlands', France's and Spain's FDI individually stay higher than the ones of the rest of countries in the region, despite their chronically negative FDI stock balances. Or, this country group dominance on the Ccp side for a high intra-region Ccp makes the region a [b-mixed[12]] type one – i.e. the same phenomenon is seen in the neighbouring West Europe case in a proportion as different (lower) than here as the size difference between these two regions. Anyway, as related to the here above developed model, the Euro-zone and West Europe look the most related to the [b] type transactions and regions (i.e. multilateral intra-Ccp flows), despite this already mentioned pretty large amount differences of capital stocks among member countries. And as a [b] type region, there is a 268774 million US$, corresponding to 1.1% of world capital stocks, cumulated amount of positive FDI stock balances [c-c'] to talk about – i.e. these belong to Malta, Belgium, Ireland, Portugal and Greece (as seen in Table A). But the more significant part of the Euro-zone's international capital belongs to its cumulated DIA in the rest of Eurasia – i.e. 3269383 million US$, as high as 13.4% of world capital stocks and this amount, together with the West Europe's contribution is here estimated to share for the FDI of CEE Europe – 440391 million US$ as 1.8 % of world stocks --, East Asia (China and Hong Kong) – 2548805 million US$, as 10.5% of world stocks –, South-East Asia – i.e. 1106034 million US$, that is 4.6% of world capital stocks -- and in a lower proportion the nearby South-East Europe – i.e. 67869million US$, that is as low as 0.3% of world capital stocks. As noticed in the below Tables, the Euro-Zone's DIA are larger than the ones of

[11] This group of countries was preferred in our study without Baltics (Estonia, Latvia and Lithuania), Slovakia and Slovenia, considered as behaviourally proper rather to the CEE countries group.

[12] Namely the [b] type behsaviour for the intra-region Ccp corroborated with concomitant existence of the investment leader country group.

its four dominant countries subgroup and this makes a really investor region, instead of a region with some significant investor countries. In the alternative – i.e. another variant of investments flow estimation – the West Europe countries' DIA – 1146086 millions US$, so 4.7% of world stocks – might couple with the SE Asia region's FDI of 1106034 million US$, that is 4.6% of world capital stocks.

West Europe

This region not only lies nearby the Euro-zone, but also looks like this neighbouring region on the international capital point of view. This region is obviously higher FDI/DIA and turnover than the equally neighbouring CEE region, with about double number of countries. The region's international capital
received[c] – i.e. 435449 million US$ that is 1.7% of world capital stocks – is estimated as from the East Asia – i.e. together with the Eurasia's [c] inflows and in more detail from: Korea, Taiwan, Hong Kong and China (this one just for Ccp[c']). The region's capital seems symptomatically dominated by Ccp (72.9%) and its Ccp by the intra-region part. Only Island and Gibraltar are positive FDI stock balances countries – i.e. a minority of countries reminding the neighbouring Euro-zone's description. On the other hand, the invested capital of the region, 731403 million US$ that is 3.2% of world capital stocks, together with the Euro-zone's investments, is in its turn estimated to go to just South-East Asia or in alternative to this and its neighbouring East Asia, to which CEE and South-East Europe regions coul be added. Switzerland, Sweden, Norway and Denmark are significantly investing off the region, while Island and Gibraltar keep positive FDI stock balances.

Central and Eastern(CEE) Europe

This region is strongly dominated by Lwf entries – i.e. 440391 million US$, as high as 2.4% of world capital stocks, that is more than double than the region's total Ccp, see the [e] type regions, and these are alternatively estimated: (i) from the Euro-zone, as entirely, e.g. mostly from Netherlands (414582 million US$, as 1.7% of world stocks) and Luxembourg (46047 US$, as high as 0.2% of world stocks); (ii) from the Euro-zone, as mostly, then in a smaller part from West Europe. It is certain that foreign investor countries individually deal with each FDI recipient country of this region and there is actually no FDI/DIA dominant country within this same region. Cooperation capital (Ccp) stays weak (36.3% of total turnover) and entirely intra-region. Country leaders of the region are Poland, as FDI recipient country (167603 million US$, as high as 0.7% of world stocks amounts received, about 1/3 of all the region's FDI amount) and Hungary, as investor country in the rest of the region (45391 million US$, as high as 0.2% of world capital stocks, as DIA-Ccp, the half of total Ccp amount invested of/in the region). In compensation to this situation, the FDI inflows in the CEE countries make envious large regions of Africa and elsewhere.

South-East (SE) Europe

This is a region very similar FDI structure to its neighbouring CEE Europe – i.e. of the [e] type. Besides the common communist origin with neighbouring CEE, the SE Europe's low FDI and strongly dominated by Lwf entries – 67869 million US$, as high as 0.2% of world capital stocks, i.e. over 88% of total FDI amounts in the region and probably from

the same Euro-zone and West Europe -- , so low Ccp in total (11.8%, even lower than for the CEE case) and entirely intra-region; low DIA amounts, as well (4519 million US$, just 0.0% of world capital stocks). The qualitative difference, compared to the neighbouring CEE region, consists in some regional leadership of Serbia& Montenegro – 58.0% of the region for FDI, 54.6% the same for DIA and Ccp and 58.3% for Lwf – but this stays far from any dominance here qualifying the leader investor country.

CIS countries

This is one of the [a] type world regions, in our model expression – i.e. Russian Federation is the single and total investor country in its region, as similarly to India in South Asia, to Mexico in Central America and to British Virgin Islands in the Caribbean archipelago. But Russia in the CIS countries region gets similar just to the last British Virgin Islands case for that she invests either inside the region, or out of the region. 401100 million US$, so 1.2% of world capital stocks, were here estimated to be received [c] by Russia from East Asia, versus 185494 million US$, that is 0.9% of world capital stocks, to be invested by Russia off its region[d] – i.e. as associated to DIA from South-East Asia, probably to the Near East region.

Through investing her Ccp intra-region [a] -- 324338 million US$, also as high as 1.2% ot world capital stocks -- the Russian Federation receives back[a'] 15.7% during the analyzed year interval, but this weight differs enough between 0.0% -- Turkmenistan, Uzbekistan and Tajikistan – and 65.8% -- Azerbaijan. Though even the Russia's investments in the other countries of the region[ai] differ enough amongst – e.g. the highest such investment flows go to Kazakhstan (129551million US$, as 0.5% of world stocks), from which Russia equally receives the highest individual country [ai'] cooperation capital amount (27639 million US$ as 0.1% of world stocks and this is 21.3% of the previously amount received from Russia). It is due to Russian Federation, as well, in its region that Ccp in total turnover and intra-region make about 75% each that is quite different from the other European ex-communist regions, the CEE and South-East Europe, strongly dominated by Lwf from the west of the continent.

South Asia

India is the full investment leader country of a region in which the FDI-DIA stuff stays enough weak, even as compared to neighbouring Asian regions. India bases on 365805 million US$, so 1.5% of world capital stock FDI, as Lwf[c] received, according to our estimations from its neighbouring East Asia. India concomitantly invests 110273 million US$, 0.4% of world capital stocks in its South Asia region around [a], for which it receives back [a'] just 4984 million US$, 0.0% of world capital stocks, as Ccp from its neighbouring countries [a'], mostly from Iran and Pakistan while though Afghanistan seems to be the region country partner here repaying back at the highest percentage [ai'/ai] that is 21.1%. India appears to also have invested back to its off region investor country partners[c'] 29787 million US$, as 0.2% of world capital stocks that makes 8.1% return to that FDI-c-Lwf initial amount received. These being all Indian DIA, the country's FDI stocks balance gets as high as (+) 230729 million US$, 0.9% of world capital stocks, while the whole South Asian region makes its same balance as high as (+) 336018 million US$, which is 1.3%of world capital stocks.

East Asia

East Asia is a really interesting region case in the sense that it basically is an [a] transactions type region – i.e. through its investment leader countries that are China and Hong-Kong --, but concomitantly three of its seven member countries do invest out of the region, as similarly to the [b] type regions, as in the cases of Euro-zone and West Europe – i.e. or, actually this region case might be found mostly similar to the ones of CIS region and Caribbean archipelago, with just one investment leader country each and also investing Lwf out of the region each. So, the region received Lwf[c] as high as 2548805 million US$, so 10.4% of world capital stocks during the analyzed year interval (1990-2015) from Euro-one and possibly also from West Europe and these went to just China and her Hong-Kong roommate. These two countries make the full investment leader over-entity of the region that succeeds those nearly 78% of Ccp in the region's turnover (Tv), but interestingly, this region's total Ccp sees itself dominated by its inter-regions part[c'] – i.e. the other interesting aspect of East Asia. Then, besides including the China's highest country's FDI stocks balance world-wide – i.e.(+) 911596 million US$, as 3.8% of world stocks --, this region invests abroad as both Lwf[d] – 273109 million US$, as 1.1% of world capital stocks, from South Korea, Taiwan and Hong-Kong – and Ccp [c'] – 1595434 million US$, as 6.4% of world capital stocks from China and Hong Kong – i.e. but only partly to Euro-zone (738443million US$, that is 3.0% of world capital stocks) and West Europe (414683 million US$, that is 1.7% of world capital stocks). The rest of this China's and Hong-Kong's [c'] amounts – i.e. together with the one of the neighbouring South-East Asia -- seem to go remaking (new) Lwf and part of these last to the same European regions; the other part to South Asia and Near East. Finally, interesting for this region as well is the way that the rest of countries – than China and Hong-Kong – appear to respond by their proper Ccp [a'] to the one of the full investment leader entity[a] – at the level of 86%, unique world-wide, and once more due to the same three countries here proven able to invest outside their own region that are South Korea, Taiwan and Hong-Kong (each one with 100% for [ai'/ai], in our model's terms).

Near East

This is another interesting region in its FDI&DIA behaviour.. A minority group of countries – i.e. Saudi Arabia, Turkey, Israel and United Arab Emirates -- receive a Lwf [c] cumulative amount of 560188 million US$, as 2.4 % of world capital stocks, possibly from South-East Asia – i.e. 497532 million US$, equal to 2.0% of world stocks -- and Russian Federation – i.e. 185494 million US$, that is 0.7% of world capital stocks. They invest in the rest of region [a] 201993 million US$, that is 0.7% of world stocks, here getting a good return [a'] of 79740.5 million US$, equal to 0.2% of world stocks, for a return rate of 39.5% that is, as similarly to the East Asian region, also due to that some countries of this region – i.e. Qatar and Kuwait -- prove able to invest Lwf abroad [d] 69150 million US$, as 0.4% of world capital stocks probably back to Russia – i.e. together with an inter-regions cooperation capital [c'] as high as 56085 million US$, that is also about 0.4% of world capital stocks this time invested back to traditional investment partners. As similarly to CEE region there are FDI country leaders that are Saudi Arabia and Turkey with low FDI amount differences between, as distinguished from the DIA country leader that is Israel, plus the last though keep a positive FDI stocks

balance – i.e. here recalling the Hungary's position in the CEE countries. This region's FDI-DIA turnover shares nearly equally between Ccp and Lwf, while Ccp is predominantly intra-region (83.4%) – i.e. in a region meanwhile meeting enough conflicts, turbulence and even wars.

South East Asia

This Asian region is equally one of several investment leader countries – i.e. Singapore, Thailand, Indonesia and Malaysia – looking like taking over on behalf of the whole region a total amount of 1106034 million US$, so 4.7% of world capital stocks as Lwf [c], the most probably from the Euro-zone and West Europe, as associated, or in alternative just from West Europe. The same countries invest around in this region [a] 206112 million US$, so 0.9% of world capital stocks and this makes returns [a'] of 37772 million US$, which is 0.2% of world capital stocks, but equally a 18.3% ratio [a'/a%] of the capital received by the rest of the region. Actually this return ratio from the rest of countries in the region [ai'/ai] varies between 0.0%(Myanmar and Lao) and 54% (Philippines). And then, back to the outside the region investment partners [c'] the same investment leader countries do invest 497532 million US$, so 2.0% of world capital stocks – i.e. unfortunately, together with part of [c'] from East Asia, this last amount is found as the one of turning back not quite to initial investors in this rgion, but from Ccp to Lwf status. As in detail and with of without connection with this region's Ccp appears as predominantly inter-regions – i.e. recall from Annexes 1 and 2 the restricted circumstances in which Ccp turn into Lwf.

Eurasia (a summarizing)

Eurasia is an economically complex, but equally an economically traditional territorial block – i.e. not only since the modern era. This way, the FDI stock cumulated balances by countries lower (restrict) to less than one percent of world capital stocks – i.e. this confirms that capitals mostly move around this territory, here drawing Section I, an over-entity imitating the total world specific of the autonomous capital market behaviour. Moreover, this Section is the largest one in the world – it weights more than the half of world capital stocks(i.e. 54-56%), i.e. by its turnover. Here in context, once more, even more interesting .appears that the world FDI-DIA top countries – that are the US, UK, Japan, Canada and Australia – belong off the 'great Eurasia'. Through further deepening the world capital sections concept the fact that Eurasia isn't even the lonely section as such world-wide will clearly result in favour of the other, i.e. larger, idea – the one of a world capital trend evolving in such a direction

North Africa

This is a pretty typical Third World region [e type] strongly dependent on Lwf entries [c] as high as 184593 million US$, that is 0.9% of world stocks, estimated as directly from the US – i.e. as for the whole Section II of international capital. Egypt has about a half of this total amount, followed by Morocco with a half of the Egypt's FDI amount and the rest of countries in the region have about a half of the Morocco's FDI amounts or less each. Ccp is as low as 26% of all FDI&DIA amounts in the region (Tv) and they remain inside the region. Besides the region's typical FDI behaviour as overall, here Libya has

an FDI stocks balance in deficit – i.e. this country seems to push out the whole FDI amounts received during the 1990-2015 year interval that is a unique case in the region and in the whole Africa. Besides, the young South Sudan has even an about three times higher such deficit, probably in the relationship with its older and larger Sudan country partner. Fortunately, our model proves able to make this difference of FDI stocks deficit – i.e. this is not [d] Lwf (outside the region).

Middle Africa

Let us recall that this is rather an artificially formed region – actually, there are three African multi-country regions to talk about[13], as displayed in 'WIR 2016' – on the criterion of reaching one country or a group of countries as FDI/DIA dominant – and this country is Nigeria, with its highest FDI and DIA in the whole newly created Middle African region. Nevertheless, the Nigeria's FDI and DIA amounts do not succeed any real dominance in the region since Lwf entries[c] are strongly dominant -- the [e] type of regions --, i.e. 83% of total Tv and of course as [c] type transactions. This region that is obviously larger than its neighbouring North Africa – i.e. especially as the number of countries -- receives about the same [c] amounts, i.e. 281374 million US$, that is about 0.8% of world capital stocks, apparently from the US, as well. A total amount of which the region makes a lower than 20% Ccp for within – i.e. 29616 million US$, that is 0.1% of world capital stocks. Besides, some of FDI/DIA country behaviours here show as chaotic as reminding the Atlantic and Pacific archipelagos – e.g. FDI or DIA reported as negative. amounts.

Southern Africa

This region's FDI-DIA behaviour looks a little atypical for Africa – i.e. it is not the [e], but just the [a] type -- and rather similar to the Asian regions. South Africa and Mozambique appear (together) as investment country leaders in the region [c] and so basically received 106221 million US$, that is 0.4% of world capital stocks, probably directly from the US, to invest in the rest of the region 50876 million US$, that is 0.1% of world capital stocks and to receive from 1,122 million US$, just 0.0% of world capital stocks, i.e. as high as a 2.2% return. Besides, 15245 million US$, that is 0.2% of world capital stocks, were inter-regions Ccp [c'] – i.e. back to US investors – to make the total of 67242 million US$, so 0.3% of world capital stocks that is DIA of the country leaders that are the same South Africa and Mozambique. Though, in such a description context the whole region, including the investment leader countries, keep positive FDI stock balances – i.e. curiously, the other two African regions, in their turn, meet some negligible [d] outflows --, just about 30% of turnover is the Ccp and 23% of these last are the long-distance [c'] ones.

Africa (a summarizing)

This whole continent runs less than 3.0% of the whole capital stocks that is about the same as Canada's FDI and less than what this 5th world positioned country for FDI-DIA invests abroad. Actually Africa received during the 1990-2015 year interval 570,860 million US$, that is 2.1% of world capital stocks, as [c] transactions (Lwf entries) – i.e. within world Section II – from the US. But despite its capital minority on the continent

[13] i.e. East Africa, Central Africa and West Africa.

the Southern African region seems to be the lonely one with some 15245 million US$, that is 0.2% of world capital stocks long distance Ccp back investments [c'] to the US – i.e. that is 14.4% of the US' investments in Southern Africa and 2.7% of the whole given amount received by the continent. The continent's international capital so is 84% dominated by Lwf entries and the rest of 16% that is Ccp runs as 88% within the regions. Lastly, in North and Middle Africa there are to be curiously found some [d] outflows, i.e. 14390 million US$, that is 0.0% of world capital stocks which's directions couldn't be detected.

South America

This part (region) of Latin America receives international capital[c] nearly double than the whole Africa – 1334565 million US$, that is 5.8% of world capital stocks, estimated as from Japan, in Section III – and keeps an [a] type structure with multi-country investment leader – i.e. see Brazil, Chile, Argentina and Columbia, versus the rest of region – and with no Lwf issued – i.e. except for the Suriname's case with negative FDI (i.e. pretty accidental), as similar to the one of South Sudan in North Africa and except for long-distance Ccp [c'] of 89144 million US$, that is 0.3% of world capital stocks back to international investors. The other intra-region Ccp investments [a] of the region's 'top-4' was, during our 26 years interval, as high as 217104 million US$, that is 0.9% of world capital stocks, and meet some 26030 million US$, that is 0.1% of world capital stocks Ccp of the rest of region [a'] that is 12% of initial [a] amounts. Despite its FDI performances, this region performs less than 35% Ccp Ultimately, what sounds interesting for this region's case is just that South America – i.e. enough richer in international capital than Africa, on similar geographic latitude coordinates – equally belongs to an obviously narrower Section III (Japan and Pacific) than Section II (US and the rest of world FDI-DIA top-6).

Central America

This other Latin American region looks similar structure to its neighbouring South America according to our model – i.e. [a] type, with single investment leader country that is Mexico --, but is enough different as both common territory and that except for Mexico – a comparable size country with the 'heavy four' of South America – the other countries are little sizes as both geographically and economically. There is another difference between the Latin American regions that could be a little hidden so far – i.e. Central America belongs to Section II (the US), unlike South America, estimated as included in Section III(Japan). In the same context the difference in capital amounts received [c] -- 495413 million US$, that is 2.1% of word capital stocks for Central America, Mexico – comes to the detriment of this region, as well as above to the detriment of the African continent. But neither this region's detriment, nor the Mexico's unique investment position in its region – i.e. very similar to the one of India, in South Asia -- prove able to stop this country from occupying the 4th position in the world for positive FDI stock balances – just behind China, Brazil and Australia. No Lwf issued either for Central America, except for negative DIA of El Salvador – similar to the negative FDI of Suriname, in neighbouring South America --, and, once more similarly to South America, a back Ccp long-distance amount [c'] of 19467 million US$, that is 0.1% of world capital stocks. Inside its region Mexico invests [a] 112305 million US$, that is 0.5% of

world capital stocks, and so meets just 4326 million US$, that isn't more than 0.0% of world stocks, Ccp from the rest of region [a'], namely as low as 4%. Finally, the weight of Ccp in total turnover makes once more similarity between the two Latin Americas.

Caribbean

Caribbean – as well as Oceania, in Pacific – is a group of island countries – i.e. and this is for somehow taking into account for its FDI-DIA behaviour and certainly not only. This archipelago receives 432227 million US$, that is 1.9% of world capital stocks, as Lwf entries [c] from the US, according to our estimation, and keeps the [a] type region structure in favour of British Virgin Islands – i.e. a British overseas territory of just four main islands (and many others much smaller) and no more than 30 thousand inhabitants – as, paradoxically, with more international capital than the Russian Federation and here the very investment leader country (the same as the Russian Federation in its region). It performs 79% in total turnover for Ccp, of which 65.6% within the region – i.e. 331241 million US$, as 1.2% of world stocks, as [a] amounts to the rest of countries, from which then receives [a'] 178396 million US$ that makes 0.7% of world stocks. The rest of 35.4% of total region's Ccp, namely 279383 million US$, that is 1.4% of world capital stocks, is of course back Ccp to international investor partners [c']. Plus, this country invests off the region more than half of the archipelago's 271675 million US$, that is 1.1% of world capital stocks, as Lwf issues [d]. As for the whole picture and well seen in Tables (A) and (E), there are also other countries in this archipelago that invest [d] off the region

Oceania and Bermuda Islands

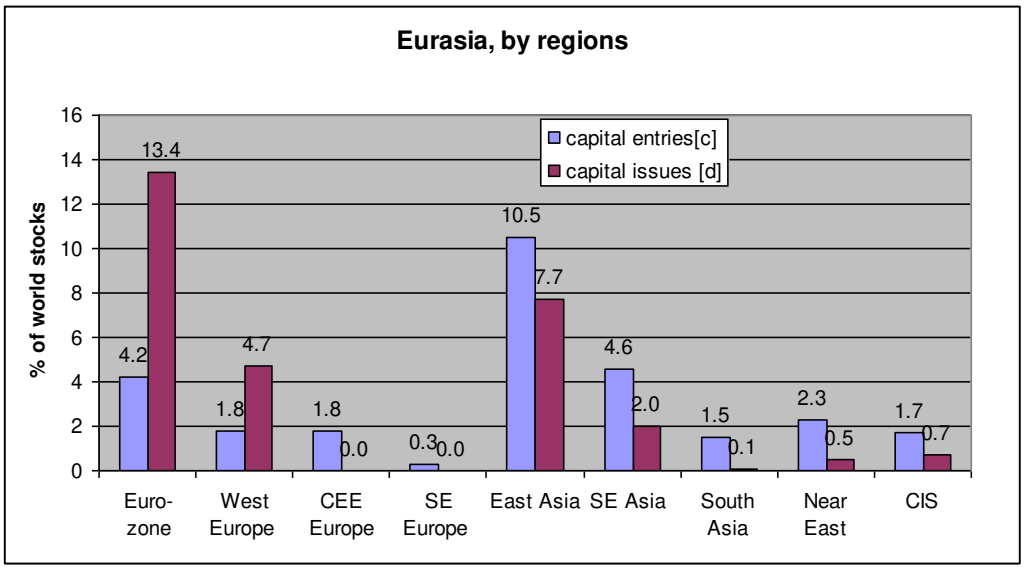
This other large archipelago belongs to South Pacific and to international capital Section III, FDI fed by Japan, according to our here estimation. But unlike South America – i.e. here in advantage in this Section --, Oceania is the poorest region in international capital in the whole world and belongs to the [e] type regions. It receives during our analyzed interval 28562 million US$, that is as low as 0.1% of world stocks, Lwf entries [c] and all countries succeed to invest in their archipelago area [a] 1782 million US$, that is 0.0$ of world stocks, and, curiously, off their area, as [d] Lwf significantly more than this – i.e. 9173 million US$, that is also 0.0% of world capital stocks – i.e. this might be a kind of 'super-[e]' region far from either investment leader countries, or Ccp performing (8.7% of turnover). As in other [e] type regions, here New Caledonia is the FDI leader country while Cook Islands are the DIA leader that is equally the largest FDI stocks deficit countries in the area, as rather meeting no FDI.

3.2. Description by sections

3.2.1 Section I. Eurasia. Flows estimation

Let us reiterate from above that Eurasia is the first – i.e. the largest – world Section of international capital – i.e. capital market space -- in the world. As for such a true world capital Section the Eurasia's FDI stocks balance of -0.8% of world capital stocks (slightly in favour of DIA) is the same as the difference between cumulated entries [c-c'/3475952 million US$, that is 14.3% of world capital stocks] and issues [d-d'/3665153 million US$, that is 15.1% of world capital stocks] of Lwf. Ccp are here significant either (73.2%

of corresponding turnover) and as both intra- (64.7%) and inter-regions(35.3%) – i.e. all these with more or less important differentiations among regions, but in our view this is supporting the capital market section's overall. Finally this world capital section sees dominant CCp in its turnover and intra-regions Ccp dominant in total Ccp – i.e. which, despite the world trend of autonomous capital markets (sections) formation, might allow some differentiations regarding these percentage characteristics.



There also can be added the aspect that Eurasia – i.e. as multi-region area and not quite homogenous, as already mentioned here – looks curiously similar behaviour to [b] type regions – e.g. high Ccp weight in total, due to multilateral capital invested among countries, high Lwf invested as well and obvious correspondence between strong investor and the same for investment recipient countries.
See the four Estimation tables below with specific comments on respective flows.

Estimation tables (1)

By the Region	**Received [c]**		**Invested [d]**	
	Mill.US$	**% f world**	**Mill.US$**	**% f world**
Euro-zone	-	-	3269383	13.4
West Europe	-	-	1146086	4.7
East Asia	2548805	10.5	-	-
SE Asia	1106034	4.6	-	-
CEE Europe	440391	1.8	-	-
SE Europe	67869	0.3		
Subtotal 1	**4163099**	**17.2**	**4415469**	**18.1**

Comment (1): Here above investor and investment recipient regions normally are seen in their decreasing order. Though, the second investor region in order in Eurasia – i.e. East Asia – is here missing as investor entity and preferred as the largest investment recipient entity in Eurasia – i.e. East Asia will reach back its investor place in Estimation table (2). Euro-zone – i.e. of which less member countries do not here appear to invest off the region, e.g. Ireland, Belgium, Malta and Portugal – and West Europe – i.e. with probably, Switzerland, Sweden, Norway and Denmark -- invest together in the two largest Asian recipient regions, plus in the nearer CEE and South-East Europe. In a possible alternative to this Table (1) its international investment game would approach the nearly matching amounts – i.e. invested and received – between West Europe and South-East Asia. Obvious investment (DIA) surplus results in Estimation table (1) – i.e. this could, in alternative, approach the overall Eurasia's FDI stocks balance or allow the two west European international investment over-entities a really effective plausible surplus.
Remark: Ultimately – i.e. on the side of uncertainties, this time -- it is here, in this flows association for the whole Eurasian international capital section, to remark a comparison between Lwf and FDI stocks deficit on the European (Euro-zone and West Europe) side against Asian regions – i.e. 760630 million US$, that is 3.1% of world capital stocks – and the Asian (East Asia and SE Asia) deficit against Europeans on both the last's [c] flow entries – i.e. 923409 million US$, that is 3.8% of world capital stocks – and Europeans' [c'=d'] that is pretty the same – i.e. 939840 million US$, that is 3.9% of world capital stocks. Or, the difference between the first amount and the last two (similar) seems to approach both the above table's one of totals and the whole FDI stocks balance of Eurasia (about 0.8% of world capital stocks).

Estimation tables (2)

By the Region	**Received [c]**		**Invested [d]**	
	Mill.US$	**% f world**	**Mill.US$**	**% f world**
East Asia	-	-	1868543	7.7
Euro-zone	1007217	4.2	-	-
West Europe	435449	1.8	-	-
South Asia	365805	1.5	-	-
Subtotal 2	**1808471**	**7.5**	**1868543**	**7.7**

Comment (2): Finally, East Asia – i.e. with its Korea, Taiwan, Hong Kong and China, this last only with Ccp[c'] – meets back roughly the same investment partners that are Euro-zone -- i.e. probably Germany, Netherlands, France and Spain -- and West Europe – i.e. possibly, the whole country group --, plus here the South Asia – i.e. India.

Estimation tables (3)

By the Region	**Received [c]**		**Invested [d]**	
	Mill.US$	**% f**	**Mill.US$**	**% f world**

		world		
SE Asia	-	-	497532	2.0
CIS	-	-	185494	0.7
Near East	560188	2.3	-	-
Subtotal 3	**560188**	**2.3**	**683026**	**2.7**

Comment (3): This third regions association in Eurasia in the decreasing order of amounts traded tries to match mostly inter-regions Ccp[c'] – e.g. from Singapore and its investment country partners of South-East Asia. Besides, an easy imaginable investment relationship between Near East (countries of) and CIS – i.e. for which there is only Russian Federation to talk about -- and this will come back up in the next and last Estimation table (4). Once more here, the South-Asian long distance Ccp flows [c'] seem to turn into real Lwf – i.e. as the alternative of the above explained retracing the previous [c] inflows' direction, here to West Europe or to this last and Euro-zone.

Estimation tables (4)

By the Region	**Received [c]**		**Invested [d]**	
	Mill.US$	**% f world**	**Mill.US$**	**% f world**
Near East	-	-	125235	0.5
South Asia	-	-	29787	0.1
CIS	401101	1.7	-	-
Subtotal 4	**401101**	**1.7**	**155022**	**0.6**
Section I	**6932859**	**28.6**	**7122060**	**29.2**

Comment (4): Besides the above revealed investments relationship between Russian Federation and several Near East countries and the aspect that the CIS' FDI appear not fully/really fed by inflows from these above two regions, India (South Asia) gets part of a kind of flows 'triangle' with Russia and East Asia – i.e. probably China and Hong Kong – that doesn't appear in this table, but might be figured out as here present due to its DIA surplus resulted from Estimation table (2). Here to be note a similar Ccp [c'] flows from India possibly turning into new Lwf [d], instead of retracing the old flows direction as in the above East Asian and South-East Asian cases.

Ultimately: This above flows estimation of Eurasia in four large flows association allows their enough large differences between received [c] and invested [d] amounts – i.e. together with the even larger differences of inter-regions' cooperation capital admitted. Here recall the last /19/ working assumption of adjusting the 'matching principle' (Assumption /16/) for the sake of a realistic admission/presumptive inclusion of other transactions – i.e. out of 'model schema' – in our estimation undertaking.

Epilogue: Eurasia is not only the largest international section of directly invested capital, but equally the most complex investment flows tissue, as compared to the way that the other two capital sections appear and can be described, and first to that these two seem to

work on the same schema that is different than the Eurasian design and enough simpler (see the next paragraph).

3.2.2 The other international capital sections

Section II -- that might be called 'The US international capital leadership' one -- is the second such world/international capital section in the amounts traded decreasing order. It counts nine world investment entities, as well as Eurasia – e.g. here including the US, UK, Canada and Australia, the 'heavy ones' of international investments --, but a total turnover (Tv) of 9087679 million US$, as 37.3% of world capital stocks, that is nearly 20% lower than the one of Eurasia. Section III – that might equally be called 'The Japan capital leadership over Pacific' section – is the last capital market space accounting just for 1800964 million US$ equal to 7.4% of world capital stocks. We'll see below that these other two international capital sections essentially differ from Eurasia to meet a common principle of flows settling – i.e. and just one difference between these two: that in Section II there are several negative FDI stocks balance countries/regions, besides the investment leader that is the US; not the same in Section III, where Japan is both the investment leader country and the one bearing negative FDI stocks balance[14].

A common flows description

Let us first have the key concepts to deal with in the next Diagram.

Diagram-Key concepts of international capital sections

Notation	For:
ci	capital entries in country (i)
di	capital issues from country (i)
cUS/Jap	capital entries in the investment leader country
dUS/Jap	capital issues from the investment leader country
ciR	capital entries in the rest of countries of the given section
diR	capital issues from the rest of countries of the section
FDI stcks US/Jap	FDI stocks balance of the investment leader country of the section
FDI stcksRi	FDI stock balances cumulated of the rest of countries of the section

Now, getting started from the already settled null sum of FDI stock balances within a capital section, pretty the same as for the whole world area:

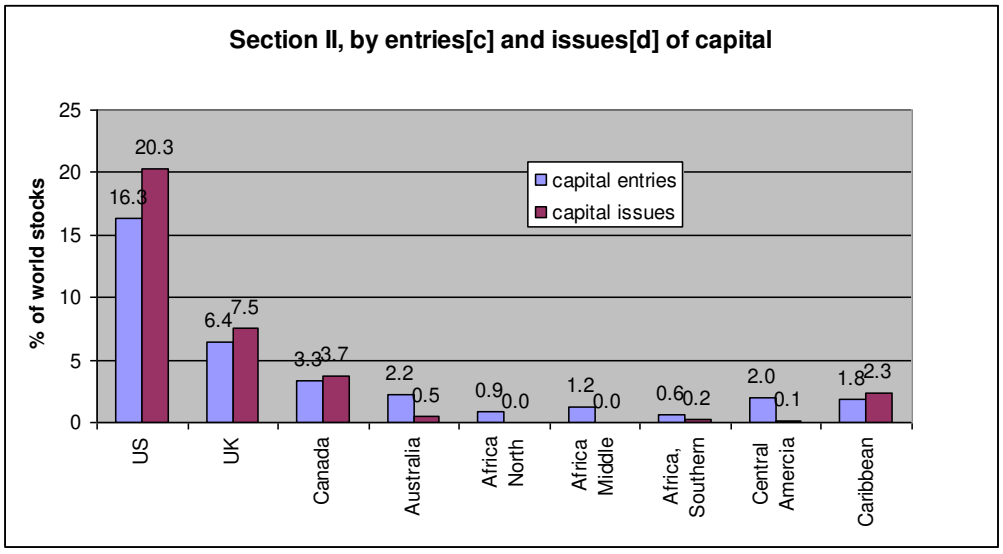
$\sum (ci - di) \approx 0$

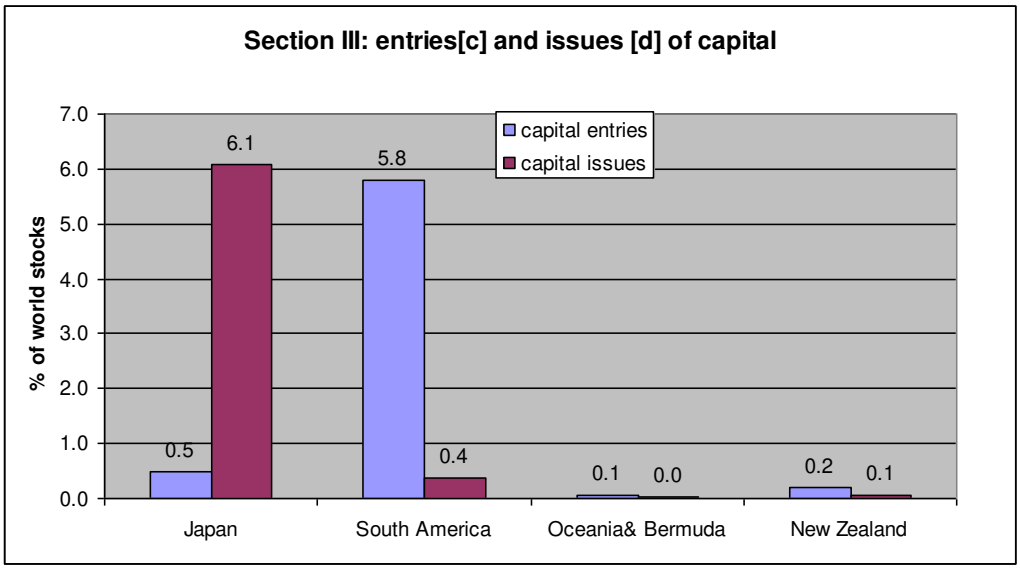
for which Section II keeps this as low as -1107 million US$, so even 0.0% of world capital stocks and Section III keeps the same a little higher – i.e. -53632 million US$, that is -0.2% of world capital stocks, re-write the same as:

$(cUS/Jap - dUS/Jap) + \sum(ci-di)/R \approx 0$

[14] i.e. except for a few Oceania's small island countries, with too negligible FDI stock deficits for being able to really FDI feed any part of this section.

to make the primary difference between investment leader and the rest of sections' countries regarding their belongings as international capitals received and invested. Then, while for these both sections:
FDI stcks US/Jap > ciR – diR
for which each one keeps a similar international capital structure with the [a] type regions with single investment leader country, except for that within a section there are Lwf to deal with – i.e. for which the model allows just half operable amounts. FDI stock balances of these investment leader countries stay significant for their capital sections:
c US/Jap - d US/Jap = FDI stcks US/Jap
It will become obvious that :
c US/Jap - ΣdiR ≈ dUS/Jap - ∑ciR ≈ 1/2 FDI stcs US/Jap
and:
(c US/Jap - ΣdiR) + (dUS/Jap - ∑ciR) = FDI stcks US/Jap
Hence, just concluding the truth that is the most obvious for these two sections: their flows relationship within is just bilateral type – i.e. between the US and Japan, each one, versus the rest of countries and regions in the section, as respectively. But here also recall from above the specific difference as such between Section II and Section III – i.e. this is that the previous, besides the investment leader country that is the US, UK, Canada and the Caribbean region – i.e. British Virgin Islands – equally keep FDI stock deficits. The fact is that these other country-regions keep these last just against the US, plus that doesn't offset the larger true that cumulative [c'] flows to the US from the whole rest of the section (R) do not balance the US capital invested abroad. Or, once more, it is not the same for the last Section III.





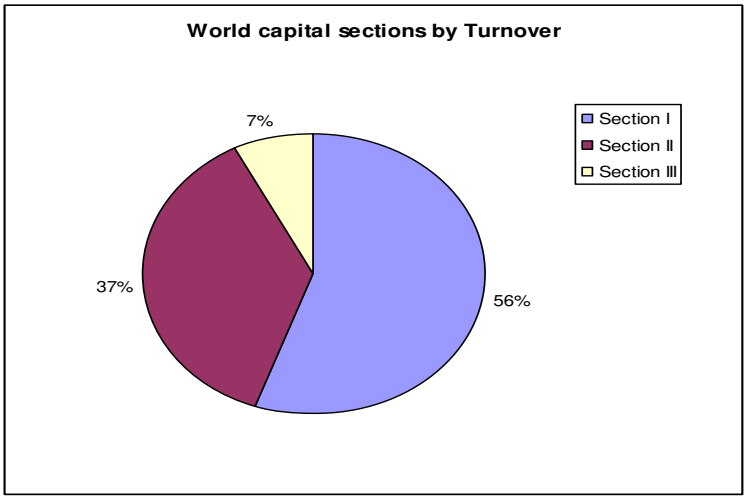
3.2.3 The world. A synthesis of results

At the end of our trip across the word for international directly invested capital we have the synthesis of our estimations, also in Annex 7, according to our model rigueur. See also in the next Diagram the general lines of the same estimations.

Diagram for the main lines of international capital estimations for the 1990-2015 estimations throughout the world

item	Enunciation
I.	world capital
I.1	equal to total FDI and DIA
I.2	equal to total inter-regions entries [c]/issues[d] + intra-region Ccp
I.3	equal to total Ccp + Lwf ([c-c']/[d-d']), as turnover (Tv)
II	total inter-regions capital entries[c] = total inter-regions capital issues[d]
III	long-way flow entries [c-c'] = long-way flow issues [d-d']
IV	cooperation capital (total) = intra-region Ccp[a/b+a'/b'] + inter-regions Ccp[c'/d']

The world capital of this category unequally shares among its three sections as 56%(I), 37%(II) and 7%(III). About 70% of the same total of world capital flows between regions[c/d] – i.e. as total of long-way flows that include long-way/distance cooperation capital[c'/d'] that is 43% of total, in its turn – i.e. see also the last table in the Annex.



Of course, the rest of 30% is made by intra-region flows that are entirely assumed as(pure) cooperation capital [a/b& a'/b'][15] in our model. In another classification, the total of cooperation capital (Ccp) makes 73% of total world capital, in its turn. It is this way that Ccp appears as obviously dominated by its long-distance part – i.e. that could be somehow unexpected --, but the explanation here simply consists in that the world capital investment leader countries – with their important weight in the total of flows – account off the regions, except for all countries of Eurasia, with less individual countries dominating the international investments.

From another viewpoint, it also appears interesting that the 'pure' long-way flows – i.e. that is supposed to be concomitantly [c-c'] and [d-d'] at 27% of total world capital – do equally approach the total of intra-region cooperation capital [a/b & a'/b'] – i.e. 30% of total world capital. Finally, the same total world/international capital – i.e. here found as turnover (Tv) -- breaks down into cooperation capital (Ccp) – i.e. total, 73% of total world capital – and long-way flows(Lwf) – i.e. 27%.

All of these should be taken for equally important differences among the three world capital divisions and markets -- i.e. while such differences actually start from their capital sizes.

*

Ultimately, for our above study, the international directly invested capital looks having followed an obvious trend of settling on different autonomous market spaces throughout the world, but then its evolution was different on these.

4. A new theory of FDI

That given set of theories on FDI -- i.e. on their sources and determinants, as recalled in the next Diagram.

[15] i.e. Annex 8

Diagram-Theories about FDI's origins

Ord.	Title	Details	Authors
1	Production factors	Capital, labour and resources do follow and serch for each-other in the macro, as well as in the international economic area.	Markusen, JR & Venables, AJ (1995)
2	International trade	Since there is no competition on the international market, countries prefer to put into value and profit their own available/abundant resources/production factors. Capital makes no exception to this. Comparative and competitive advantages here play the essential role.	E Heckscher,B Ohlin, P Samuelson (HOS), Muchieli, , JL, Helpman, E & Krugman, P(1985), A Iancu(1983)
3	Product's life cycle	That is from entering the consumer's market demand, enlarging it, going to exportation, but finally, when exporting production itself, instead of just good produced -- i.e. direct investment abroad (DIA) -- this is the decline already.	R. Vernon, T. Ozawa
4	Ownership(O), Location (L) Internationalization (I)	This is for the individual firm, here assuming a trio of requirements done by a firm to give birth to other firms in the international area.	J.Dunning(1995), T Horst (1972)
5	Multinationals	Not all firms investing abroad, but a number of companies make an international investment oligopoly and so become international entities to deal directly with governments.	Broaden (1999), Buckley, PJ & Casson(1976), Ethier, WJ (1986), Helpman, E (1984),

Our reply/ contribution is a new one that sounds like the following:
(i) The subjects of FDI&DIA are the economic nations -- i.e, not the goods-products (Vernon), nor firms/companies in their evolution (Dunning), nor the multinationals etc.
(ii) The object, on the other hand, is (of course) the FDI-DIA flows,
(iii) but beyond them the international capital of direct investments does limit to just two components that are (A) cooperation capital and (B) long-way flows (See Annex 2[16]).
(iv) This way the theory assumes a clear-cut distinction between (A) cooperation capital (Ccp) and (B) long-way flows (Lwf). Despite this, Ccp might turn into Lwf and conversely, according to some rules of both these flows by definition (see Annex 2 again).
(iv) The international directly invested capital (the one of FDI&DIA) is supposed to move directly within/through world *capital sections.*
(v) As contrary to a (previously) claimed diversity of international capital sources, in parallel with the movement of the same capital between nations, its sources see themselves restricted to only a few countries of the world – i.e. those with FDI stocks deficit are a good indication about, although several countries of low enough such deficits are equally to be found, as 'accidents'[17]. In our opinion, first, sources of international

[16] i.e. for details on concepts of cooperation capital (Ccp) and long-way flows (Lwf).
[17] e.g. Yemen, in the Near East, Libya and South Sudan, in North Africa, the same as several island countries of Caribbean and Oceania.

capital are to be found at the same country level, that is the consistent case with all here above debated issues about FDI and international capital. In other words, international capital is a macroeconomic issue and so results in that national economy making it cheap enough in the domestic area – i.e. as according to the international trade theory. Then, once this capital sees itself 'internationalized' its 'rules of work' change and all countries comply with.

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Annex 1
The assumptions

I. Model assumptions:

/1/ The international directly invested capital is world belonging, then distributes among individual countries. Its amounts are never invested in the same country, but compulsorily in another one[18].

/2/And they might be what is popularly called international investment (foreign direct investment) transactions -- but also basically what is called investment *flows:* FDI inflow and /or DIA outflow – the two latest, as seen by the countries involved in such transactions – see the volume of such transactions done during up to one year time.

/3/ A single transaction, a one-year flow and all that comes to be more than these, as amounts traded – which here are supposed to start from amounts like [a], [b] and the rest -- will be in two postures, i.e. on both sides of the equality sign. And this gets enough important for the modeling practice.

/4/ The concept of *flow* has equally another meaning; a long term one: the direction of repeated/systematic flows in world territory/ between country X and country Y.

/5/ Hence, each transaction recalls and respects the basic accounting rule -- e.g. between debit (left hand side of the equality for FDI recipient entity) and credit (the right hand sign of the equality for the investing entiy).

/6/ All model equalities let the same inflow on the left and outflows on the right hand sides.

/7/ And, according to /3/ above – i.e. despite the two appearances of all basic amounts --, this is just one flow to talk about that moves between at least two countries.

/8/ Each individual transaction and all transactions cumulated leave the basic amount equality between investments made by investor countries (DIA) and those received (FDI) by the recipient countries[19].

/9/ And reciprocally, each investment amount or part of amount found throughout data exposed by 'WIR 2016' is supposed to be investment both made by a country and received by another country;

/10/ There might also be one investor country for several recipient countries, and conversely -- as much as (at the world level, once more) the FDI=DIA equality sees itself valid since each individual transaction, as already seen above, passes through world flows of each year and get to FDI/DIA stocks as such (flows cumulated of all multi-year period). Recall that 'WIR 2016' offers FDI&DIA flow data on all years of the 1990-2015 interval.

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[18] Despite the oddity that this assumption sentence sounds like, it will prove more than important in the following context below.

[19] Or, there might be a problem -- the primary one in all orders -- since our data source here develops a (primary) error-inequality as such. Or, our solution here used will be a re-conversion coefficient between the world levels of FDI and DIA -- this is a double one: 1.015671 for DIA converted into FDI and 0.98457, as the opposite, though giving a relatively low FDI-DIA world difference. Despite using such palliative solution, the problem remains and in our view this is the source of most forthcoming errors. See details in Andrei & Andrei (2019a).

II. Working assumption (the model applied):

/11/ When DIA of a country -- DIA cumulated of a group of countries -- in a region is equal and/or higher than the cumulated FDI of the rest of countries there is assumed that the previous -- i.e. individual country or group of countries -- is/are the investment leader in the region and so it is this country/country group first receiving [c] flows to then reinvest the [a] amounts/flows of to the rest of countries, as Ccp on the previous country/country group side. The region so qualifies for the [a] type and the investments leader (country or country group) will then receive back [ai'] capital flows from the rest of region.

/11'/ When all DIA of individual countries in a region are lower than the cumulated FDI of the rest of countries there is assumed that in this region all investment leader is missing and then each member country deals its FDI/inflows directly with out of region direct investors. So, there are no [a'/b'] back intra-region Ccp flows either.

/12/ Except for the [a] type regions -- as defined by Assumption 11/ -- other two types of regions are here expected:
/the [b] type: regions with active Ccp intra-region and important Lwf issues
/the [e] type region that isn't any of [a](Assumption 11) or [b] types -- i.e. it is as in the Assumption 11/ enounced category and might be equally called as 'FDI-DIA passive' regions.

/13/ When the region is [a] type and so works according to Assumption 11/, the difference -- i.e. positive -- between the Ccp of investment leader country/ countries and cumulated FDI of the rest of (recipient) countries is assumed to be inter-regions Ccp issued [c']. This capital outflow is assumed to retrace the previous [c] Lwf entries in the region back to the out of region's initial foreign investors or, in alternative, to (re)make new / newly directed or re-directed Lwf.
Remark: This is the only way of [c'] flows identifying -- i.e. and only as attached to leader countries, which might be a limitation/weakness of this model at least a potential one.

/14/ Unlike the long distance Ccp flows [c'] -- i.e. hidden at the first sight as in the above Assumption 13/context -- Lwf issued [d] belong to negative FDI stocks balance. And reciprocally, all negative FDI stocks balance of a country and in a region indicates the Lwf issues' presence.

/15/ Actually, the negative FDI stocks balance equals the [d-d'] difference, the same way that the opposite positive FDI stocks balance equals the [c-c'] (also positive) difference.

16/ The amounts' 'matching' principle between entities: basing concomitantly on:
/Assumption 1/ of our above described model;
/what might be called 'investment (already) done' reality.

/17/ Strictly connected to the previous Assumption 16/, the principle of: 'highest / higher Lwf amounts invested (DIA/d) by the investor entity for highest/higher Lwf amounts received by recipient entity'.

18/ The same 'matching principle' might go decreasing on amounts obvious as apparent amounts exposed, but the same decreasing order as quantitative will be a decreasing order of certainty for estimations to be here done -- e.g. not entirely matching amounts look more realistic on the ground, it clears the way for presumptive international investments off schemas etc.
Remark: Presumptive inter-sections transactions couldn't be higher than the FDI-DIA world amount here found as, possibly, residual differences (Rd) or just errors.

19/ Finally, the flow estimation is supposed to reconcile at least: (i) the matching principle -- with its applicable limitations; (ii) the principle of inter-regions Ccp flows retracing the previous Lwf [c] ones' direction(s), -- to its applicable extent, as well.

Annex 2
Cooperation capital and long-way flows

(A) Cooperation capital (Ccp):

This is the first type transactions and capital invested over the world country borders met by an individual world country in its international direct investments experience. It usually starts, as similarly to the equally international trade, by transactions done between neighbouring countries -- i.e. countries in the same region, as in the 'WIR 2016'(UNCTAD) definition applied. Amounts specific to Ccp might be of all sizes and primarily lower than others/e.g. later ones.

As of principle, a Ccp is assumed to be invested from country X to country Y and then, during a middle-long period of time -- e.g. here equally assuming capital amortization -- the same amount will be seen as invested back from country Y to country X. This is just 'remaking the old flow trajectory', the last being either Ccp [c'], or Lwf; either intra-region (the [a] bilateral type regions), or inter-regions. However, 'remaking the old flow trajectory' principle of Ccp equally meets the alternative principle -- i.e. and also intra-region (the [b]/multilateral type/vrersus [a] type regions and inter-regions).

For both above types of FDI-DIA transactions and regions, one more duality: Ccp turn into Lwf, and conversely. In all the above circumstances the Ccp evolving follows a limitative equalizing trend between FDI and DIA -- i.e. this is limitative, so towards the equality of new flows to the old/initial flows invested.

Ccp flows, transactions and process as a whole do not stop at the world multi-country region level and/or at low-primary amounts invested -- i.e. it might (assumed to) come from the other long-way flows (Lwf, here in our model alternative to Ccp) that turn into and equally after a similar middle-long time term, as in the intra-region Ccp transactions case. This is for the second type of Ccp -- the long-distance one, for the long distance that is supposed to be the same as the one of Lwf. So, as compared to the alternative international capital Lwf Ccp is more complex issue, here including that it is for both short -- intra-region -- and long -- inter-regional -- flows.

Besides, there might also be previously intended long-distance Ccp since investment opportunities within the region might be exhausted -- i.e. temporarily. Or, there are two other aspects to be here emphasized: (a) the long-distance transaction [c'] isn't yet accounted as such since 'just intended', but only when it is already done in facts; (b) previously of accounting as Ccp [c'], it accounts and works as Lwf.

Given the theoretical reciprocity of turning Ccp into Lwf and conversely, however the 'Ccp into Lwf' alternative would be assumed as more difficult than its opposite.

(B) Long-way flows (Lwf):

This is the other (different) type of international directly invested capital that separates from Ccp by: (a) the inflexible inter-regional distance of flows; (b) their usually high amounts in question; (c) that these flows do not expect reply, as in the case of Ccp flows. Lwf -- i.e. the [c] and [d] transactions -- are here found turning into Ccp in two ways:

(a) at region level/inside the region -- i.e. country X receives [c] FDI and then re-invests total or part of this primary amount[a] to other countries in the region[ai/bi]. This is the moment in which the total [a/b] amount invested by country X to the rest of

countries is Ccp for country X only -- i.e. the [a] DIA amount of country X equalizes part of the previous [c] amount received; so the same country X might keep positive FDI stocks balance, its surplus staying Lwf nature. For the rest of countries in the region the [ai] amounts yet are Lwf -- i.e. imperfect Ccp;

(b) between regions -- i.e. at world or world-FDI/DIA section levels -- as already described above, initial Lwf[c] engender in a while some replies from the previous FDI recipient countries [c'] -- i.e. working exactly like the intra-region Ccp [ai] investments.

Conversely, Ccp into Lwf turning is rather rare and imaginable for restricted enough circumstances -- e.g. pretty high down limits of amounts to be re-invested

Annex 3
The model approach: accounting tables

The [a] type transactions (bilateral capital formation and Ccp)

Basic accounting table

Chapter \ Country	**X1**	**X2,X3,X4,…**	**Total**
Entries (FDI)	-	a1, a2, a3,…	a
Issues (DIA)	a	-	a
FDI flows balance*	(-) a	a1, a2, a3,…	0
Turnover(Tv)**	a	a	a = ½ (Tv_{X1}+TvX2)
Cooperation capital	a	-	a
Residual difference	-	-	-

Accounting table 2

Chapter \ Country	**W**	**X1**	**X2,X3,X4,…**
Entries (FDI)	-	c	a1, a2, a3,…
Issues (DIA)	c	a	-
FDI flows/stocks balance	(-) c	c-a	a1, a2, a3,…
Turnover(Tv)**	1/2c	a+c	a
Cooperation capital	-	a	-
Long-way flows	1/2c	c	-
Residual difference	-	-	-

Chapter \ Country	**R1**	**Total**
Entries (FDI)	a	a+c
Issues (DIA)	a	a+c
FDI flows/stocks balance	0	0
Turnover(Tv)**	a+1/2c = ½ (Tv_{X1}+TvX2,3,4...)	a+c = ½ (Tv_{X1}+TvX2+TvW)
Cooperation capital	a	a
Long-way flows	1/2c	c
Residual difference	-	-

Accounting table 3

Chapter \ Country	W	X1	X2,X3,X4,…
Entries (FDI)	-	c	a1, a2, a3,…
Issues (DIA)	c	a	-
FDI flows/stocks balance	(-)c	c-a	a1, a2, a3,…
Turnover(Tv)**	1/2c	a+c	a
Cooperation capital	-	a	-
Long-way flows	1/2c	c-a	a1, a2, a3,…
Residual difference	-	-	-

Chapter \ Country	R1	Total
Entries (FDI)	a+c	a+c
Issues (DIA)	a	a+c
FDI flows/stocks balance	c	0
Turnover(Tv)**	a+1/2c = ½ (TvX1+TvX2,3,4...)	a+c = ½ (Tv_{X1}+TvX2+TvW)
Cooperation capital	-	a
Long-way flows	1/2c	c
Residual difference	-	-

Accounting table 4

Chapter \ Country	W	X1	X2,X3,X4,…
Entries (FDI)	c'	a'+c	a1, a2, a3,…
Issues (DIA)	c	a+c'	a'1, a'2, a'3,…
FDI flows/stocks balance	c'-c	(c-c')-(a-a')	a-a'
Turnover(Tv)**	½ (c+c')	(a+a')+(c+c')	ai+ ai'
Cooperation capital	c'	a+c'	a'1, a'2, a'3,…
Long-way flows	1/2(c-c')	c-c'-a	a1, a2, a3,…
Residual difference	-	-	-

Chapter \ Country	R1	Total
Entries (FDI)	a+a'+c	(a+a')+(c+c')
Issues (DIA)	a+a'+c'	(a+a')+(c+c')
FDI flows/stocks balance	c-c'	0
Turnover(Tv)**	(a+a')+1/2(c+c') = ½ (TvX1+TvX2,3,4...)	(a+a')+(c+c') = ½ (Tv_{X1}+TvX2+TvW)
Cooperation capital	a+a'+c'	a+a'+2c'
Long-way flows	1/2(c-c')	c-c'
Residual difference	-	-

Accounting table 5

Chapter \ Country	**W**	**X1**	**X2,X3,X4,…**	**Xi**	**R1**
Entries (FDI)	c'	a'+c	a1, a2, a3,…	ai+d'	(a+a')+c+d'
Issues (DIA)	c	a+c'	a'1, a'2, a'3,…	ai'+d	(a+a')+c'+d
FDI flows/ stocks balance	c'-c	(c-c')-(a-a')	a-a'	(ai-ai')-(d-d')	(c-c')-(d-d')
Turnover(Tv)**	½ (c+c')	(a+a')+(c+c')	ai+ai'	(ai+ai')+(d+d')	(a+a')+1/2(c+c'+d+d') = ½ (TvX1+TvX2,3,4...)
Cooperation capital	c'	a+c'	a'1, a'2, a'3,…	ai'+d	a+a'+c'+d'
Long-way flows	½ (c-c')	c-c'-a	a1, a2, a3,…	di-di'	1/2[(c-c')+(d-d')]
Residual diff.	-	-	-	-	-

Chapter \ Country	**V**	**R2**	**Total**
Entries (FDI)	d	d	(a+a')+(c+c')+(d+d')
Issues (DIA)	d'	d'	(a+a')+(c+c')+(d+d')
FDI flows/ stocks balance	d-d'	d-d'	0
Turnover(Tv)**	d+d'	1/2(d+d')	(a+a')+(c+c')+(d+d') = ½ (Tv_{X1}+TvX2+TvW)
Cooperation capital	-	d’	(a+a')+2(c'+d')
Long-way flows	d-d'	1/2(d-d')	(c-c')+(d-d')
Residual difference	-	-	-

The [b] type transactions (multilateral Ccp)

Primary b type accounting table

Chapter \ Country	**Y1**	**Y2**	**Y3**	**…**
Entries (FDI)	bn	b1	b2	…
Issues (DIA)	b1	b2	b3	…
FDI flows/stocks balance	bn-b1	b1-b2	b2-b3	…
Balance algebraic sign	(-)	(+)	(+)	(+)
Turnover(Tv)**	(bn+b1)	(b1+b2)	(b2+b3)	…
Cooperation capital	bn	b2	b3	…
Long-way flows	-	-	-	-
Residual difference	-	-	-	-

Chapter \ Country	**Yn**	**R1**
Entries (FDI)	b(n-1)	b1+b2+…bn
Issues (DIA)	bn	b1+b2+…bn
FDI flows/stocks balance	b(n-1)-bn	0
Balance algebraic sign	(+)	No sign
Turnover(Tv)**	[b(n-1)+bn]	∑b
Cooperation capital	bn	2bn+∑[b2;b(n-1)]
Long-way flows	-	-
Residual difference	-	b1-bn

Intermediary (second wave) [b] type accounting table

Chapter \ Country	**Y1**	**Y2**	**Y3**	**…**
Entries (FDI)	b1'	b2'	b3'	…
Issues (DIA)	bn'	b1'	b2'	…
FDI flows/stocks balance	b1'-bn'	b2'-b1'	b3'-b2'	…
Balance algebraic sign	(+)	(-)	(-)	(-)
Turnover(Tv)**	b1'+bn'	b2'+b1'	b3'+b2'	…
Cooperation capital	bn'	b2'	b3'	…
Long-way flows	-	-	-	-
Residual difference	-	-	-	-

Chapter \ Country	**Yn**	**R1**
Entries (FDI)	bn'	b1'+b2'+…bn'
Issues (DIA)	b(n-1)'	b1'+b2'+…bn'
FDI flows/stocks balance	bn'-b(n-1)'	0
Balance algebraic sign	(-)	No sign
Turnover(Tv)**	bn'+b(n-1)'	∑b'
Cooperation capital	bn'	2bn'+∑[b2';b(n-1)']
Long-way flows	-	-
Residual difference	-	b1'-bn'

Final [b] type accounting table

Chapter \ Country	**Y1**	**Y2**	**Y3**	**…**
Entries (FDI)	bn+b1'	b1+b2'	b2+b3'	…
Issues (DIA)	b1+bn'	b2+b1'	b3+b2'	…
FDI flows/stocks balance	(bn-bn')-(b1-b1')	(b1-b1')-(b2-b2')	(b2-b2')-(b3-b3')	…
Balance algebraic sign	(-)	(+)	(+)	(+)
Turnover(Tv)**	(bn+b1)+(bn'+b1')	(b1+b2)+(b1'+b2')	(b2+b3)+(b2'+b3')	…
Cooperation capital	bn+b1'	b2+b1'	b3+b2'	…
Long-way flows	-	-	-	-
Residual difference	-	-	-	-

Chapter \ Country	**Yn**	**R1**
Entries (FDI)	b(n-1)+bn'	∑bi+∑bi'
Issues (DIA)	bn+b(n-1)'	∑bi+∑bi'
FDI flows/stocks balance	[b(n-1)-b(n-1)'] -(bn-bn')	0
Balance algebraic sign	(+)	No sign
Turnover(Tv)**	[b(n-1)+bn]+[b(n-1)'+bn'')	∑bi+∑bi'
Cooperation capital	bn+ b(n-1)'	2(bn+b1')+∑[b2;b(n-1)]+∑[b2';b(n-1)']
Long-way flows	-	-
Residual difference	-	(b1-bn)-(b1'-bn')

Annex 4
World, versus section capital market areas. A comparison

the world area	in common	capital section area
→	(1) Σ FDI = ∑ DIA and (2) ∑FDI stocks = 0 are both valid:	←
(a) for each transaction done, individual flows, stocks, year and multi-year long developments	↔	(a) only for the given 26 years interval and stocks accounted along.
(b) as such -- these are perfect(as much as permanent) equalities and just zero.	↔	(b) as approximation only -- i.e. as distinct, but not closed market spaces. There ever remain transactions and less significant flow amounts crossing these autonomous and distinct market borders.
→	(2) an area that is multi-countries and multi-regions:	
	(3) homogeneity is missing -- see the world region landscapes -- and replaced by diversity of geo-economic areas.	
	(4) the same rules of converting FDI&DIA into Ccp, Lwf and Tv.	←
	(5) Both areas suppose Ccp and Lwf as components -- never just one of these.	

Annex 5
Reiterating the model key concepts for detecting and evaluating international capital flows

	item	definition	further explaining
1	[a/b]	intra-region Ccp issued by investor country leaders	When/where full investment country leaders
2	[a'/b']	intra-region Ccp issued by the rest of (recipient) countries, as the response of the [a/b] amounts received	When/where full investment country leaders
3	[c]	Total Lwf/international capital received by the region / the country, when/where positive FDI stocks balance	[c]=FDI - [a/b -a'/b' - d'] -- when/where investment leader countries in the region and only for the region
4	[c']	Long-way/distance Ccp issued, as the reply to the [c] Lwf previously received	
5	[d]	Total Lwf issued by the region /the country, when/where negative FDI stocks balance	
6	[d']	Long-way/distance Ccp received, as the reply of the [d] Lwf previously invested	
7	[Ccp]	total cooperation capital of a country/a region	the lower amount accounted of FDI or DIA -- for the individual country
			Ccp = a/b+a'/b' + c'+d' -- for the region
8	[Lwf]	Long-way flows	[c-c'] -- for the country with positive FDI stocks balance
			[d-d'] -- for the individual country with negative FDI stocks balance
			[c-c'] + [d-d'] for the region
9	[Tv]	turnover[Tv]:	
		all cumulated FDI-DIA traded amounts of all areas	Tv =[a+a']/[b+b'] + [c+c'] + [d+d']
		FDI and DIA of a country cumulated in module numbers	Tv = FDI + DIA
		the half of cumulated Tv of countries in a region (Theorem 1)	Tv = 1/2 ∑ Tv(Xi)
		the half of Tv accounted by a country (see Tv+FDI+DIA above) that does not belong to a region -- i.e. an international investor country (Top6)	

Annex 6
Research results

1. Description by regions

Euro-zone

(A) FDI, DIA & FDI stock balances

Ord	Country	FDI		DIA		FDI stock balances	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	Germany	845853	3.5	1609790	6.6	-763937	-3.1
ii	Netherlands	771295	3.2	1185877	4.9	-414582	-1.7
iii	France	654240	2.7	1400064	5.8	-745824	-3.1
iv	Spain	632005	2.6	862385	3.6	-230381	-1.0
v	Belgium	497098	2.0	412389	1.7	84709	0.3
vi	Ireland	400388	1.6	376923	1.6	23465	0.0
vii	Italy	357706	1.5	582941	2.4	-225235	-0.9
viii	Luxembourg	298286	1.2	344333	1.4	-46047	-0.2
ix	Malta	183812	0.8	73552	0.3	110260	0.5
x	Austria	139350	0.6	227226	0.9	-87876	-0.3
xi	Finland	115175	0.5	124777	0.5	-9602	0.0
xii	Portugal	98689	0.4	60464	0.2	38225	0.2
xiii	Greece	37531	0.2	25417	0.1	12114	0.1
xiv	Cyprus	36914	0.2	44371	0.2	-7457	0.0
-	**Euro-zone**	**5068342**	**21.0**	**7330509**	**30.2**	**-2262167**	**-9.2**

(B) Cooperation capital, long-way and total flows by regions

Ord	Country	Cooperation capital		Long way flows		Turnover	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	Germany	845853	3.5	763937	3.1	2455643	10.1
ii	Netherlands	771295	3.2	414582	1.7	1957172	8.1
iii	France	654240	2.7	745824	3.1	2054304	8.5
iv	Spain	632005	2.6	230381	1.0	1494390	6.2
v	Belgium	412389	1.7	84709	0.3	909487	3.7
vi	Ireland	376923	1.6	23465	0.0	777311	3.2
vii	Italy	357706	1.5	225235	0.9	940647	3.9

viii	Luxembourg	298286	1.2	46047	0.2	642619	2.6
ix	Malta	73552	0.3	110260	0.5	257364	1.1
x	Austria	139350	0.6	87876	0.3	366576	1.5
xi	Finland	115175	0.5	9602	0.0	239952	1
xii	Portugal	60464	0.2	38225	0.2	159153	0.6
xiii	Greece	25417	0.1	12114	0.1	62948	0.3
xiv	Cyprus	36914	0.2	7457	0.0	81285	0.4
-	**Euro-zone**	**4799569**	**19.9**	2799714	11.4	12398851	51.2
-	**1/2**	**/**	**/**	**1399857**	**5.7**	**6199426**	**25.6**

C) Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	Lw/Tv	IntraCCp	InterCCp
77.4	22.6	60.2	39.8

West Europe
(A) FDI, DIA & FDI stock balances

Ord.	Country	FDI		DIA		FDI stocks balance	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	Switzerland	364707	1.5	782722	3.3	-418014	-1.8
ii	Sweden	359999	1.5	499007	2.1	-139009	-0.6
iii	Norway	147664	0.6	257281	1.1	-109618	-0.5
iv	Denmark	122474	0.5	187236	0.8	-64762	-0.3
v	Iceland	19844	0.1	19120	0.1	725	0.0
vi	Gibraltar	20042	0.1	0	0	20042	0.1
-	**West Europe**	**1034729**	**4.3**	**1745366**	**7.4**	**-710637**	**-3.1**

(B) Cooperation capital, long-way and total flows by regions

Ord.	Country	Ccp		Lwf		Turnover	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	Switzerland	364707	1.5	418014	1.8	1147429	4.8
ii	Sweden	359999	1.5	139009	0.6	859006	3.6
iii	Norway	147664	0.6	109618	0.5	404945	1.7
iv	Denmark	122474	0.5	64762	0.3	309709	1.3
v	Iceland	19120	0.1	725	0.0	38964	0.2
vi	Gibraltar	0	0.0	20042	0.1	20042	0.1
-	**West Europe**	**1013963**	**4.2**	752169	3.3	2780095	11.7
-	**1/2**	**/**	**/**	**376085**	**1.7**	**1390047**	**5.9**

(C) Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	Lw/Tv	IntraCCp	InterCCp
72.9	27.1	94.5	5.5

Central and Eastern(CEE) Europe
(A) FDI, DIA & FDI stock balances

Ord.	Country	FDI		DIA		FDI stock balance	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	Poland	167603	0.7	25403	0.1	142200	0.6
ii	Czech Rep.	85314	0.4	21213	0.1	64100	0.3
iii	Hungary	57095	0.2	45391	0.2	11704	0.0
iv	Romania	79314	0.3	498	0.0	78816	0.3
v	Bulgaria	55735	0.2	3103	0.0	52632	0.2
vi	Croatia	29207	0.1	7131	0.0	22076	0.1
vii	Slovakia	43415	0.2	4960	0.0	38455	0.2
viii	Estonia	12902	0.1	7254	0.0	5647	0.1
ix	Lithuania	12416	0.1	2820	0.0	9596	0.1
x	Latvia	12529	0.1	1961	0.0	10568	0.1
xi	Slovenia	10612	0.0	6016	0.0	4596	0.0
-	**CEE Europe**	**566140**	**2.4**	**125749**	**0.4**	**440391**	**2.0**

: These above are basic data (see 'WIR 2016') cumulated for the 1990-2015 year interval.

(B) Cooperation capital, long-way and total flows/turnover

Ord.	Country	Ccp		Lwf		Turnover	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	Poland	25403	0.1	142200	0.6	193005	0.8
ii	Czech Rep.	21213	0.1	64100	0.3	106527	0.5
iii	Hungary	45391	0.2	11704	0.0	102487	0.4
iv	Romania	498	0.0	78816	0.3	79812	0.3
v	Bulgaria	3103	0.0	52632	0.2	58838	0.2
vi	Croatia	7131	0.0	22076	0.1	36338	0.1
vii	Slovakia	4960	0.0	38455	0.2	48375	0.2
viii	Estonia	7254	0.0	5647	0.1	20156	0.1
ix	Lithuania	2820	0.0	9596	0.1	15236	0.1
x	Latvia	1961	0.0	10568	0.1	14489	0.1
xi	Slovenia	6016	0.0	4596	0.0	16628	0.0
-	**CEE Europe**	**125749**	**0.4**	440391	2.0	691890	2.8
-	**1/2**	**/**	**/**	**220195**	**1.0**	**345945**	**1.4**

(C) Weights(%) of:
/ cooperation capital and long-way flows in total turnover
/ intra- and inter-regions cooperation capital in total

CCp/Tv	Lw/Tv	IntraCCp	InterCCp
36.3	63.7	100.0	0.0

South-East Europe
(A) FDI, DIA & FDI stock balances

Ord.	Country	FDI		DIA		FDI stocks balance	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	Serbia & Montenegro	44172	0.2	3911	0.0	40261	0.2
ii	Bosnia & Herzegovina	7993	0.0	260	0.0	7733	0.0
iii	Albania	10820	0.0	342	0.0	10478	0.0
iv	The former Yugoslav Republic of Macedonia	5065	0.0	6	0.0	5059	0.0
v	Kosovo	4338	0.0	0	0.0	4338	0.0
-	**SE Europe**	**72387**	**0.2**	**4519**	**0.0**	**67869**	**0.2**

(B) Cooperation capital, long-way and total flows/turnover by regions

Ord.	Country	Ccp		Lwf		Turnover	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	Serbia & Montenegro	3911	0.0	40261	0.2	48083	0.2
ii	Bosnia & Herzegovina	260	0.0	7733	0.0	8253	0.0
iii	Albania	342	0.0	10478	0.0	11162	0.0
iv	The former Yugoslav Republic of Macedonia	6	0.0	5059	0.0	5070	0.0
v	Kosovo	0	0.0	4338	0.0	4338	0.0
-	**SE Europe**	**4519**	**0.0**	67869	0.2	76906	0.2
-	**1/2**	**/**	**/**	**33934**	**0.1**	**38453**	**0.1**

(C) Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	Lw/Tv	IntraCCp	InterCCp
11.8	**88.2**	**100.0**	**0.0**

CIS countries

(A) FDI, DIA & FDI stock balances

Ord	Country	FDI		DIA		FDI stock bal.	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	Russian Federation	452008*	1.9*	512559	2.1	-60551	-0.2
ii	Kazakhstan	129551	0.5	27639	0.1	101912	0.4
iii	Ukraine	77433	0.3	4769	0.0	72664	0.3
iv	Turkmenistan	32124	0.1	0	0.0	32124	0.1
v	Azerbaijan	23919	0.1	15741	0.1	8178	0.0
vi	Belarus	20940	0.1	671	0.0	20269	0.1
vii	Georgia	15080	0.1	1392	0.0	13688	0.1
viii	Uzbekistan	9888	0.0	0	0.0	9888	0.0
ix	Armenia	6913	0.0	421	0.0	6492	0.0
x	Kyrgyzstan	4357	0.0	83	0.0	4274	0.0
xi	Moldova, Republic of	4134	0.0	192	0.0	3942	0.0
xii	Tajikistan	2727	0.0	0	0.0	2727	0.0
-	**CIS**	**779074**	**3.1**	**563467**	**2.3**	**215607**	**0.8**

* For this investment leader country in the region, this amount is assumed to be the sum of basic Lwf received by the whole region [c] and the cooperation capital of the rest of countries in the region [a'].

(B) Cooperation capital, long-way and total flows by regions

Ord	Country	Cooperation capital		Long way flows		Turnover	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	Russian Federation	452008	1.9	60551	0.2	964567	4.0
ii	Kazakhstan	27639	0.1	101912	0.4	157190	0.6
iii	Ukraine	4769	0.0	72664	0.3	82202	0.3
iv	Turkmenistan	0	0.0	32124	0.1	32124	0.1
v	Azerbaijan	15741	0.1	8178	0.0	39660	0.2
vi	Belarus	671	0.0	20269	0.1	21611	0.1
vii	Georgia	1392	0.0	13688	0.1	16472	0.1
viii	Uzbekistan	0	0.0	9888	0.0	9888	0.0
ix	Armenia	421	0.0	6492	0.0	7334	0.0
x	Kyrgyzstan	83	0.0	4274	0.0	4440	0.0
xi	Moldova, Republic of	192	0.0	3942	0.0	4326	0.0
xii	Tajikistan	0	0.0	2727	0.0	2727	0.0

	CIS	**502916**	**2.1**	336708	1.2	1342541	5.4
	1/2	**/**	**/**	**168354**	**0.6**	**671270**	**2.7**

(C Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	Lw/Tv	IntraCCp	InterCCp
74.9	25.1	75.2	24.8

(D) The Russian Federation's intra-Ccp returns [ai'] in the CIS region

Ord	Country	FDI/Russia's intra-CCp[ai]		DIA/country's Ccp[ai']		ai'/ai
		Mill.US$	% of world	Mill.US$	% of world	%
i	Kazakhstan	129551	0.5	27639	0.1	21.3
ii	Ukraine	77433	0.3	4769	0.0	6.2
iii	Turkmenistan	32124	0.1	0	0.0	0.0
iv	Azerbaijan	23919	0.1	15741	0.1	65.8
v	Belarus	20940	0.1	671	0.0	3.2
vi	Georgia	15080	0.1	1392	0.0	9.2
vii	Uzbekistan	9888	0.0	0	0.0	0.0
viii	Armenia	6913	0.0	421	0.0	6.1
ix	Kyrgyzstan	4357	0.0	83	0.0	1.9
x	Moldova, Republic of	4134	0.0	192	0.0	4.6
xi	Tajikistan	2727	0.0	0	0.0	0.0
-	**Total**	**324338**	**1.2**	**50908**	**0.2**	**15.7**
		[a]		**[a']**		**[a'/a]**

South Asia
(A) FDI, DIA & FDI stock balances

Ord	Country	FDI		DIA		FDI stock	Bal.
		Mill.US$	% of world	Mill. US$	% of world	Mill.US$	% of world
i	India	370789*	1.5*	140060	0.6	230729	0.9
ii	Iran, Islamic Republic of	42019	0.2	2465	0.0	39554	0.2
iii	Pakistan	35893	0.1	1092	0.0	34801	0.1
iv	Bangladesh	16716	0.1	327	0.0	16389	0.1
v	Sri Lanka	9840	0.0	689	0.0	9151	0.0
vi	Maldives	2764	0.0	0	0.0	2764	0.0

vii	Afghanistan	1738	0.0	367	0.0	1371	0.0
viii	Nepal	550	0.0	0	0.0	550	0.0
ix	Bhutan	384	0.0	0	0.0	384	0.0
x	Timor-Leste	369	0.0	44	0.0	325	0.0
	South Asia	**481062**	**1.9**	**145044**	**0.6**	**336018**	**1.3**

* For this investment leader country in the region, this amount is assumed to be the sum of basic Lwf received by the whole region [c] and the cooperation capital of the rest of countries in the region [a'].

(B) Cooperation capital, long-way and total flows by regions

Ord	Country	Ccp		Lwf		Turnover	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	India	140060	0.6	230729	0.9	510849	2.1
ii	Iran, Islamic Republic of	2465	0.0	39554	0.2	44484	0.2
iii	Pakistan	1092	0.0	34801	0.1	36985	0.1
iv	Bangladesh	327	0.0	16389	0.1	17043	0.1
v	Sri Lanka	689	0.0	9151	0.0	10529	0.0
vi	Maldives	0	0.0	2764	0.0	2764	0.0
vii	Afghanistan	367	0.0	1371	0.0	2105	0.0
viii	Nepal	0	0.0	550	0.0	550	0.0
ix	Bhutan	0	0.0	384	0.0	384	0.0
x	Timor-Leste	44	0.0	325	0.0	413	0.0
-	**South Asia**	**145044**	**0.6**	336018	1.3	626106	2.5
	1/2	**/**	**/**	**168009**	**0.7**	**313053**	**1.3**

(C Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	Lw/Tv	IntraCCp	InterCCp
46.3	53.7	79.5	20.5

(D) The India's intra-Ccp returns [ai'] in South Asia

Ord	Country	FDI/India's intra-CCp[ai]		DIA/country's Ccp[ai']		ai'/ai %
		Mill.US$	% of world	Mill.US$	% of world	
i	Iran, Islamic Republic of	42019	0.2	2465	0.0	5.9
ii	Pakistan	35893	0.1	1092	0.0	3.0
iii	Bangladesh	16716	0.1	327	0.0	2.0
iv	Sri Lanka	9840	0.0	689	0.0	7.0

v	Maldives	2764	0.0	0	0.0	0.0
vi	Afghanistan	1738	0.0	367	0.0	21.1
vii	Nepal	550	0.0	0	0.0	0.0
viii	Bhutan	384	0.0	0	0.0	0.0
ix	Timor-Leste	369	0.0	44	0.0	11.9
-	**Total**	**110273**	**0.4**	**4984**	**0.0**	**4.5**
		[a]		**[a']**		**[a'/a]**

East Asia
(A) FDI, DIA & FDI stock balances

Ord	Country	FDI		DIA		FDI stock bal.	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	China	1724671*	7.1*	813075	3.3	911596	3.8
Ii	Hong Kong, China	1076080*	4.4*	1098468	4.5	-22388	-0.1
Iii	Korea, Republic of	182259	0.8	310480	1.3	-128221	-0.5
Iv	Taiwan Province of China	65073	0.3	187573	0.8	-122500	-0.5
V	Macao, China	29333	0.1	4117	0.0	25216	0.1
Vi	Mongolia	16393	0.1	497	0.0	15896	0.1
vii	Korea, Democratic People's Republic of	663	0.0	0	0.0	663	0.0
	East Asia	**3094472**	**12.8**	**2414210**	**9.9**	**680262**	**2.9**

* For these two investment leader countries in the region, these amounts are assumed to be the sum of basic Lwf received by the whole region [c] and the cooperation capital of the rest of countries in the region [a'].

(B) Cooperation capital, long-way and total flows by regions

Ord	Country	Ccp		Lwf		Turnover	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	China	813075	3.3	911596	3.8	2537746	10.4
Ii	Hong Kong, China	1076080	4.4	22388	0.1	2174548	8.9
Iii	Korea, Republic of	182259	0.8	128221	0.5	492739	2.1
Iv	Taiwan Province of China	65073	0.3	122500	0.5	252646	1.1
V	Macao, China	4117	0.0	25216	0.1	33450	0.1
Vi	Mongolia	497	0.0	15896	0.1	16890	0.1
vii	Korea, Democratic People's Republic of	0	0.0	663	0.0	663	0.0
-	**East Asia**	**2141101**	**8.8**	1226480	5.1	5508682	22.7
	1/2	**/**	**/**	**613240**	**2.6**	**2754341**	**11.4**

(C) Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	Lw/Tv	IntraCCp	InterCCp
77.7	22.3	25.5	74.5

(D) The China's and Hong-Kong's intra-Ccp returns [ai'] in East Asia

Ord	Country	FDI/China & Hong - Kong's intra-CCp[ai]		DIA/ country's Ccp[ai']		ai'/ai %
		Mill.US$	% of world	Mill.US$	% of world	
i	Korea, Republic of	182259	0.8	182259*	0.8*	100.0
ii	Taiwan Province of China	65073	0.3	65073*	0.3*	100.0
iii	Macao, China	29333	0.1	4117	0.0	14.0
iv	Mongolia	16393	0.1	497	0.0	3.0
v	Korea, Democratic People's Republic of	663	0.0	0	0.0	0.0
-	**Total:** China & Hong Kong	**293721**	**1.3**	**251946**	**1.1**	**85.8**
		[a]		**[a']**		**[a'/a]**

* These numbers are, of course, proper to our model applied, but equally doubtful for the reality and a real challenge for our same model since these countries (Korea and Taiwan) are found to invest out of their region, as well. But the most doubtful here seems to be the so high [a'/a%] Ccp return rate from the rest of countries to investment leader countries of the region, that is about 86%, so not at all similar to what happened elsewhere in the world, not even to the other countries in the same region.

Near East

(A) FDI, DIA & FDI stock balances

Ord	Country	FDI		DIA		FDI stock balances	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	Saudi Arabia*	219737*	0.9*	38276	0.2	181461	0.7
ii	Turkey*	177757*	0.7*	36014	0.1	141743	0.6
iii	Israel*	126536*	0.5*	95106	0.4	31430	0.1
iv	United Arab Emirates*	115898*	0.5*	88682	0.4	27216	0.1
v	Lebanon	49346	0.2	13005	0.1	36341	0.1
vi	Qatar	34476	0.1	46475	0.2	-11999	-0.1
vii	Jordan	26967	0.1	242	0.0	26725	0.1
viii	Iraq	26686	0.1	2142	0.0	24544	0.1
ix	Bahrain	20163	0.1	7394	0.0	12769	0.1
x	Oman	18447	0.1	7555	0.0	10892	0.1
xi	Kuwait	12117	0.0	69223	0.3	-57107	-0.3
xii	Syrian Arab Republic	10628	0.0	0	0.0	10628	0.0
xiii	State of Palestine	2542	0.0	2188	0.0	354	0.0
xiv	Yemen	623	0.0	667	0.0	-44	0.0
-	**Near East**	**841922**	**3.3**	**406968**	**1.7**	**434953**	**1.6**

* For these investment leader countries in the region, these amounts are assumed to be the sum of basic Lwf received by the whole region [c] and the cooperation capital of the rest of countries in the region [a'].

(B) Cooperation capital, long-way and total flows by regions

Ord	Country	Ccp		Lwf		Turnover	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	Saudi Arabia	38276	0.2	181461	0.7	258012	1.1
ii	Turkey	36014	0.1	141743	0.6	213771	0.8
iii	Israel	95106	0.4	31430	0.1	221643	0.9
iv	United Arab Emirates	88682	0.4	27216	0.1	204580	0.9
v	Lebanon	13005	0.1	36341	0.1	62351	0.3
vi	Qatar	34476	0.1	11999	0.1	80951	0.3
vii	Jordan	242	0.0	26725	0.1	27209	0.1
viii	Iraq	2142	0.0	24544	0.1	28828	0.1
ix	Bahrain	7394	0.0	12769	0.1	27557	0.1
x	Oman	7555	0.0	10892	0.1	26001	0.1

xi	Kuwait	12117	0.0	57107	0.3	81340	0.3
xii	Syrian Arab Republic	0	0.0	10628	0.0	10628	0.0
xiii	State of Palestine	2188	0.0	354	0.0	4730	0.0
xiv	Yemen	623	0.0	44	0.0	1290	0.0
-	**Near East**	**337818**	**1.3**	573253	2.4	1248890	5.0
	1/2	**/**	**/**	**286626**	**1.2**	**624445**	**2.5**

(C) Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	Lw/Tv	IntraCCp	InterCCp
54.1	45.9	83.4	16.6

(D) The investment country leaders' group's* intra-Ccp returns [ai'] in the Near East

Ord	Country	Investment leader countries'* intra-CCp[ai]		DIA/country's Ccp[ai']		ai'/ai %
		Mill.US$	% of world	Mill.US$	% of world	
i	Lebanon	49346	0.2	13005	0.1	26.4
ii	Qatar	34476	0.1	34476	0.1	100.0**
iii	Jordan	26967	0.1	242	0.0	0.9
iv	Iraq	26686	0.1	2142	0.0	8.0
v	Bahrain	20163	0.1	7394	0.0	36.7
vi	Oman	18447	0.1	7555	0.0	41.0
vii	Kuwait	12117	0.0	12117	0.0	100.0**
viii	Syrian Arab Republic	10628	0.0	0	0.0	0.0
ix	State of Palestine	2542	0.0	2188	0.0	86.1
x	Yemen	623	0.0	623	0.0	100.0**
-	**Total:** Saudi Arabia, Turkey, Israel, United Arab Emirates	**201993**	**0.7**	**79740.5**	**0.2**	**39.5**
		[a]		**[a']**		**[a'/a]**

* That are Saudi Arabia, Turkey, Israel and United Arab Emirates.

** These numbers are, of course, proper to our model applied, but equally doubtful for the reality and a real challenge for our same model since these countries (Qatar, Kuwait and Yemen) are found to invest out of their region, as well.

South East Asia

(A) FDI, DIA & FDI stock balances

Ord	Country	FDI		DIA		FDI stock	Bal.
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	Singapore*	669061*	2.8*	410662	1.7	258400	1.1
ii	Thailand*	161441*	0.7*	65656	0.3	95785	0.4
iii	Indonesia*	158547*	0.7*	64488	0.3	94059	0.4
iv	Malaysia	154756	0.6	151982	0.6	2774	0.0
v	Viet Nam	102728	0.4	8590	0.0	94138	0.4
vi	Philippines	48367	0.2	25563	0.1	22805	0.1
vii	Myanmar	20416	0.1	0	0.0	20416	0.1
viii	Cambodia	15251	0.1	347	0	14904	0.1
ix	Brunei Darussalam	14137	0.1	2645	0.0	11492	0.1
x	Lao People's Democratic Rep.	4844	0.0	0	0.0	4844	0.0
xi	Timor-Leste	369	0.0	44	0.0	326	0.0
	SE Asia	**1349918**	**5.7**	**729977**	**3.0**	**619941**	**2.7**

* For these investment leader countries in the region, these amounts are assumed to be the sum of basic Lwf received by the whole region [c] and the cooperation capital of the rest of countries in the region [a'].

(B) Cooperation capital, long-way and total flows by regions

Ord	Country	Ccp		Lwf		Turnover	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	Singapore	410662	1.7	258400	1.1	1079723	4.5
ii	Thailand	65656	0.3	95785	0.4	227097	1.0
iii	Indonesia	64488	0.3	94059	0.4	223035	1.0
iv	Malaysia	151982	0.6	2774	0.0	306739	1.2
v	Viet Nam	8590	0.0	94138	0.4	111318	0.4
vi	Philippines	25563	0.1	22805	0.1	73930	0.3
vii	Myanmar	0	0.0	20416	0.1	20416	0.1
viii	Cambodia	347	0.0	14904	0.1	15597	0.1
ix	Brunei Darussalam	2645	0.0	11492	0.1	16783	0.1
x	Lao People's Democratic Rep.	0	0.0	4844	0.0	4844	0.0
xi	Timor-Leste	44	0.0	326	0.0	413	0.0
-	**SE Asia**	**729977**	**3.0**	619941	2.7	2079895	8.7
	1/2	**/**	**/**	**309971**	**1.4**	**1039947**	**4.4**

(C) Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	Lw/Tv	IntraCCp	InterCCp
70.9	29.1	32.9	67.1

(D) The investment country leaders' group's* intra-Ccp returns [ai'] in the South-East Asia

Ord	Country	Investment leader countries'* intra-CCp[ai]		DIA/country's Ccp[ai']		ai'/ai %
		Mill.US$	% of world	Mill.US$	% of world	
i	Viet Nam	102728	0.4	8725	0.0	8.5
ii	Philippines	48367	0.2	25964	0.1	53.7
iii	Myanmar	20416	0.1	0	0.0	0.0
iv	Cambodia	15251	0.1	352	0.0	2.3
v	Brunei Darussalam	14137	0.1	2686	0.0	19.0
vi	Lao People's Democratic Republic	4844	0.0	0	0.0	0.0
vii	Timor-Leste	369	0.0	45	0.0	12.2
-	**Total:** Singapore, Thailand, Indonesia and Malaysia	**206112**	**0.9**	**37772**	**0.2**	**18.3**
		[a]		**[a']**		**[a'/a]**

* That are Singapore, Thailand, Indonesia and Malaysia.

Eurasia

(A) FDI, DIA and stock balances

Region	FDI		DIA		Stocks balance	
	Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
Euro-zone	5068342	21.0	7330509	30.2	-2262167	-9.2
West Europe	1034729	4.3	1745366	7.4	-710637	-3.1
CEE Europe	566140	2.4	125749	0.4	440391	2.0
SE Europe	72387	0.2	4519	0.0	67869	0.2
Near East	841922	3.3	406968	1.7	434953	1.6
East Asia	3094472	12.8	2414210	9.9	680262	2.9
South Asia	481062	1.9	145044	0.6	336018	1.3
SE Asia	1349918	5.7	729977	3.0	619941	2.7
CIS	779074	3.1	563467	2.3	215607	0.8
Eurasia	**13288046**	**54.7**	**13465809**	**55.5**	**-177763**	**-0.8**

(B) Cooperation capitals, long-way flows and turnover (I)

Region	Investment leader countries	Cooperation capital Ccp		Long-way flows LWf		Turnover Tv	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
Euro-zone	Germany, Netherlands, France, Spain	4799569	19.9	1399857	5.7	6199426	25.6
West Europe	Switzerland, Sweden, Norway, Denmark	1013963	4.2	376085	1.7	1390047	5.9
CEE Europe	No case	125749	0.4	220195	1.0	345945	1.4
SE Europe	No case	4519	0.0	33934	0.1	38453	0.1
East Asia	China, Hong Kong	2141101	8.8	613240	2.6	2754341	11.4
SE Asia	Singapore, Thailand, Indonesia, Malaysia	729977	3.0	309971	1.4	1039947	4.4
South Asia	India	145044	0.6	168009	0.7	313053	1.3
Near East	Saudi Arabia, Turkey, Israel, Emirates*	337818	1.3	286626	1.2	624445	2.5
CIS	Russian Federation	502916	2.1	168354	0.6	671270	2.7
Eurasia	x	**9800656**	**40.3**	**3576271**	**15.0**	**13376927**	**55.3**

* This is while investor countries out of this region are: Qatar, Kuwait, United Arab Emirates

(II)

Region	Investment leader countries	Adjusted Lwf entries [c-c']		Long distance Ccp [c'=d']		Adjusted Lwf issues [d-d']	
		Mill. US$	% of world	Mill. US$	% of world	Mill.US$	% of world
Euro-zone	Germany, Netherlands, France, Spain	268774	1.1	0	0.0	2530940	10.3
West Europe	Switzerland, Sweden, Norway, Denmark	20766	0.1	0	0.0	731403	3.2
CEE Europe	No case	440391	2.0	0	0.0	0	0.0
SE Europe	No case	67869	0.2	0	0.0	0	0.0
East Asia	China, Hong Kong	953371	4.0	1595434	6.4	273109	1.1
SE Asia	Singapore, Thailand, Indonesia, Malaysia	619941	2.7	188412	0.8	0	0.0
South Asia	India	365805	1.5	29787	0.2	-	-
Near East	Saudi Arabia, Turkey, Israel, Emirates*	504103	2.0	56085	0.4	69150	0.4
CIS	Russian Federation	276158	1.0	124943	0.7	60551	0.2
Eurasia	x	**3517178**	**14.6**	**1994661**	**8.5**	**3725704**	**15.4**

* This is while investor countries out of this region are: Qatar, Kuwait, United Arab Emirates

(C) Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	Lw/Tv	IntraCCp	InterCCp
73.2	26.8	64.7	35.3

North Africa
(A) FDI, DIA and stock balances

Ord.	Country	FDI		DIA		Stocks balance	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	Egypt	83722	0.4	6976	0.0	76746	0.4
Ii	Libya	18718	0.1	19285	0.1	-567	0.0
Iii	Morocco	40745	0.2	5196	0.0	35549	0.2
Iv	Tunisia	25106	0.1	437	0.0	24669	0.1
V	Algeria	24712	0.1	1669	0.0	23043	0.1
Vi	Sudan	24587	0.1	0	0.0	24587	0.1
vii	South Sudan	-1328	0.0	0	0.0	-1328	0.0

-	**North Africa**	**216261**	**1.0**	**33564**	**0.1**	**182698**	**0.9**

(B) Cooperation capital, long-way and total flows

Ord.	**Country**	**Ccp**		**LWf**		**Turnover**	
		Mill.US$	**% of world**	**Mill.US$**	**% of world**	**Mill.US$**	**% of world**
i	Egypt	6976	0.0	76746	0.4	90697	0.4
Vi	Libya	18718	0.1	567	0.0	38003	0.2
Ii	Morocco	5196	0.0	35549	0.2	45941	0.2
Iii	Tunisia	437	0.0	24669	0.1	25544	0.1
Iv	Algeria	1669	0.0	23043	0.1	26381	0.1
V	Sudan	0	0.0	24587	0.1	24587	0.1
vii	South Sudan	-1328	0.0	1328	0.0	-1328	0.0
-	**North Africa**	**31668**	**0.1**	186488	0.9	249825	1.1
-	**1/2**	**/**	**/**	**93244**	**0.5**	**124912**	**0.6**

(C) Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	**Lw/Tv**	**IntraCCp**	**InterCCp**
25.4	74.6	100.0	0.0

Middle Africa

(A) FDI, DIA and stock balances

Ord.	**Country**	**FDI**		**DIA**		**Stocks balance**	
		Mill.US$	**% of world**	**Mill.US$**	**% of world**	**Mill.US$**	**% of world**
i	Nigeria	92235	0.4	15664	0.1	76571	0.3
ii	Ghana	25980	0.1	502	0.0	25478	0.1
iii	Congo	22943	0.1	69	0.0	22874	0.1
iv	Congo, Democratic Rep. of	19492	0.1	2024	0.0	17468	0.1
v	United Rep. of Tanzania	17749	0.1	4	0.0	17745	0.1
vi	Equatorial Guinea	13725	0.1	2	0.0	13723	0.1
vii	Uganda	11058	0.0	84	0.0	10974	0.0
viii	Ethiopia	10580	0.0	0	0.0	10580	0.0
ix	Madagascar	9448	0.0	14	0.0	9434	0.0
x	Côte d'Ivoire	7617	0.0	96	0.0	7521	0.0
xi	Niger	6419	0.0	349	0.0	6070	0.0

xii	Mauritania	6418	0.0	85	0.0	6333	0.0
xiii	Liberia	6093	0.0	6774	0.0	-681	0.0
xiv	Gabon	5628	0.0	-33	0.0	5661	0.0
xv	Cameroon	5462	0.0	-702	0.0	6164	0.0
xvi	Kenya	5267	0.0	474	0.0	4793	0.0
xvii	Chad	4660	0.0	34	0.0	4626	0.0
xviii	Mali	4197	0.0	62	0.0	4135	0.0
xix	Mauritius	4128	0.0	1171	0.0	2957	0.0
xx	Senegal	4090	0.0	535	0.0	3555	0.0
xxi	Sierra Leone	3834	0.0	-6	0.0	3840	0.0
xxii	Guinea	3515	0.0	148	0.0	3367	0.0
xxiii	Benin	2836	0.0	237	0.0	2599	0.0
xxiv	Seychelles	2583	0.0	261	0.0	2322	0.0
xxv	Burkina Faso	2302	0.0	353	0.0	1949	0.0
xxvi	Rwanda	2234	0.0	28	0.0	2206	0.0
xxvii	Somalia	2179	0.0	0	0.0	2179	0.0
xxviii	Togo	1876	0.0	2067	0.0	-191	0.0
xxix	Cabo Verde	1866	0.0	-27	0.0	1893	0.0
xxx	Djibouti	1504	0.0	0	0.0	1504	0.0
xxxi	Gambia	898	0.0	155	0.0	743	0.0
xxxii	Eritrea	887	0.0	0	0.0	887	0.0
xxxiii	Central African Rep.	487	0.0	29	0.0	458	0.0
xxxiv	Sao Tome and Principe	376	0.0	29	0.0	347	0.0
xxxv	Guinea-Bissau	247	0.0	4	0.0	243	0.0
xxxvi	Comoros	90	0.0	0	0.0	90	0.0
xxxvii	Burundi	88	0.0	2	0.0	86	0.0
xxxviii	Mayotte	5	0.0	0	0.0	5	0.0
xxxix	Saint Helena	-4	0.0	0	0.0	-4	0.0
-	**Middle Africa**	**310990**	**0.9**	**30490**	**0.1**	**280502**	**0.8**

(B) Cooperation capital, long-way and total flows

Ord.	**Country**	**Ccp**		**LWf**		**Turnover**	
		Mill.US$	**% of world**	**Mill. US$**	**% of world**	**Mill.US$**	**% of world**
i	Nigeria	15664	0.1	76571	0.3	107899	0.5
ii	Ghana	502	0.0	25478	0.1	26482	0.1
iii	Congo	69	0.0	22874	0.1	23012	0.1

iv	Congo, Democratic Rep. of	2024	0.0	17468	0.1	21516	0.1
v	United Rep. of Tanzania	4	0.0	17745	0.1	17753	0.1
vi	Equatorial Guinea	2	0.0	13723	0.1	13727	0.1
vii	Uganda	84	0.0	10974	0.0	11142	0.0
viii	Ethiopia	0	0.0	10580	0.0	10580	0.0
ix	Madagascar	14	0.0	9434	0.0	9462	0.0
x	Côte d'Ivoire	96	0.0	7521	0.0	7713	0.0
xi	Niger	349	0.0	6070	0.0	6768	0.0
xii	Mauritania	85	0.0	6333	0.0	6503	0.0
xiii	Liberia	6093	0.0	-681	0.0	12867	0.0
xiv	Gabon	-33	0.0	5661	0.0	5661	0.0
xv	Cameroon	-702	0.0	6164	0.0	6164	0.0
xvi	Kenya	474	0.0	4793	0.0	5741	0.0
xvii	Chad	34	0.0	4626	0.0	4694	0.0
xviii	Mali	62	0.0	4135	0.0	4259	0.0
xix	Mauritius	1171	0.0	2957	0.0	5299	0.0
xx	Senegal	535	0.0	3555	0.0	4625	0.0
xxi	Sierra Leone	-6	0.0	3840	0.0	3828	0.0
xxii	Guinea	148	0.0	3367	0.0	3663	0.0
xxiii	Benin	237	0.0	2599	0.0	3073	0.0
xxiv	Seychelles	261	0.0	2322	0.0	2844	0.0
xxv	Burkina Faso	353	0.0	1949	0.0	2655	0.0
xxvi	Rwanda	28	0.0	2206	0.0	2262	0.0
xxvii	Somalia	0	0.0	2179	0.0	2179	0.0
xxviii	Togo	1876	0.0	191	0.0	3943	0.0
xxix	Cabo Verde	-27	0.0	1893	0.0	1893	0.0
xxx	Djibouti	0	0.0	1504	0.0	1504	0.0
xxxi	Gambia	155	0.0	743	0.0	1053	0.0
xxxii	Eritrea	0	0.0	887	0.0	887	0.0
xxxiii	Central African Rep.	29	0.0	458	0.0	516	0.0
xxxiv	Sao Tome and Principe	29	0.0	347	0.0	405	0.0
xxxv	Guinea-Bissau	4	0.0	243	0.0	251	0.0
xxxvi	Comoros	0	0.0	90	0.0	90	0.0
xxxvii	Burundi	2	0.0	86	0.0	90	0.0

xxxviii	Mayotte	0	0.0	5	0.0	5	0.0
xxxix	Saint Helena	0	0.0	4	0.0	4	0.0
-	**Middle Africa**	**29616**	**0.1**	280891	0.8	343009	1.0
-	**1/2**	**/**	**/**	**140446**	**0.4**	**170062**	**0.5**

(C) Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	Lw/Tv	IntraCCp	InterCCp
17.4	82.6	100.0	0.0

Southern Africa

(A) FDI, DIA and stock balances

Ord.	Country	FDI		DIA		Stocks balance	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	South Africa	77763	0.3	42524	0.2	35239	0.1
ii	Mozambique	29580	0.1	23596	0.1	5984	0.0
iii	Zambia	17078	0.1	454	0.0	16624	0.1
iv	Namibia	10079	0.0	236	0.0	9843	0.0
v	Angola	8264	0.0	125	0.0	8139	0.0
vi	Botswana	6979	0.0	113	0.0	6866	0.0
vii	Zimbabwe	3702	0.0	88	0.0	3614	0.0
viii	Lesotho	1732	0.0	85	0.0	1647	0.0
ix	Malawi	1690	0.0	21	0.0	1669	0.0
x	Swaziland	1351	0.0	0	0.0	1351	0.0
-	**Southern Africa**	**158219**	**0.5**	**67242**	**0.3**	**90977**	**0.2**

(B) Cooperation capital, long-way and total flows by region

Ord.	Country	Ccp		LWf		Turnover	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	South Africa	42524	0.2	35239	0.1	120287	0.5
ii	Mozambique	23596	0.1	5984	0.0	53176	0.2
iii	Zambia	454	0.0	16624	0.1	17532	0.1
iv	Namibia	236	0.0	9843	0.0	10315	0.0
v	Angola	125	0.0	8139	0.0	8389	0.0
vi	Botswana	113	0.0	6866	0.0	7091	0.0
vii	Zimbabwe	88	0.0	3614	0.0	3789	0.0

viii	Lesotho	85	0.0	1647	0.0	1817	0.0
ix	Malawi	21	0.0	1669	0.0	1712	0.0
x	Swaziland	0	0.0	1351	0.0	1351	0.0
-	**Southern Africa**	**67242**	**0.3**	90977	0.2	225460	0.8
	1/2	**/**	**/**	**45488**	**0.1**	**112730**	**0.4**

(C) Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	Lw/Tv	IntraCCp	InterCCp
29.8	70.2	77.3	22.7

(D) The investment country leaders' group's* intra-Ccp returns [ai'] in the Southern Africa

Ord	Country	Investment leader countries' intra-CCp[ai]		DIA/country's Ccp[ai']		ai'/ai
		Mill.US$	% of world	Mill.US$	% of world	%
i	Zambia	17078	0.1	454	0.0	2.7
ii	Namibia	10079	0.0	236	0.0	2.3
iii	Angola	8264	0.0	125	0.0	1.5
iv	Botswana	6979	0.0	113	0.0	1.6
v	Zimbabwe	3702	0.0	88	0.0	2.4
vi	Lesotho	1732	0.0	85	0.0	4.9
vii	Malawi	1690	0.0	21	0.0	1.2
viii	Swaziland	1351	0.0	0	0.0	0.0
-	**Total:** South Africa	**50875**	**0.1**	**1122**	**0.0**	**2.2**
	& Mozambique	**[a]**		**[a']**		**[a'/a]**

* That are South Africa and Mozambique.

Africa
(A) FDI, DIA and stock balances

Ord.	Region	FDI		DIA		Stocks balance	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	North Africa	216261	1.0	33564	0.1	182698	0.9
Ii	Middle Africa	310990	0.9	30490	0.1	280502	0.8
Iii	Southern Africa	158219	0.5	67242	0.3	90977	0.2
	Africa	**685470**	**2.4**	**131295**	**0.5**	**554177**	**1.9**

(B) Cooperation capital, long-way and total flows by regions

Ord.	Region	Ccp		LWf		Turnover	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	North Africa	31668	0.1	186488	0.9	249825	1.1
Ii	Middle Africa	29616	0.1	282253	0.8	343009	1.0
Iii	Southern Africa	67242	0.3	90977	0.2	225460	0.8
-	**Africa**	**128526**	**0.5**	**559719**	**1.9**	**818294**	**2.9**

Region	c		c-c'		Ccp		c'	
	Mill. US$	% of world	Mill.US$	% of world	Mill.US$	% of world	Mill. US$	% of world
North	183265	0.9	183265	0.9	32996	0.1	0	0.0
Middle	281374	0.8	281374	0.8	29616	0.1	0	0.0
Southern	106221	0.4	90977	0.2	67242	0.3	15245	0.2
Africa	**570860**	**2.1**	**555616**	**1.9**	**129854**	**0.5**	**15245**	**0.2**

Region	d	
	Mill. US$	% of world
North	567	0.0
Middle	872	0.0
Southern	0	0.0
Africa	**1439**	**0.0**

(C) Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	Lw/Tv	IntraCCp	InterCCp
15.7	84.3	88.1	11.9

South America

(A) FDI, DIA and stock balances

Ord.	Country	FDI		DIA		Stocks bal	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	Brazil	785605	3.3	103506	0.4	682100	2.9
ii	Chile	228155	1.0	122404	0.5	105752	0.5
iii	Argentina	191587	0.8	30950	0.1	160637	0.7
iv	Columbia	155247	0.7	48740	0.2	106507	0.5
v	Peru	99772	0.4	2549	0.0	97222	0.4
vi	Venezuela, Bolivarian Rep. of	59002	0.2	22275	0.1	36728	0.1
vii	Uruguay	24174	0.1	213	0.0	23961	0.1
viii	Ecuador	13976	0.1	855	0.0	13120	0.1
ix	Bolivia, Pluri-national State of	13441	0.1	18	0.0	13423	0.1
x	Paraguay	4433	0.0	118	0.0	4316	0.0
xi	Guyana	2878	0.0	0	0.0	2878	0.0
xii	Falkland Islands (Malvinas)	75	0.0	2	0.0	73	0.0
xiii	Suriname	-647	0.0	0	0.0	-647	0.0
-	**South America**	**1577699**	**6.7**	**331630**	**1.3**	**1246069**	**5.4**

(B) Cooperation capital, long-way and total flows by regions

Ord.	Country	Ccp		LWf		Turnover	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	Brazil	103506	0.4	682100	2.9	889111	3.7
ii	Chile	122404	0.5	105752	0.5	350559	1.5
iii	Argentina	30950	0.1	160637	0.7	222537	0.9
iv	Columbia	48740	0.2	106507	0.5	203988	0.9
v	Peru	2549	0.0	97222	0.4	102321	0.4
vi	Venezuela, Bolivarian Rep.of	22275	0.1	36728	0.1	81277	0.3
vii	Uruguay	213	0.0	23961	0.1	24387	0.1
viii	Ecuador	855	0.0	13120	0.1	14831	0.1

ix	Bolivia, Pluri-national State of	18	0.0	13423	0.1	13459	0.1
x	Paraguay	118	0.0	4316	0.0	4551	0.0
xi	Guyana	0	0.0	2878	0.0	2878	0.0
xii	Falkland Islands (Malvinas)	2	0.0	73	0.0	77	0.0
xiii	Suriname	0	0.0	647	0.0	647	0.0
-	**South America**	**331630**	**1.3**	1247363	5.4	1910623	8.0
	1/2	**/**	**/**	**623682**	**2.7**	**955311**	**4.0**

(C) Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	Lw/Tv	IntraCCp	InterCCp
34.7	65.3	73.5	26.5

(D) The investment country leaders' group's* intra-Ccp returns [ai'] in the Southern Africa

Ord	Country	Investment leader countries' intra-CCp[ai]		DIA/country's Ccp[ai']		ai'/ai
		Mill.US$	% of world	Mill.US$	% of world	%
i	Peru	99772	0.4	2549	0.0	2.6
ii	Venezuela, Bolivarian Republic of	59002	0.2	22275	0.1	37.8
iii	Uruguay	24174	0.1	213	0.0	0.9
iv	Ecuador	13976	0.1	855	0.0	6.1
v	Bolivia, Pluri-national State of	13441	0.1	18	0.0	0.1
vi	Paraguay	4433	0.0	118	0.0	2.7
vii	Guyana	2878	0.0	0	0.0	0.0
viii	Falkland Islands (Malvinas)	75	0.0	2	0.0	2.7
ix	Suriname	-647	0.0	0	0.0	0.0
-	**Total:** Brazil, Chile,	**217104**	**0.9**	**26030**	**0.1**	**12.0**
	Argentina and Colombia	**[a]**		**[a']**		**[a'/a]**

* That are: Brazil, Chile, Argentina and Colombia.

Central America

(A) FDI, DIA and stock balances

Ord.	Country	FDI		DIA		Stocks bal.	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world

i	Mexico	499739	2.1	131771	0.6	367968	1.5
ii	Panama	39139	0.2	1428	0.0	37711	0.2
iii	Costa Rica	28652	0.1	1609	0.0	27043	0.1
iv	Guatemala	13176	0.1	648	0.0	12528	0.1
v	Honduras	12932	0.1	429	0.0	12503	0.1
vi	Nicaragua	8775	0.0	367	0.0	8408	0.0
vii	El Salvador	7863	0.0	-192	0.0	8055	0.0
viii	Belize	1768	0.0	37	0.0	1731	0.0
	Central America	**612043**	**2.6**	**136097**	**0.6**	**475946**	**2.0**

(B) Cooperation capital, long-way and total flows by regions

Ord.	**Country**	**Ccp**		**LWf**		**Turnover**	
		Mill.US$	**% of world**	**Mill.US$**	**% of world**	**Mill.US$**	**% of world**
i	Mexico	131771	0.6	367968	1.5	631510	2.7
ii	Panama	1428	0.0	37711	0.2	40567	0.2
iii	Costa Rica	1609	0.0	27043	0.1	30261	0.1
iv	Guatemala	648	0.0	12528	0.1	13824	0.1
v	Honduras	429	0.0	12503	0.1	13361	0.1
vi	Nicaragua	367	0.0	8408	0.0	9142	0.0
vii	El Salvador	-192	0.0	8055	0.0	7671	0.0
viii	Belize	37	0.0	1731	0.0	1805	0.0
-	**Central America**	**136481**	**0.6**	475946	2.0	748524	3.2
-	**1/2**	**/**	**/**	**237973**	**1.0**	**374070**	**1.6**

(C) Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	**Lw/Tv**	**IntraCCp**	**InterCCp**
36.4	63.6	85.7	14.3

(D) The investment country leader's* intra-Ccp returns [ai'] in Central America

Ord	**Country**	**Investment leader countries' intra-CCp[ai]**		**DIA/country's Ccp[ai']**		**ai'/ai**
		Mill.US$	**% of world**	**Mill.US$**	**% of world**	%
i	Panama	39139	0.2	1428	0.0	3.6
ii	Costa Rica	28652	0.1	1609	0.0	5.6

iii	Guatemala	13176	0.1	648	0.0	4.9
iv	Honduras	12932	0.1	429	0.0	3.3
v	Nicaragua	8775	0.0	367	0.0	4.2
vi	El Salvador	7863	0.0	-192	0.0	-2.4
vii	Belize	1768	0.0	37	0.0	2.1
-	**Total:** Mexico	**112305**	**0.5**	**4326**	**0.0**	**3.9**
		[a]		**[a']**		**[a'/a]**

* That is just Mexico.

Caribbean

(A) FDI, DIA and stock balances

Ord.	**Country**	**FDI**		**DIA**		**Stocks balance**	
		Mill.US$	**% of world**	**Mill.US$**	**% of world**	**Mill.US$**	**% of world**
i	British Virgin Islands	610623	2.57	759174	3.1	-148551	-0.6
ii	Cayman Islands	223028	0.9	136838	0.5	86190	0.4
iii	Bahamas	18533	0.0	102444	0.1	-83911	-0.3
iv	Anguilla	1257	0.0	32	0.0	1225	0.0
v	Dominican Republic	31066	0.1	-1056	0.0	32122	0.1
vi	Barbados	4880	0.0	32106	0.0	-27226	-0.1
vii	Haiti	1278	0.0	3552	0.0	-2275	0.0
viii	Curaçao	785	0.0	1297	0.0	-513	0.0
ix	Sin Maarten	215	0.0	729	0.0	-514	0.0
x	Puerto Rico	0	0.0	194	0.0	-194	0.0
xi	Turks and Caicos Islands	0	0.0	0	0.0	0	0.0
xii	Cuba	0	0.0	0	0.0	0	0.0
xiii	Grenada	1507	0.0	53	0.0	1454	0.0
xiv	Saint Kitts and Nevis	2045	0.0	1455	0.0	589	0.0
xv	Saint Vincent and the Grenadines	1866	0.0	1983	0.0	-117	0.0
xvi	Montserrat	114	0.0	1860	0.0	-1746	0.0
xvii	Dominica	775	0.0	112	0.0	662	0.0
xviii	Antigua and Barbuda	2756	0.0	119	0.0	2637	0.0
xix	Netherlands Antilles	68	0.0	2638	0.0	-2570	0.0
xx	Saint Lucia	2353	0.0	-68	0.0	2422	0.0

xxi	Aruba	798	0.0	733	0.0	65	0.0
xxii	Trinidad and Tobago	25554	0.1	77	0.0	25477	0.1
xxiii	Jamaica	12365	0.1	16424	0.1	-4059	0.0
-	**Caribbean**	**941864**	**3.8**	**1060695**	**3.8**	**-118831**	**-0.5**

(B) Cooperation capital, long-way and total flows by regions

Ord.	Country	Ccp		LWf		Turnover	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	British Virgin Islands	610623	2.6	148551	0.5	1369797	5.7
ii	Cayman Islands	136838	0.5	86190	0.4	359865	1.4
iii	Bahamas	18533	0.0	83911	0.1	120977	0.1
iv	Anguilla	32	0.0	1225	0.0	1289	0.0
v	Dominican Republic	-1056	0.0	32122	0.1	30010	0.1
vi	Barbados	4880	0.0	27226	0.0	36986	0.0
vii	Haiti	1278	0.0	2275	0.0	4830	0.0
viii	Curacao	785	0.0	513	0.0	2082	0.0
ix	Sin Maarten	215	0.0	514	0.0	944	0.0
x	Puerto Rico	0	0.0	194	0.0	194	0.0
xi	Turks and Caicos Isl.	0	0.0	0	0.0	0	0.0
xii	Cuba	0	0.0	0	0.0	0	0.0
xiii	Grenada	53	0.0	1454	0.0	1560	0.0
xiv	Saint Kitts and Nevis	1455	0.0	589	0.0	3500	0.0
xv	Saint Vincent and the Grenadines	1866	0.0	117	0.0	3849	0.0
xvi	Montserrat	114	0.0	1746	0.0	1973	0.0
xvii	Dominica	112	0.0	662	0.0	887	0.0
xviii	Antigua and Barbuda	119	0.0	2637	0.0	2875	0.0
xix	Netherlands Antilles	68	0.0	2570	0.0	2706	0.0
xx	Saint Lucia	-68	0.0	2422	0.0	2285	0.0
xxi	Aruba	733	0.0	65	0.0	1531	0.0
xxii	Trinidad and Tobago	77	0.0	25477	0.1	25630	0.1
xxiii	Jamaica	12365	0.1	4059	0.0	28789	0.2
-	**Caribbean**	**789020**	**3.2**	424519	1.2	2002558	7.6
-	**1/**	**/**	**/**	**212260**	**0.6**	**1001279**	**3.8**

(C) Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	Lw/Tv	IntraCCp	InterCCp
78.8	21.2	64.6	35.4

(D) The investment country leader's* intra-Ccp returns [ai'] in Caribbean

Ord	Country	Investment leader countries' intra-CCp[ai]		DIA/country's Ccp[ai']		ai'/ai
		Mill.US$	% of world	Mill.US$	% of world	%
i	Cayman Islands	223028	0.9	136838	0.5	61.4
ii	Bahamas	18533	0.0	18533	0.0	100.0
iii	Anguilla	1257	0.0	32	0.0	2.5
iv	Dominican Republic	31066	0.1	-1056	0.0	-3.4
v	Barbados	4880	0.0	4880	0.0	100.0
vi	Haiti	1278	0.0	1278	0.0	100.0
vii	Curaçao	785	0.0	785	0.0	100.1
viii	Sin Maarten	215	0.0	215	0.0	100.0
ix	Grenada	1507	0.0	53	0.0	3.5
x	Saint Kitts and Nevis	2045	0.0	1455	0.0	71.2
xi	Saint Vincent and the Grenadines	1866	0.0	1866	0.0	100.0
xii	Montserrat	114	0.0	114	0.0	100.3
xiii	Dominica	775	0.0	112	0.0	14.5
xiv	Antigua and Barbuda	2756	0.0	119	0.0	4.3
xv	Netherlands Antilles	68	0.0	68	0.0	100.4
xvi	Saint Lucia	2353	0.0	-68	0.0	-2.9
xvii	Aruba	798	0.0	733	0.0	91.9
xviii	Trinidad and Tobago	25554	0.1	77	0.0	0.3
xix	Jamaica	12365	0.1	12365	0.1	100.0
-	**Total:** British Virgin Islands	**331241**	**1.2**	**178399**	**0.6**	**53.9**
		[a]		**[a']**		**[a'/a]**

* That is just British Virgin Islands.

(E) Caribbean countries investing off their region

World entity	Lwf issues [d]	
	Mill.US$	% of world
British Virgin Islands	148551	0.6
Bahamas	83911	0.4
Barbados	27226	0.1
Haiti	2275	0.0
Curaçao	513	0.0
Sin Maarten	514	0.0
Puerto Rico	194	0.0
Saint Vincent and the Grenadines	117	0.0
Montserrat	1746	0.0
Netherlands Antilles	2570	0.0
Jamaica	4059	0.0
Caribbean	**271675**	**1.1**

Oceania and Bermuda Islands

(A) FDI, DIA and stock balances

Ord.	Country	FDI		DIA		Stocks Bal.	
		Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
i	New Caledonia	16170	0.1	647	0.0	15523	0.1
ii	Fiji	4540	0.0	-16	0.0	4556	0.0
iii	Marshall Islands	2195	0.0	92	0.0	2103	0.0
iv	Papua New Guinea	2023	0.0	479	0.0	1544	0.0
v	Bermuda	2014	0.0	0	0.0	2014	0.0
vi	French Polynesia	858	0.0	354	0.0	504	0.0
vii	Solomon Islands	806	0.0	45	0.0	761	0.0
viii	Vanuatu	548	0.0	14	0.0	534	0.0
ix	Tonga	415	0.0	107	0.0	308	0.0
x	Samoa	242	0.0	14	0.0	228	0.0
xi	Palau	151	0.0	0	0.0	151	0.0
xii	Sint Maarten	112	0.0	0	0.0	112	0.0
xiii	Northern Mariana Isl.	90	0.0	0	0.0	90	0.0

xiv	Cook Islands	82	0.0	9176	0.0	-9094	0.0
xv	Nauru	19	0.0	9	0.0	10	0.0
xvi	Kiribati	18	0.0	12	0.0	6	0.0
xvii	Comoros	5	0.0	0	0.0	5	0.0
xviii	Mayotte	4	0.0	0	0.0	4	0.0
xix	Tuvalu	0	0.0	0	0.0	0	0.0
xx	Tokelau	0	0.0	0	0.0	0	0.0
xxi	Micronesia, Federated States of	0	0.0	0	0.0	0	0.0
xxii	Niue	-2	0.0	22	0.0	-24	0.0
xxiii	Wallis and Futuna Islands	-55	0.0	0	0.0	-55	0.0
-	**Oceania & Bermuda Islands**	**30235**	**0.1**	**10955**	**0.0**	**19280**	**0.1**

(B) Cooperation capital, long-way and total flows by regions

Ord.	**Country**	**Ccp**		**LWf**		**Turnover**	
		Mill. US$	**% of world**	**Mill. US$**	**% of world**	**Mill. US$**	**% of world**
i	New Caledonia	647	0.0	15523	0.1	16817	0.1
ii	Fiji	-16	0.0	4556	0.0	4556	0.0
iii	Marshall Islands	92	0.0	2103	0.0	2287	0.0
iv	Papua New Guinea	479	0.0	1544	0.0	2502	0.0
v	Bermuda	0	0.0	2014	0.0	2014	0.0
vi	French Polynesia	354	0.0	504	0.0	1212	0.0
vii	Solomon Islands	45	0.0	761	0.0	851	0.0
viii	Vanuatu	14	0.0	534	0.0	562	0.0
ix	Tonga	107	0.0	308	0.0	522	0.0
x	Samoa	14	0.0	228	0.0	256	0.0
xi	Palau	0	0.0	151	0.0	151	0.0
xii	Sint Maarten	0	0.0	112	0.0	112	0.0
xiii	Northern Mariana Isl.	0	0.0	90	0.0	90	0.0
xiv	Cook Islands	82	0.0	9094	0.0	9258	0.0
xv	Nauru	9	0.0	10	0.0	28	0.0
xvi	Kiribati	12	0.0	6	0.0	30	0.0
xvii	Comoros	0	0.0	5	0.0	5	0.0
xviii	Mayotte	0	0.0	4	0.0	4	0.0
xix	Tuvalu	0	0.0	0	0.0	0	0.0

xx	Tokelau	0	0.0	0	0.0	0	0.0
xxi	Micronesia, Federated States of	0	0.0	0	0.0	0	0.0
xxii	Niue	-2	0.0	24	0.0	24	0.0
xxiii	Wallis and Futuna Islands	-55	0.0	55	0.0	55	0.0
-	**Oceania & Bermuda**	**1782**	**0.0**	37626	0.1	41336	0.1
-	**1/2**	**/**	**/**	**18813**	**0.0**	**20595**	**0.1**

(C) Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	Lw/Tv	IntraCCp	InterCCp
8.7	91.3	100.0	0.0

A summarizing by world regions

(A) FDI, DIA and FDI Stock balances

Entity	FDI		DIA		Stock balances	
	Mill.US$	% of world stocks	Mill.US$	% of world stocks	Mill.US$	% of world stocks
Eurasia*	13288046	54.8	13477248	55.6	-189203	-0.8
Africa**	685470	2.4	131295	0.5	554177	1.9
Latin Americ***	2189742	9.3	467727	1.9	1722015	7.4
Caribbean	941864	3.8	1060695	4.4	-118831	-0.6
Oceania	30235	0.1	10955	0.0	19280	0.1
top 6****	7012534	28.9	9242048	38.6	-2229513	-9.7
World	**24147891**	**99.3**	**24389968**	**101.0**	**-242075**	**-1.7**

(B) Cooperation capital, long-way and total flows by regions

Entity	Cooperation capital		Long-way flows		World Turnover	
	Mill.US$	% of world stocks	Mill.US$	% of world stocks	Mill.US$	% of world stocks
Eurasia*	9812095	40.3	3570551	15.0	13382647	55.3
Africa**	128526	0.5	559719	1.9	818294	2.9
Latin America***	467727	1.9	861655	3.7	1329382	5.6
Caribbean	789020	3.2	212260	0.8	1001279	4.1
Oceania	1782	0.0	18813	0.0	20595	0.1

top 6****	6573246	27.5	1554045	6.3	8127291	33.8
World	**11199150**	**73.5**	**6777042**	**27.8**	**24679488**	**101.7**

* Euro-zone, West Europe, CEE Europe, SE Europe, CIS, Near East, East Asia, SE Asia, South Asia.
** North Africa, Middle Africa, Southern Africa
***South America, Central America
****US, UK, Japan, Canada, Australia, New Zealand.

2. Description by sections
Section II. 'The US international capital leadership'
(A) FDI, DIA and stock balances

Region Country	FDI		DIA		Stocks balance	
	Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
US	3949711	16.3	4918371	20.3	-968660	-4.0
UK	1557943	6.4	1819101	7.5	-261158	-1.1
Canada	806876	3.3	894166	3.7	-87290	-0.4
Australia	532168	2.2	126130	0.5	406038	1.7
Africa North	216261	0.9	33564	0.1	182697	0.8
Africa Middle	310990	1.3	30488	0.1	280502	1.2
Africa, Southern	158219	0.7	67242	0.3	90977	0.2
Central America	612043	2.5	136097	0.6	475946	2.0
Caribbean	941864	3.9	1060695	4.4	-118831	-0.5
Section II	**9086075**	**37.5**	**9085854**	**37.5**	**221**	**0.0**

(B) Cooperation capitals, long-way flows and turnover (I)

Region Country	Investment leader countries	Cooperat capital Ccp		Long-way flows LWf		Turnover Tv	
		Mill.US$	% of world	Mill. US$	% of world	Mill.US$	% of world
US	No case	3949711	16.3	484330	2.0	4434041	18.3
UK	No case	1557943	6.4	130579	0.5	1688522	7.0
Canada	No case	806876	3.3	43645	0.2	850521	3.5
Australia	No case	126130	0.5	203019	0.8	329149	1.4
Africa North	No case	32996	0.1	93244	0.4	126240	0.5
Africa Middle	No case	29616	0.1	141127	0.4	170743	**0.5**
Africa, Southern	South Africa	67242	0.3	45488	0.2	112730	0.5
Central Amercia	Mexico	136481	0.6	237973	1.0	374454	1.5
Caribbean	British Virgin Islands	789020	3.3	212260	0.9	1001279	4.1
Section II	x	**7496015**	**30.9**	**1591665**	**6.4**	**9087679**	**37.3**

(II)

Region Country	Investment leader countries	Adjusted Lwf entries [c-c']		Long distance Ccp [c'=d']		Adjusted Lwf issues [d-d']	
		Mill.	% of	Mill.	% of	Mill.US$	% of

		US$	world	US$	world		world
US	No case	0	0.0	3949711	16.3	968660	4.0
UK	No case	0	0.0	1557943	6.4	261159	1.1
Canada	No case	0	0.0	806876	3.3	87290	0.4
Australia	No case	406038	1.7	126130	0.5	0	0.0
Africa North	No case	184593	0.9	0	0.0	1895	0.0
Africa Middle	No case	281374	1.2	0	0.0	872	0.0
Africa, South	South Africa	90977	0.4	15245	0.2	0	0.0
Central America	Mexico	475946	2.0	19467	0.1	0	0.0
Caribbean	British Virgin Islands	152844	0.6	279383	1.2	271675	1.1
Section II	x	**1591772**	**6.7**	**6754755**	**28.0**	**1591551**	**6.6**

(C) Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	Lw/Tv	IntraCCp	InterCCp
82.5	17.5	9.9	90.1

Section III. 'The Japan capital leadership over Pacific'
(A) FDI, DIA and stock balances

Region Country	FDI		DIA		Stocks balance	
	Mill.US$	% of world	Mill.US$	% of world	Mill.US$	% of world
Japan	120363	0.5	1472056	6.1	-1351693	-5.6
South America	1577699	6.5	331630	1.4	1246069	5.1
Oceania& Bermuda	30235	0.1	10955	0.0	19280	0.1
New Zealand	45474	0.2	12223	0.1	33251	0.1
Section II	**1773771**	**7.3**	**1826864**	**7.5**	**-53093**	**-0.2**

(B) Cooperation capitals, long-way flows and turnover (I)

Region Country	Investment leader countries	Cooperation capital Ccp		Long-way flows LWf		Turnover Tv	
		Mill.US$	% of world	Mill. US$	% of world	Mill.US$	% of world
Japan	No case	120363	0.5	675847	2.8	796210	3.3
South America	Brazil, Chile, Argentina,	331630	1.4	623682	2.6	955311	3.9

	Columbia						
Oceania& Bermuda	No case	1782	0.0	18813	0.0	20595	0.1
New Zealand	No case	12223	0.1	16625	0.1	28849	0.1
Section II	x	**465998**	**1.9**	**1334967**	**5.5**	**1800964**	**7.4**

(II)

Region Country	**Investment leader countries**	**Adjusted Lwf entries [c-c']**		**Long distance Ccp [c'=d']**		**Adjusted Lwf issues [d-d']**	
		Mill. US$	**% of world**	**Mill. US$**	**% of world**	**Mill.US$**	**% of world**
Japan	No case	0	0.0	120363	0.5	1351693	5.6
South America	Brazil, Chile, Argentina, Columbia	1246069	5.1	89144	0.4	-647	0.0
Oceania& Bermuda	No case	28562	0.1	0	0.0	9173	0
New Zealand	No case	33250	0.1	12223	0.1	0	0.0
Section II	x	**1307881**	**5.4**	**221730**	**0.9**	**1360219**	**5.6**

(C) Weights(%) of:
cooperation capital and long-way flows in total turnover
intra- and inter-regions cooperation capital in total

CCp/Tv	**Lw/Tv**	**IntraCCp**	**InterCCp**
25.9	74.1	52.4	47.6

3. The world. A synthesis of results

Total world, as each of FDI and DIA

world	**FDI**		**DIA**		**FDI stock balances**	
	Mill.US$	**% of world**	**Mill.US$**	**% of world**	**Mill.US$**	**% f world**
Section I	13288046	54.8	13477248	55.6	-189202	-0.8
Section II	9086075	37.5	9085854	37.5	221	0.0
Section III	1773771	7.3	1826864	7.5	-53093	-0.2
world	**24147892**	**99.6**	**24389966**	**100.6**	**-241036**	**-1.0**

Inter- regions capital entries [c] and issues [d] with calculus test for world

world	**Entries [c]**		**Issues [d]**		**FDI stock balances**	
	Mill.US$	**% of world**	**Mill.US$**	**%of world**	**Mill.US$**	**% f world**
Section I	6932859	28.6	7122060	29.2	-189202	-0.8
Section II	8346527	34.7	8346306	34.6	221	0.0

Section III	1529611	6.3	1583243	6.5	-53093	-0.2
world	**16807669**	**69.5**	**17051609**	**70.3**	**-241036**	**-1.0**
calculus test/world	**24148055**	**99.4**	**24391995**	**96.8**	**Entries[c]/issues[d] +intra-region cooperation capital (a/b+a'/b')**	

Cooperation capital (Ccp), as inter-regions [c'] and intra-region [a+a'/b+b']

world	**Ccp total**		**Inter-reg c'=d'**		**Intra-reg. a/b&a'/ b'**	
	Mill.US$	**% of world**	**Mill.US$**	**% f world**	**Mill.US$**	**% of world**
Section I	9812095	40.3	3456907	14.2	6355188	26.1
Section II	7495631	30.8	6754755	27.9	740876	2.9
Section III	466052	1.8	221730	0.9	244322	0.9
world	**17773778**	**72.9**	**10433392**	**43.0**	**7340386**	**29.9**

Long-way flows (Lwf), as capitals received [c-c'] and invested[d-d']

world	**Received [c-c']**		**Invested [d-d']**		**Long-way flows(Lwf)**	
	Mill.US$	**% of world**	**Mill.US$**	**% of world**	**Mill.US$**	**%o f world**
Section I	3475952	14.4	3665153	14.8	3570551	15.0
Section II	1590444	6.7	1591551	6.7	1591665	6.4
Section III	1307881	5.4	1361513	5.6	1334967	5.5
world	**6374277**	**26.5**	**6618217**	**27.1**	**6497183**	**26.8**

Total world, as cooperation capital (Ccp) + long-way flows(Lwf)

world	**Cooperation Capital (Ccp)**		**Long-way flows (Lwf)**		**Turnover (Tv)**	
	Mill.US$	**% f world**	**Mill.US$**	**% f world**	**Mill.US$**	**% f world**
Section I	9812095	40.3	3570551	15.0	13382647	55.3
Section II	7495631	30.8	1591665	6.4	9087679	37.3
Section III	466052	1.8	1334967	5.5	1800964	7.4
world	**17773778**	**72.9**	**6497183**	**26.8**	**24271290**	**100.0**
calculus test/world	**Cooperation Capital (Ccp) + Long-way flows (Lwf)**				**24270961**	**99.7**

Annex 7
Research results on regions.
A classification

(A) Basic (binary) evaluation system

ord.	Notation	Identifying	
1	FDI	Entries of international directly invested capital during the 1990-2015 year interval	
2	DIA	Issues of international directly invested capital during the 1990-2015 year interval	
3	FDI stock balances	Difference between entries and issues of international directly invested capitals	
Clarification : These above are basic data (see 'WIR 2016') cumulated for the 1990-2015 year interval.			

(B) Non-binary evaluation system

ord.	Notation	Definition	Methodology
1	c-c'	Initial long way flow entries, adjusted by long distance cooperation capitals back invested (FDI)	This is the presumptive country's positive FDI stocks balance amount
2	Ccp	Total cooperation capitals (short and long distances of)	This is the lower amount between FDI and DIA of the country
3	c'	Long distance/way cooperation capital back invested	This is part of total Ccp, the difference between the last one of the country and cumulated FDI(entries) of the rest of countries in the region, when positive (only).
4	d	Long way flow issues (investments in other regions/DIA)	This is just the negative FDI stocks balance of the country.
5	LWf	Total long-way flows (entries and issues)	This is just the positive or negative FDI stocks balance (the last in module numbers) of/for the country. As for the region or larger entities, this cumulates positive and negative FDI stock balances of individual countries in module numbers. To the region, once more, the [f] numbers are attributed just by half, here being equally considered both investor and recipient countries(Theorem 2
6	Turnover	Total transactions cumulated in module numbers (equal to each of FDI and DIA)	This is just cumulating FDI and DIA amounts in module numbers for the country. As for the region, this is the half of cumulated numbers by country (Theorem 1).

(C) Weights

ord.	weights(%)	Identifying
1	Ccp/Tv	of cooperation capital in total turnover
2	Ccp intra-	of intra-region flows in total cooperation capital
3	Lwf/Tv	of long-way flows in total turnover
4	Ccp inter-	of long distance/way amounts(c') in total cooperation capital (Ccp)

(D) Intra-region Ccp data for the [a], [b] and [b mixed] types regions*

ord.	Notation	Definition
1	[a/b]	Total investment of the investment leader country in the rest of the region(Ccp)
2	[a'/b']	Investment of the investment leader country in country (i)
3	[ai/bi]	Total investment of the rest of countries of the region back in the investment leader country
4	[ai'/bi']	Investment of country (i) back in the investment leader country
5	[a' over a]	Weight of total investments of the rest of region back in the leader investor country in the initial investment received from the leader investor country
6	[ai' over ai]	Weight of investments from country (i) back in the leader investor country in the initial investment from the leader investor country

* These are regions with active intra-Ccp that equally prove presence of some investment leader countries (i.e. as similarly to the other [a] type regions).

Annex 8

World Cooperation capital (Ccp)

ord	Region Country	The whole Ccp		Of which, inter-regions [c'/d']		
		Mill.US$	% f world	Countries	Mill.US$	% of world
1	Euro-zone	4799569	19.9	Germ, Ndl, France, Spain	738443	3.0
2	West Europe	1013963	4.2	Switzerland, Sweden	414683	1.7
3	East Asia	2141101	8.8	China, Hong Kong, China	1595434	6.6
4	SE Asia	741416	3.0	Singap, Thai, Indon, Mala	497532	2.0
5	South Asia	145044	0.6	India	29787	0.1
6	Near East	337818	1.3	Israel, Saudi Arabia, Turkey, Emirates	56085	0.2
7	CEE Europe	125749	0.4	…	0	0.0
8	SE Europe	4519	0.0	…	0	0.0
9	CIS	502916	2.1	Russian Federation	124943	0.5
I	**Eurasia (SI)**	**9812095**	**40.3**	--	**3456907**	**14.2**
10	Central America	136097	0.6	Mexico	19467	0.1
11	Caribbean	789020	3.2	British Virgin Islands	279383	1.1
12	US	3949711	16.2	US	3949711	16.2
13	UK	1557943	6.4	UK	1557943	6.4
14	Canada	806876	3.3	Canada	806876	3.3
15	Australia	126130	0.5	Australia	126130	0.5
16	North Africa	32996	0.1	…	0	0.0
17	Middle Africa	29616	0.1	…	0	0.0
18	Southern Africa	67242	0.3	South Africa, Mozambique	15245	0.2
II	**Section II**	**7495631**	**30.8**		**6754755**	**27.9**
19	South America	331630	1.3	Brazil, Chile, Argentina, Columbia	89144	0.4
20	New Zealand	12223	0.1	New Zealand	12223	0.1
21	Japan	120363	0.5	Japan	120363	0.5
22	Oceania&Berm	1836	0.0	X	0	0.0
III	**Section III**	**466052**	**1.8**	**X**	**221730**	**0.9**
IV	**world**	**17773778**	**72.9**	**X**	**10433392**	**43.0**