

Regional integration and foreign direct investment: the potential impact of the FTAA and the EU-MERCOSUR agreement on FDI flows into MERCOSUR countries: winners and losers

**Gustavo Bittencourt
Rosario Domingo
Nicolás Reig L.¹**

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The purpose of this paper is to analyze some additional issues related to foreign direct investment (FDI) and to the development of regional integration agreements (RIA). We include additional variables to the baseline model of FDI determinants developed by Lopez and Orlicki and presented previously in this document. These variables are related to the external sector and to the relative size of economies that are involved in each bilateral relationship and they allow us to obtain some conclusions about FDI expansion forms in MERCOSUR countries and to progress in the analysis of which could be transnational corporations (TNC) most probably strategies in the frame work of new integration agreements, particularly, if it is possible that some of these enterprises could follow complex integration strategies.

Secondly, as estimations with the general model only allow to capture the average impact of integration agreements, the analysis of “winners” and “losers” is disaggregated at country level, with the purpose to consider possible effects of agreements on each MERCOSUR country in the frame work of ALCA and MERCOSUR-EU.

FDI bilateral flows and trade openness

World bilateral flows of FDI increased between 1983 and 2003. Flows from the European Union (EU) had a clear predominance and determined the global trend. EU flows also induced a strong fluctuation in the global trend of world FDI in 1998-2002. The increase of bilateral FDI flows observed at the end of the nineties has been strongly associated with the wave of cross-border mergers and acquisitions (M&A) that have been mainly concentrated on enterprises of developed countries. The European transnational corporations (TNC) have played the main role in this progress. They have fulfilled near 70% of the purchases, between 1998 and 2000

Bilateral FDI flows to MERCOSUR countries have shown a similar trend with global flows. During the eighties the inflows to the region were very low, although they tended to grow slightly. From the first years of the nineties these inflows increased sharply. At the end of this decade, in accordance with the evolution of world FDI, MERCOSUR countries duplicated the inflow of FDI. The principal source of this FDI was the EU countries and their investments were mostly related to the privatization of public enterprises at the beginning of the decade, and to the wave of cross-border mergers

¹ Department of Economics - Faculty of Social Sciences - University of Uruguay (dECON-FCS-UdelaR). The authors acknowledge the value comments and suggestions of Graciela Sanroman related to econometric issues, as well as comments of Andrés López, Silvia Laens and Inés Terra.

and acquisitions observed in the world at the late 90's. The importance of this trend makes necessary to discriminate a more "normal" period of FDI inflows to the region (1984-1997) to evaluate the conclusions that we could extract when we incorporate in the model a phenomenon that is unlikely to happen in the next future with such magnitude.

Different theoretical approaches propose that the most open economies are those that have the greatest possibilities to capture FDI. Traditional expansion forms of TNCs (horizontal or market seeking) could be yielding space to vertical or complex forms which involve more intensive external trade. It could be possible to associate a great level of external openness with more open transnational expansion forms which could attract FDI, particularly FDI from developed to developing countries. This relationship between FDI and external openness would appear to be confirmed by some examples: the member of Agreement of South Eastern Asian Nations (ASEAN), China, Hong Kong and Korea as well as Mexico and Central America Common Market (CACM) present a correlation between the openness degree and the participation of FDI on the GDP.

Theoretical issues

The combination of different theoretical issues presented in some analytical frameworks, particularly Markusen's "knowledge-capital" model and a set of typology of TNC strategies (for example Dunning, 1993; Trajtenberg and Vigorito, 1982; and UNCTAD, 1993), can contribute to define the variable set to be included in the descriptive model and to identify predominant transnational expansion forms. Markusen and Maskus (2001) indicate the existence of two basic models to include transnational firms in the traditional theoretical approaches of international trade: the "horizontal" and the "vertical" model. The first model could characterize most FDI flows among developed countries, where TNCs would obtain advantages over domestic firms, by the presence of economies of scale at the firm level. The second model would typify north-south FDI flows. However north-south and south-south flows may also be horizontal if there are high trade barriers to imports. These authors integrate both models in a new theoretical frame ("knowledge-capital" model), using this model they suggest that affiliates' production and trade tend to be substitutes between similar countries, and to be complementary when countries have great differences in their relative factor endowment.

It is important to consider simultaneously the question of transnational expansion forms and FDI determinants, to do so in the baseline model we include two additional variables: *Simisize*, an indicator of similar countries size which could allow to capture horizontal transnational expansion forms; and *XMH* that represents the external openness of the host economy.

The World Investment Reports (2004) recognized the increasingly importance of the "complex integration strategies" followed by TNCs, which have been defined by Yeaple (2003) as those which establish affiliates in some foreign countries to avoid transport cost and establish affiliates in others to take advantage of factor price differentials. This strategy creates complementarities between the two types of affiliates. The explanation of when TNCs follow complex integration strategies is that "north-north and north-south FDI reduce the cost of serving international markets in complementary ways, creating complementarities between the two forms of FDI". The variables used in the modelization to consider the effects of "FDI creation", "FDI diversion", and "FDI dilution" are strongly associated with the horizontal and vertical FDI, but they are not associated with a possible transition between both forms of FDI. We discriminate the general

model between countries' blocs with the purpose to include some dimension of this strategy.

The formation of a regional integration agreement (RIA) can imply more extra regional investment for the region as a whole but this does not mean more FDI in each member of the RIA. FDI may have an unequal distribution across countries that form the regional agreement. Within a RIA there may be winners and losers, in terms of the amount of FDI received for each country. What determines whether a particular country win or lose? Most literature on RIA and FDI find that one of the factors that may explain who loses and who wins is country size. Levy, Stein and Daude (2003) considered that the bigger losers could be the medium-size countries, since small countries are more likely to be supplied by trade rather than FDI, with or without the RIA. On the other hand, countries that offer a more attractive package for foreign investors due to the quality of their institutions, the quality of their labor force, their tax treatment of TNCs and the development of their infrastructure could be winners.

Te Velde and Bezemer (2004) found that the larger the country is relative to others in the region, the more FDI it will attract. Also, they considered that poorer countries in a region are not necessary which attract less FDI. Te Velde and Fahnbulleh (2003) suggested that if integration leads to more FDI with equal benefits to the member of the RIA, it could start a virtuous circle, so cooperation to joint investment promotion may bring benefits across the region.

What countries can do to become FDI winners or increase their capacity to attract FDI, in the regional integration? In this paper we formulate some hypothesis about how a RIA can affect FDI determinants. The evidence discussed in Levy, Stein, Daude (2003) suggests that improve in the attraction capacity may be smaller for countries that have similar factor endowments that those of the source countries, and are relatively closed to international trade. The same authors (2002b) demonstrate that countries that present a more attractive overall package to foreign investors are also likely to gain more FDI from the formation or RIAs.

Conclusions

A first interesting issue is that host country GDP has not a significant coefficient, when internal market size and dynamics are the most significant variables in FDI determinant studies. This fact would be indicating a change in FDI forms from horizontal to vertical and/or complex. The form that FDI among countries adopts allows us to profile winners and losers related to FDI flows in the framework of regional integration agreements.

Other result that reinforce previous one is the positive relationship between FDI flows and trade openness. The variable which measure FDI internal creation effect for EU countries loses significance when we include trade openness in the model, because the principal market of EU exports is the own region and intra-European trade operates as determinant of trade openness which has a positive effect on FDI flows. This result indicates that one of the principal determinants of FDI flows would be the increase of trade flows (as a consequence of integration agreement or through other factors). When we evaluate possible agreements to enlarge MERCOSUR integration, this behavior must be taken into account. If this enlargement implies increased trade flows, they could have associated increased FDI flows. The sign of the agreement is not sufficient to increase FDI inflows, thus it is necessary a previous or simultaneous change in MERCOSUR countries' strategy of predominant international insertion.

When we reduce the period of analysis to remove distortions generated by the process of mergers and acquisitions developed in the nineties, the results show that FDI

increase could be associated to external creation of FDI in countries that would integrate FTAA as well as in EU.

Horizontal FDI (oriented to internal market) would predominate in bilateral flows among developed countries; elasticity associated to GDP of source country is the only significant variable to explain movement of FDI flows. In FDI flows between developed and developing countries, other variables besides GDP of source country are significant: trade openness, politic risk, privatizations, inflation and bilateral investment treaties, so these results would indicate that horizontal forms of transnational expansion are not the principal determinants of bilateral FDI movements.

Previous hypothesis would be supported in the results obtained when we differentiate exports of host countries by type of good. In the case of FDI among developed countries none export variables were significant. In FDI from developed to developing countries, the results show that open expansion forms of "resource seeking" type (natural resources and labor) would be predominant to explain the pattern of FDI movement. In this case the variation of total exports is positive and significant as well as exports of primary or more intensive in natural resources goods, but exports of industrial or with greater technological content goods seems to impact negatively and significantly in the increase of bilateral FDI flows. May be, complex international integration forms are progressing slower than we have foreseen in other works or these variables are not the best to capture this impact. Previous results could be indicating that if ALCA and MERCOSUR-EU agreements would increase trade flows –as is foreseeable- and those flows would have a positive impact on FDI flows, predominant forms of expansion would be open/resource seeking forms, since these agreements implies relationships between developed and developing countries.

In relation to which MERCOSUR countries would be winners or losers as attractors of FDI in the framework of regional integration agreements, the estimation results, using a special methodological approach, show that Brazil would be the only "winner" inside the bloc and Argentina would be probably the "loser", when we consider external creation of FDI. On the other hand, in small economies results are not so significant, but they would be showing a situation where Uruguay is near to be a "winner" and Paraguay a "loser", both in relation to its.

A significant factor, in FDI flows increase in MERCOSUR countries, has been the exports growth from the bloc to developed countries. This would indicate that investment in the region has a certainly correlation degree with trade flows from MERCOSUR countries. If integration agreements with EU as well as with NAFTA would be materialized, MERCOSUR would receive increasing FDI flows associated with additional trade flows that these agreements could generate. These considerations for the whole MERCOSUR are applied to Brazil; while in Argentina the principal FDI determinants would be internal market and privatization of public services process (trade flows seem to affect FDI flows in a decreasing form). Previous results would be reaffirming that Brazil would be a "winner" and Argentina a "loser" (trade flows are not significant in FDI to Paraguay and Uruguay).

The results of winners and losers analysis are not sufficiently robust to allow us to project potential impacts of ALCA and EU agreements on FDI flows to MERCOSUR countries. The gravitational model does not capture in an appropriate way phenomena or FDI forms that had a great weight during the period of analysis. In the other hand, it is very difficult to include control variables in these models, taking into account that there are not countries comparable to those of MERCOSUR that have previous experience in enlarged agreements with EU or NAFTA.

On the contrary, the identification of FDI forms that lead bilateral relationships seems to offer a better option to project the effects of agreements with North countries. Particularly, it would be possible to establish a link between trade flows potential increase and FDI that would receive MERCOSUR countries, if we associate the agreements with a change in actually dominant FDI forms in MERCOSUR, from horizontal to vertical or complex (the last associated with trade flows, in developing countries perspective). The results sustain the hypothesis that trade flows growth is the determinant of a great part of intra-European FDI (and probably of FDI received by Mexico when this country integrated the NAFTA), more than the sign of the integration agreement. In other words, if the integration agreement does not generate new trade flows (before, simultaneously or as a consequence of FDI received), it will be difficult to increase FDI flows in a significant way.

How this structure of winners and losers could be modified if ALCA and MERCOSUR-EU agreements are signed and applied? How many countries would be in better conditions to make a change towards export strategies, those that would be beneficiated by integration agreements?

About these questions we can only offer some tentative answers related to future most likely stages. A possibility is that ALCA and EU agreements expand differences in external capture of FDI, and Brazil and Uruguay tend to strengthen as winners while Argentina and Paraguay as losers.

Brazil, on the base of its greater industrial development and sustained in the development of internal scale economies, could present a major potential to go from "market seeking" strategies of TNCs' affiliates to strongly exports strategies, supported by exports to other developing countries and some specialized exports to developed countries.

Uruguay with its potential related to its geographical location as entry and exit to MERCOSUR as well as a better development of its natural resources could move towards vertical or complex strategies. The principal problem could be to induce entry TNCs to produce goods with greater value added in the framework of their vertical strategies that are dominants in this country. This could avoid or compensate the tendency of FDI natural resource oriented to generate "enclaves".

Argentina appears as an intermediate situation case. Its potential transformation to export strategies, beyond natural resources, seems to depend increasingly on the possibility of obtaining scale economies inside MERCOSUR. Nowadays, this situation appears as very complicated.

The central problem for Argentina and Uruguay consist in their very low average long run growth rates related strongly to volatility of both economies. To those countries, which economies are particularly interconnected, a greater integration to MERCOSUR, principally with Brazil, is a key aspect for a possible industrial.

Paraguay is the most concerned case by its intra-territoriality, poverty levels, recently economic evolution and high levels of informality of its economy. These issues make Paraguay as the country with less potential to capture FDI related to other bloc's members.