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FOREIGN DIRECT INVESTMENT AND REGIONAL CONVERGENCE: AN INTERNATIONAL APPROACH

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ABSTRACT

Since the middle 1980's, as consequence of the worldwide process of liberalization, there has been an important rise in international capital flows, especially Foreign Direct Investment (FDI). In particular, during the second half of 1990's, worldwide FDI inflows grew four times faster than domestic output, twice as fast as domestic investment and three times as fast as exports. However, the geographical distribution of these flows of international capital was highly uneven. The main receivers of these FDI inflows were the most-developed countries. The developing countries only received approximately 30% of the worldwide FDI inflows.

At the same time, there has been a decrease in the speed of economic convergence among countries and regions. Between 1950 and 1990 the rate of convergence has been around 2% annually, but from the mid 1980's, this rate decreased to the 0.2%-0.5% level on an annual basis. Immediately, a question arises: could the very high share of international capital directed to the most-developed countries, be one reason for the slowdown in the rate of economic convergence?.

Most studies on the effects of the internationalization of production processes in economic growth have identified the liberalization process with international trade, excluding the effects of FDI and its consequences on regional convergence. However, the liberalization process has increased not only trade, but also international capital flows. In this paper we address this last point. The main objective is to analyze the possible relationship among FDI and economic convergence. In particular, we present arguments which support the hypothesis that FDI inflows could be one of the elements helping to slowdown the speed of convergence in recent years.

We show, on one hand, that FDI is an "engine of growth", the same as international trade. The main reason is that FDI is not merely a transfer of capital. FDI contributes to

strengthening the economic structure on the host country, modernizes and internationalises it as well. FDI is usually accompanied by specific intangible assets of the transnational corporation, changes in production systems and/or technological innovations, among others. There is not doubt that all these factors generate positive growth effects in the target destination.

On the other hand, we show that the main receivers of this FDI are not the developing countries. The developed countries, with more than two-thirds of the worldwide FDI inflows dominate the global picture.

So, if these facts are analysed together, it is possible to show that the positive effects of FDI on economic growth are concentrated mainly in the most developed countries. From this point, the negative effect of FDI on economic convergence is an obvious result.

1. INTRODUCTION

Over the last few years, there was a very important decrease in the speed of convergence among countries and among regions too. At the same time, many governments accelerated their liberalization process on international trade through commercial agreements, involving bilateral or multilateral agreements in foreign investments too. Such is the case of the Free Trade Agreement of the Americas, the ASEAN Investment Area, in Asia, or the Organization of African States. As result, international inflows of Foreign Direct investment (FDI¹¹) grew at rates never been seen before. Since the mid 1980s, -with the only exception of the period 1991-1992-, the worldwide inflow of FDI reached record levels each year. The annual growth rates of FDI were considerably higher than the Gross Domestic Product (GDP) or the Gross Fixed Capital Formation (GFCF). Only the general economic situation in 2001 braked this trend.

This increase in the worldwide flow of FDI and this decrease in the speed of convergence explains the growing interest among the international scientific community

¹ According to the UNCTAD, FDI inflows are comprised of capital received from an FDI enterprise by a foreign direct investor. There are three components in FDI: equity capital, reinvested earnings and intra-company loans.

-and among politicians too- in analysing their causes and their effects, and the possible linkages between both. The main reason for such interest is that FDI is usually considered as an “engine of growth” and could be used as intermediate variable in economic policy in achieving long-term and sustained growth. Although the debate on the costs and benefits of FDI for the receiving countries has not yet concluded, the idea that FDI can be an “engine of growth” has been widely accepted. FDI is not merely seen as an external source of financing the growth of an economy. Indeed, FDI does not merely contribute to strengthening the economic structure, but also modernizes and internationalises it as well. Furthermore, FDI is not merely a transfer of capital, but is generally accompanied by a series of specific intangible assets of the transnational corporation. The changes in production systems, the new managerial methods, the technological innovations, the *know-how*, and the greater capacity for innovation, are just a few of the quality aspects of FDI. All these generate positive effects on growth in the target destination. The main reason is that resident national companies increase their productions thanks to the *spillovers* that incoming multinational companies generate. Indeed, FDI is another important factor that helps the receiving economies to grow. That explains why not only developing countries but even developed countries compete fiercely for such investments.

However, in this “struggle” to appear “more attractive” to foreign investors, and thus to achieve the greatest quota possible of this international flow of capital, the great winners continue being the most developed countries. Indeed, they have been receiving more than 80% of the global inflows of FDI, a higher percentage than they contribute to the world’s GDP. Moreover, this international distribution of FDI continues to remain highly uneven. So, it is easy to deduce that -if the principal receivers of FDI are the most developed countries-, then the positive effects for economic growth are also concentrated in these developed countries. Therefore –and obviously-, FDI could be one factor which could explain the brake in the “economic convergence process” during the last years². The main reason is that the developing countries are not receiving the

² The rhythm of regional convergence in Europe between 1950 and 1990 has been relatively low, inferior to 2% annual, and has decreased considerably from the mid 1980s, with rates between the 0,2 and 0,5% annual. See, Barro and Sala-i-Martin (1995) and Martin (2001).

technological and productive capacity that the more developed countries are indeed receiving.

This paper is the first step into the analysis of the possible negative effects of FDI inflows on regional convergence. The main objective of this paper is to present arguments, which sustain the hypothesis that FDI inflows can be one of the elements helping to brake the speed of the convergence in the last years. In particular, we present two kinds of arguments: On one hand, theoretical arguments; on the other hand, the facts. To do so, the paper is structured as follows: After this introduction, we briefly review the literature on the possible relationships between FDI and economic growth, and their possible implications for economic convergence. At the same time, we present a new model which explains the negative effect of FDI inflows on the speed of convergence. In Section 3, we present the economic data, showing the growth of worldwide FDI and the trend towards concentration into developed countries. These two facts, support the theoretical model. Section 4 offers some of the possible political solutions that may be applied. The final section then presents the main conclusions that can be drawn from our study.

2. THE THEORIES

Ever since A. Smith published *The Wealth of Nations*, most of the economists interested in economic development and growth, defend the hypothesis that countries that adopt an internationally open commercial strategy achieve greater economic growth than those that close their doors to foreign trade. Although such opening strategies initially envisaged only international trade, in the last years, international transfer of capital has been added to the list of market-opening strategies. International capital transfers started in the form of the extension of external credit. The main reason was that external credit could be a source for financing national structural reforms and the formation of capital. But external credit was gradually replaced by FDI inflows. FDI was regarded as a superior source of national economic growth. There are several studies that analyse this connection between FDI inflows³ and economic growth. In general terms, it was assumed that it is a fairly complex phenomenon, but it is generally accepted that FDI

³ See, among others, Wei, 1995; Balasubramanyam *et al.*, (1996), and de Mello (1997).

can affect economic growth in host countries because FDI represents “the transmission to the host country of a package of capital, managerial skills, and technical skills” (Johnson, 1972, p.2). In particular, some of the main reasons for this linkage are the followings:

- We can not forget that FDI is essentially investment, that is, a transfer of capital between countries. The whole FDI cannot be considered as being synonymous with GFCF, since the acquisition of already existing companies and long-term loans are also included in FDI inflows. However, an important part of FDI is new investment, such as the establishment of new companies and the expansion of already existing ones. This is the so-called *Greenfield* investment, which increases national stock of capital, and so, is a source of growth (Díaz Vázquez,2003).
- Usually this transfer of capital might be accompanied by technological improvements that affect the total production of the foreign company, thanks to its specific assets (Egger and Pfaffermayr, 2001).
- As a result, FDI could also improve the efficiency of the local companies in the host countries, not only through the *spillovers* that the investing company might generate, but also by generating a more intense competition between the already established local companies and the recently founded foreign company (Coe and Helpman,1995; Blomström and Kokko,1998; Buckley *et al.*,2002; among others).
- Thanks to this quality benefits, FDI could represent an important source of new technological improvements or an increase in the human capital for the developing countries and, thus, promote their growth and development. FDI could generate both short-term and long-term growth, not only in the neo-classical sense growth, but also in the context of the new theories of endogenous growth (Balasubramanyam *et al.*, 1996; Barrell y Pain, 1997; Ramírez, 2000; Buckley et al., 2002).
- Furthermore, the transnational companies have a strong capacity for export, which increases the degree of international opening up of the host economy,

increasing the benefits of international commercial liberalization (UNCTAD, 1992).

Indeed, in 1992, UNCTAD describes and explains the main ways and linkages through which the transnational companies could affect the growth processes of the host destinations. These are summarized in the following table:

Table 1
Transnational corporations and the growth process in the host economy

Investment	Capital formation Improved efficiency Increased productivity
Technology	New capital equipment R&D Industrial upgrading
Trade	Export expansion Lower-cost imports
Human Resources	Learning effects Employment Managerial skills Training
The environment	Pollution-abatement skills Access to clean technology Links to local firms

Source: World Investment Report 1992: Transnational Corporations as Engines of Growth (UNCTAD).

However, despite these general considerations that defend FDI as an additional source of growth -and, therefore, as being highly beneficial for developing countries-, the available literature on FDI and growth demonstrates that analysing the real effects of FDI on economic growth is not an easy task.

In general, the main conclusion of previous studies, is that FDI inflows affects the economic growth in host countries. But the magnitude of this effect is uneven between countries. Many studies find that the productivity of such investments of foreign capital and, therefore, their benefits for national growth, depend on the original economic and technological conditions of the host country (Buckley et al., 2002). On this point, de Mello (1997) states that only if an acceptable level of human capital already exists in the host economy would FDI generate increases in productivity. Along these same lines,

Borensztein et al., (1998), demonstrate that only if a certain stock of human capital already exists could FDI be more productive than national investment. This is a very important result, because this implies that, with a same quantity and quality of FDI inflows, the effect on growth will be smaller in a developing country than in a developed country.

To this problem, we must add the fact that there probably is a two-way causation between FDI and growth. Economic growth is not merely a result of FDI, but rather one of the main attractions for it. Goldberg (1972) states that American investments in the EEC countries were explainable by the growth of that market and Root and Ahmed (1979) demonstrate that the rate of GDP growth is one of the major attractions for investing in the developing countries. Culem (1988) also show that this variable is an important factor in determining bilateral flows of FDI between certain developed countries, including those of the European Community. Furthermore, Bajo-Rubio and Sosvilla-Rivero (1994) and Díaz Vázquez *et al.*, (1996), demonstrate that market size is the main determinant for attracting FDI to the Spanish economy. De Mello (1996) also demonstrates that the accumulation of capital and the growth of the Total Productivity Factor (TPF) have been the main attractors of FDI in Brazil, although, for the Chilean economy, he concludes that it is FDI that has generated the growth in output and TFP. Basu et al. (2003) demonstrate, using a panel of 23 developing countries that, for open economies, there is a two-way causal relationship between FDI and GDP, while for closed economies, fundamentally, it is economic growth that attracts inflows of FDI.

This dilemma becomes even more complex when the possible effects of FDI inflows on economic convergence are analysed. To this point, we presented theoretical arguments that associate FDI inflows with the economic growth in host destinations, and we have shown FDI can certainly be an additional source of growth for the host economies. What then, are the implications of the “famous” convergence process to which the different economies are “theoretically” subjected? As we well know, the traditional neoclassical model for closed economies predicts convergence. The assumption of diminishing returns implies, automatically, that all the economies would tend to converge, in the sense that the less developed economies would grow more quickly than the most developed ones. The reason is that since the less developed economies would

have a stock of smaller capital than the more developed ones, according to the assumption of diminishing marginal returns in capital, the growth rate of the less developed economies would be greater than that of the more developed ones, so that convergence would be guaranteed. Furthermore, this convergence should take place independently of whether all of the economies have the same kind of technologies, the same rate of savings or the same population growth. Even in such cases, the traditional neoclassical model predicts conditional convergence⁴. This, however, is not what the endogenous single-sector growth models predict, since they do not consider the assumption of diminishing marginal returns in production factors.

The inclusion of international mobility of capital in either approach does not alter the results significantly. In the neoclassical model, convergence would continue to exist, since, assuming perfect mobility of capital among countries, there would be movements of capital from the more developed economies to the less developed ones. However, this has not happened in our economies. Developed countries are the major receivers of this FDI inflows. So, they are also the ones that show the greatest increase in foreign capital stock, experiencing a higher growth rate than they would supposedly have had without such inflows of FDI.

Obviously, when the growth rates of the developed countries increase, the real trend towards economic convergence is obviously broken. When we add to this situation the supposition that the effect of FDI on growth is positively related to the technological and economic situation of the host destination, the obstacles to economic convergence among the different economies is even greater.

Nor do we see any immediate possibility of “eliminating” this “brake” effect on convergence due to FDI being funnelled into the more developed economies. The spread of technology, another positive effect of FDI on economic growth, can also be negative for convergence, since FDI is concentrated in the countries that are generating such new technology. The possibility of the lesser-developed countries (the followers) imitating the technological advances of the more developed ones (the leaders) could allow a theoretical convergence even in the endogenous growth models (Barro and Sala-

⁴ See, among others, Barro and Sala-i Martín (1991 and 1992); and Mankiw, Romer and Weil (1992).

i-Martin, 1994). Such an imitation process, however, is also limited when the exchange of technology via FDI is also concentrated in the same developed countries.

All these hypotheses and their implications can be put more clearly into analytical perspective. We propose a new model. The question is not whether the model predicts or does not predict convergence. The question here is to analyse how the speed of convergence can be modified by FDI inflows. So, the starting point will never be either the traditional Solow's model with mobility of capital -because the capital is not flowing from the more to the less developed countries-, or the models of endogenous growth -because although technology diffusion exists, this would take place among developed countries, and not from the more ones to the less ones-.

We consider initially closed economies, without international movements of capital. We can propose an equation for absolute convergence as follows:

$$d \frac{Y^-}{Y^+} = \alpha \left(\frac{Y^+}{Y^+} - \frac{Y^-}{Y^+} \right) = \alpha \left(1 - \frac{Y^-}{Y^+} \right) \quad [1]$$

where Y^+ represents the income or the GDP of the developed countries, and Y^- that of the developing ones.

The assumption of absolute convergence would be given when $\frac{Y^-}{Y^+} = 1$. So, $d \frac{Y^-}{Y^+}$ would

be equal to zero. As such, the variation of this ratio would depend, on the one hand, how far the less developed economies find themselves from the more developed ones. Implicitly, we are assuming one of the main results of the Solow's model. In a closed

economy, if $\left(\frac{Y^+}{Y^+} - \frac{Y^-}{Y^+} \right)$ is positive, then $d \frac{Y^-}{Y^+}$ would trend to increase, that is, the

developing countries would approach to the developed countries. There is a trend to the economic convergence. However, the final result of $d \frac{Y^-}{Y^+}$ depends on α too, and α is

here the speed of convergence. If α is positive, then, given that by definition $1 - \frac{Y^-}{Y^+}$ is

greater than zero, $d \frac{Y^-}{Y^+}$ will also be positive, which means that the differential of the

GDP, or income, will decrease because the ratio $\frac{Y^-}{Y^+}$ rises. That implies that the variation on $\frac{Y^-}{Y^+}$ does not only depend on how far are the developed economies from the developing ones. Higher α implies higher $d\frac{Y^-}{Y^+}$ for a same $\left(\frac{Y^+}{Y^+} - \frac{Y^-}{Y^+}\right)$. In equilibrium, this ratio would be equal to one, and there would be complete convergence, such that $d\frac{Y^-}{Y^+} = 0$ since $1 - \frac{Y^-}{Y^+} = 0$. On the other hand, if α is negative, there will be a divergence even if $\left(\frac{Y^+}{Y^+} - \frac{Y^-}{Y^+}\right)$ is positive.

If we consider capital movements, according to the empirical evidence about the effects of FDI inflows on growth, this model is able to represent the effects on the speed of the convergence.

We can represent the effects of FDI inflows on growth and convergence through the following expression:

$$d\frac{Y_{FDI}^-}{Y_{FDI}^+} = \alpha_{FDI} \left(\frac{Y_{FDI}^+}{Y_{FDI}^+} - \frac{Y_{FDI}^-}{Y_{FDI}^+} \right) = \alpha_{FDI} \left(1 - \frac{Y_{FDI}^-}{Y_{FDI}^+} \right) \quad [2]$$

where the sub-index FDI refers to the fact that we are now supposing that the economies receive FDI inflows that affect their growth and, as such, the level of their income or GDP alters.

So, assuming that FDI generates growth, if FDI is concentrated in the developed countries, the growth of this developed economies will be more affected than that of the developing ones, because of the effect of the unequal inflows of FDI. As such, although

both $dY_{FDI}^- > dY^-$ and $dY_{FDI}^+ > dY^+$ are true, we also verify that $d\frac{Y_{FDI}^-}{Y_{FDI}^+} < d\frac{Y^-}{Y^+}$, when the

ratio $\frac{Y_{FDI}^-}{Y_{FDI}^+}$ rises more than the ratio $\frac{Y^-}{Y^+}$. This implies that $\alpha_{FDI} < \alpha$ (since $1 - \frac{Y_{FDI}^-}{Y_{FDI}^+}$

would be greater than $1 - \frac{Y^-}{Y^+}$, so that since $d\frac{Y_{FDI}^-}{Y_{FDI}^+} < d\frac{Y^-}{Y^+}$, then, by force, $\alpha_{FDI} < \alpha$).

Even when we assume *a priori* that absolute convergence exists, (α positive), the concentration of FDI inflows in the developed countries would certainly slow down the rate of the convergence.

However, if the FDI inflows are concentrated on developing countries, we can find that the rate of convergence increase if $\frac{Y_{FDI}^-}{Y_{FDI}^+}$ rises more than the ratio $\frac{Y^-}{Y^+}$. But we must remember that, according to Buckley et al., (2002), Borensztein et al., (1998) or de Mello (1997), this could not be always true, because the effect of FDI on growth depends on the state of technology of the host country. So, the effect of FDI inflows on economic convergence when this flows are concentrated on developing countries depends, by one hand, on the effect on growth of FDI and, by another hand, on the technological gap between developed and developing countries.

3. THE FACTS

The main argument that we have employed, so far, could be summarized as follows: FDI seems to have positive effects on economic growth, but, in relation to economic convergence, such positive results depend on where the investments are channelled. If FDI goes to the developing countries, economic convergence could exist, not only through an increase in capital stock, but also as a result of an increase in the productivity of the local companies in the host destination -thanks to the incorporation of technological advances-, but this is not sure. However, if FDI is concentrated in the more developed countries, we can affirm that there are no positive effects on economic convergence, since both the increase in capital stock and the spread of technology will also be concentrated in the more developed countries. So, in order to know the possible effects of FDI on economic convergence in our economies, the first step must be the study of the allocation of FDI inflows. This is the aim of this section. We will show that the data support one of the hypothesis of our analytical model: high degree of concentration of FDI inflows on developed countries. So, from the analytical model, the negative effects on economic convergence will be an obvious result.

Table 2
Selected Indicators of FDI and International Production (I)

	Value at current prices (In billions of dollars)			
	1982	1990	2000	2001
FDI inflows	59	203	1,271	735
FDI inward stock	734	1,874	6,314	6,846
Cross border M&As	...	151	1,144	601
Sales of foreign affiliates	2,541	5,479	15,680	18,517
Gross product of foreign affiliates	594	1,423	3,167	3,495
Employment of foreign affiliates (in thousands)	17,987	23,858	45,587	53,581
GDP (in current prices)	10,805	21,672	31,895	31,900
Gross fixed capital formation	2,285	4,841	6,466	6,680
Export of goods and non-factor services	2,081	4,375	7,036	7,430

Source: UNCTAD, World Investment Report 2001 and World Investment Report 2002.

Table 3
Selected Indicators of FDI and International Production (II)

	Annual growth rate (Percentage)				
	1986- 1990	1991- 1995	1996- 2000	2000	2001
FDI inflows	23.6	20.0	40.1	37.1	-50.7
FDI inward stock	15.6	9.1	17.9	22.2	9.4
Cross border M&As	26.4	23.3	49.8	49.3	-47.5
Sales of foreign affiliates	16.9	10.5	14.5	15.1	9.2
Gross product of foreign affiliates	18.8	6.7	12.9	32.9	8.3
Employment of foreign affiliates	6.8	5.1	11.7	10.2	7.1
GDP (in current prices)	11.5	6.5	1.2	2.5	2.0
Gross fixed capital formation	13.9	5.0	1.3	3.3	...
Exports of goods and non-factor services	15.8	8.7	4.2	11.7	-5.4

Source: UNCTAD, World Investment Report 2002.

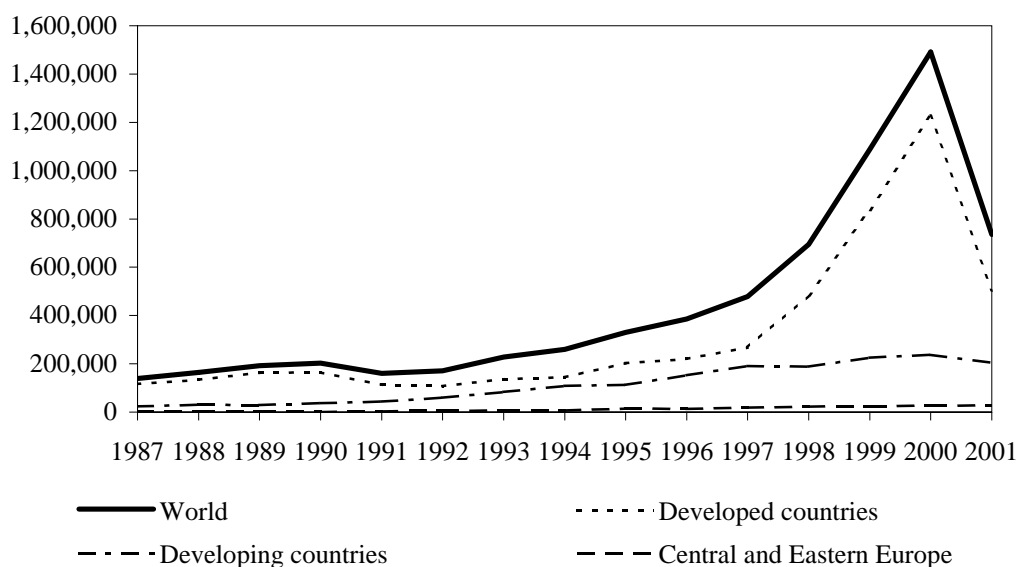
The current boom in FDI inflows suggests, that this capital movement is becoming a more significant element in the world economy. Despite the global decline in 2001 and

2002, FDI inflows continue to be a driving force of the globalization process. The growing power of FDI inflows can be seen in the increase in the worldwide FDI stock and the growth in the gross product, employment and sales of foreign affiliates of transnational corporations (tables 2 and 3).

As the data show, the worldwide FDI inflows have been clearly growing since the mid 1980s. Only the economic crisis of the early nineties and the economic situation in 2001 braked this trend. Despite these brief periods, however, it has been growing at a faster rate owing to other important macroeconomic variables like the GDP, the GFCF or even international trade. Indeed, it has moved from being 0.5% of the world's GDP in 1982 to represent 4% in 2000. With regard to GFCF, its contribution has increased from 2.6% to 19.7% in less than twenty years. At present, the total output generated by affiliated companies represents more than 10% of the global production.

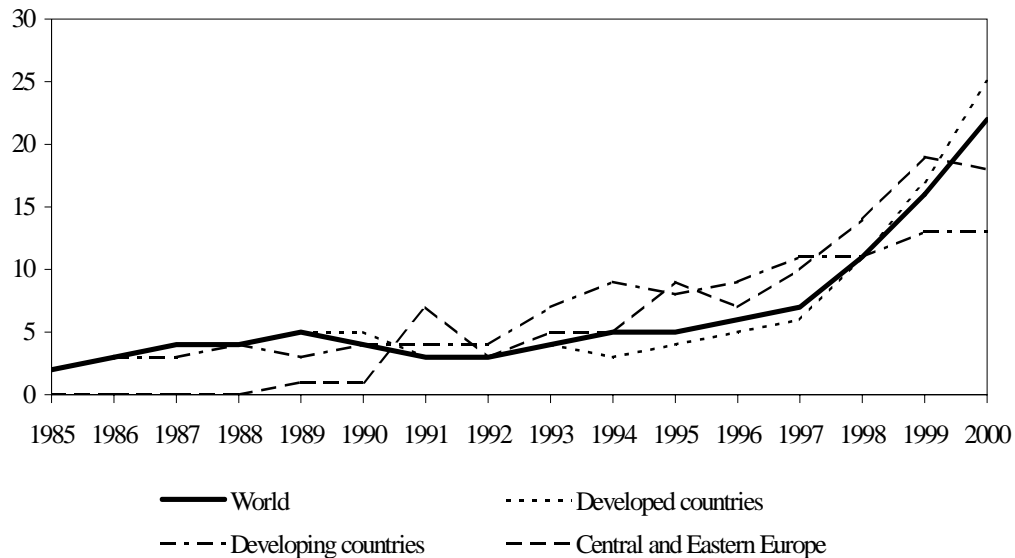
The principal beneficiaries of this spectacular growth in FDI over the last few years, however, have been precisely the most developed countries, in both relative and absolute terms, as figures 1 and 2 show.

Figure 1
Evolution FDI Inflows
(In Millions of US dollars)



Source: The author, based on the UNCTAD FDI database.

Figure 2
FDI inflows as percentage of the GFCF



Source: The author, based on the UNCTAD FDI database.

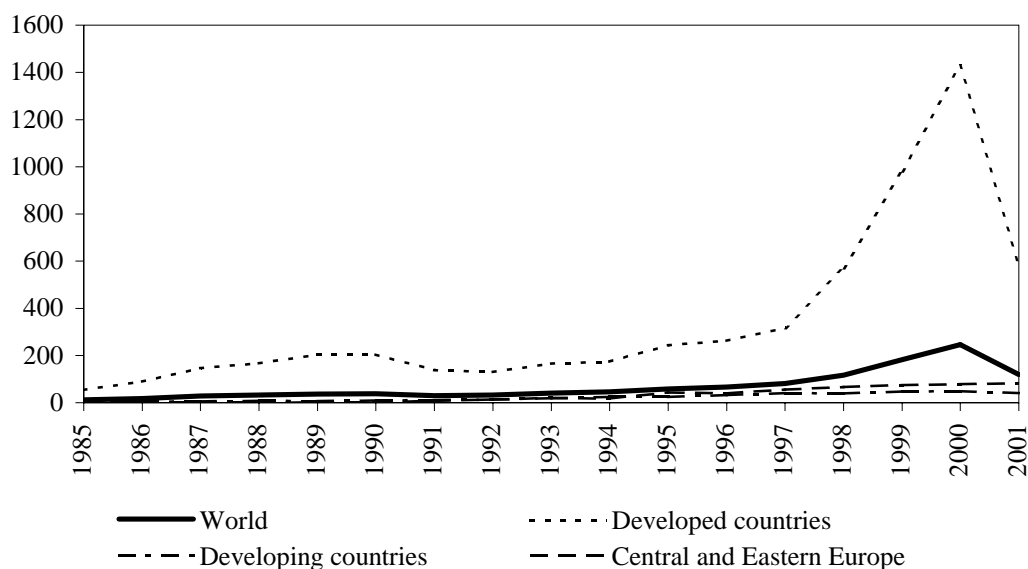
In figure 1, we can see clearly that the great majority of the international flow of FDI from the late nineties on, was allocated to the most developed countries in the world. Indeed, it is precisely the growth in the inflows of foreign capital to these countries that is now encouraging more FDI worldwide.

With regard to its distribution, however, the current pattern seen in FDI flows seems to have great repercussions for international economic convergence. Up to 1997 the importance of FDI inflows, in terms of GFCF, was relatively significant for the less developed countries. In fact, such flows tended to be higher than the world average. From 1997 onwards, however, this tendency begins to regress, with a remarkable increase in FDI in relation to GFCF being seen in the more developed countries, while the relationship stays constant in the less developed countries. In the year 2000, in fact the most developed countries were the only ones that did not see a drop in their contribution.

This, therefore, seems to be the crux of the matter. Throughout the first half of the nineties, FDI could be considered to have been an important source of growth for the

less developed countries, which were receiving considerably important flows of FDI in both relative and absolute terms. The increases in their capital stock and technological advances contributed greatly to their economic take off, and seemed to be providing a natural approach to economic convergence between the more developed countries and the less developed ones. However, with the spectacular growth seen in FDI flows to the more developed countries towards the end of the nineties, the less developed countries lose their coveted place in the international distribution of FDI and, indeed, become the great losers. FDI ceases to be the important source of economic growth for them that it used to be and is now directed towards the more developed countries, where we see greater technological exchanges and increases in capital stock taking place. These countries already had enormous economic and technical advantages over the less developed countries. The less developed countries have thus lost an important source of economic growth that would have helped them to approach convergence with the more developed ones.

Figure 3
FDI inflows per capita



Source: The author, based on the UNCTAD FDI database.

The less developed countries' loss of attraction for international FDI and the negative consequences that this could have for global economic convergence is obvious from figure 3. We clearly see a great rise in FDI per capita in the more developed countries at the end of the nineties, although this indicator was already considerably higher for them than it was for the less developed countries whose status has hardly changed significantly. In fact, the differences between the developed and the developing countries, in this sense, have increased over time. Only the economic situation in 2001, which represented a terrible shock to international investment, altered this trend.

Table 4
Inward FDI Performance Index
(1998-2000)

World	1.00
Developed countries	1.00
Western Europe	1.72
European Union	1.74
Other Western Europe	1.22
North America	0.82
Other developed countries ^(*)	0.12
Developing countries	0.99
Africa	0.52
North Africa	0.42
Other Africa	0.60
Latin America and the Caribbean	1.37
South America	1.28
Other Latin America and the Caribbean	1.57
Asia	0.85
West Asia	0.11
Central Asia	1.58
South, East and South-East Asia	1.00
East and South-East Asia	1.20
South Asia	0.16
The Pacific	0.58
Central and Eastern Europe	0.98

Source: UNCTAD, World Investment Report 2002.

^(*) Including Australia, Israel, Japan and New Zealand.

There is another important indicator that measures these great global inequalities and it demonstrates the possible negative effects that FDI has on economic convergence: i.e.,

the *Inward FDI Performance Index*, compiled by the UNCTAD. This index is the ratio of a country's share in global FDI inflows, to its share in global GDP. It is implicitly assumed, that FDI should be distributed automatically and always proportionately to the size of the economies (measured by their GDP). Otherwise, it would imply that there are other factors that alter (positively or negatively) the initial plans of foreign investment, such as political and macro-economic uncertainty, access to natural resources, human capital or infra-structure, among other things. As such, when a country has a rate higher than one in this index, it implies that it has a series of characteristics that make it more attractive for FDI than others that have a rate that is lower than one. Table 4 illustrates this quite clearly.

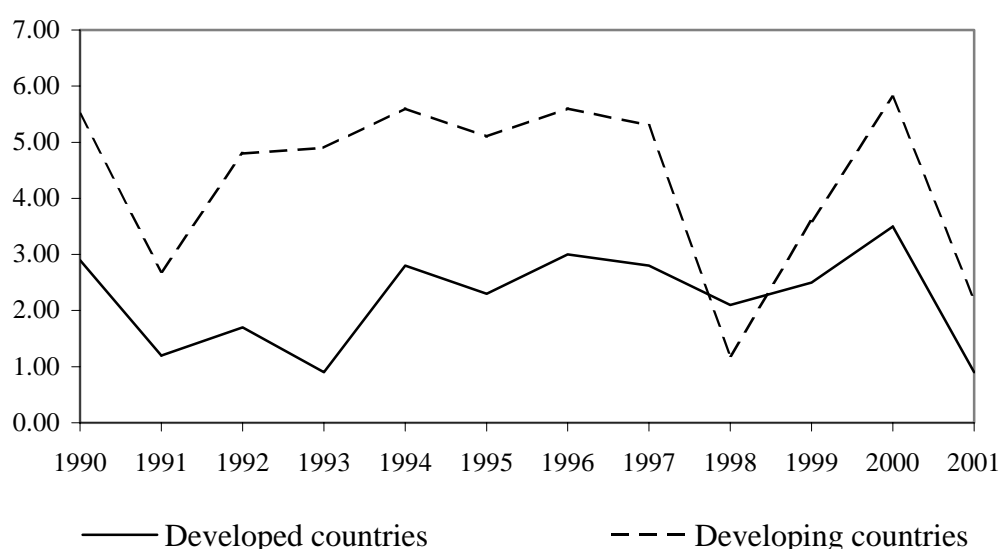
In general terms, the differences seen between the more and the less developed countries are highly significant. The countries of the European Union have the highest scores, while the lowest are seen for West and South Asia. Certain developed countries like Japan, for instance, appear under the heading of "Other developed countries", and their low scores are explained by the fact that they have traditionally been closed to inflows of FDI. The relatively high levels of FDI inflows to Latin America and Hong Kong (China) make the average score for the developing countries come close to one. In fact, there are important differences within the group of developing countries. Just 5 of these countries account for over 50% the total inflows of FDI to the developing countries, and 10 most important absorb more than 80% of the total.

Furthermore, we must not forget that FDI is very sensitive to short-term factors (which has been demonstrated by the sharp drop seen in the year 2001), which means that the international distribution of FDI is also significantly affected by small events. The case of Angola is particularly significant. Its recent climate of relative political stability has attracted important transfers of FDI to its petroleum industry, giving the country a score of over 5 and ranking it as the third most attractive country for FDI when just ten years ago it was number 129. But the important point here is that the majority of these less developed countries that are not now receiving significant amounts of FDI have little hope of receiving such foreign capital either on the short term or on the long term.

According to the *Inward FDI Potential Index*⁵, compiled by the UNCTAD, the poorer countries are “trapped” within a category countries with little potential to attract FDI, while they are now receiving very low levels of it because of their “small” economic weight.

These facts all have important implications for global economic convergence.

Figure 4
Real growth rates of GDP in developed and developing countries



Source: The author, from UNCTAD, *World Investment Report 2002*.

As can be seen, the difference between the growth rates of the more and the less developed countries is quite striking. While the less developed nations are showing a tendency to stagnate with growth rates around 5%, in the more developed ones the tendency is to increase their growth rates, bringing them nearer to those of the developing countries. The year 2000 is outstanding for its record volume of FDI transfers, most of which was directed to the more developed countries. If the growth

⁵ Estimated from a set of eight structural economic factors that are relatively constant over time. Specifically, these variables are: GDP per capita, real GDP growth, exports as percentage of GDP, number of telephone lines per 1,000 habitants, commercial energy use per capita, R&D expenditures as a percentage of gross national income, students in tertiary education as a percentage of total population and country risk.

rates of the less developed economies begin to stagnate while those of the more developed ones continue to rise, any process of economic convergence between the two groups will obviously be curtailed.

4. POLITICAL IMPLICATIONS OF THE EFFECTS OF FDI ON ECONOMIC CONVERGENCE

In the face of the growing importance of the international flows of FDI in recent years, their positive effects on the growth of the receiving economies and their negative effects on global economic convergence due to the observed pattern of international distribution, the need arises to consider new political focuses. If what we really wish to pursue, is a harmonious and global development of the world's economies as a whole, this would require a structural change in the very perception of the FDI phenomenon as well as the designing of new strategies of international distribution.

On one hand, we must admit that the international flows of FDI are playing an important role in the opening up and globalisation of many different economies, as we have seen in international trade, so that the debates on topics like internationalisation and the effects of external economies, among other topics, should not be limited to the analysis of either international flows of goods or services, but rather should consider all of these factors as a whole.

Table 5
International Regulatory Changes

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Number of countries that introduced changes in their investment regimes	35	43	57	49	64	65	76	60	63	69	71
Number of regulatory changes introduced in the investment regimes of the different countries	82	79	102	110	112	114	151	145	140	150	208
More favourable to FDI	80	79	101	108	106	98	135	136	131	147	194
Less favourable to FDI	2	-	1	2	6	16	16	9	9	3	14

Source: UNCTAD, World Investment Report 2002.

It implies a multilateral revision of the different national policies that affect FDI, just as GATT has recently revised policies on international trade. Fortunately, the most recent initiatives carried out in this field seem to be moving in that direction, as can be appreciated from the table 5, although a lot still remains to be done.

Due to the unequal international distribution of the FDI, however, there is an urgent need for an international consensus on political strategies that ensure with high-priority, that FDI is also directed to the less developed countries. As such, the individual and arbitrary performance of the countries that wish to participate in these flows of FDI would be avoided, thus limiting the unequal “battles” that take place among certain countries to be the destination of such inflows.

Their strategies should not only envisage quantitative aspects but qualitative ones as well. They should consider foreign investment, international credit or any other sort of foreign aid. These should be all analysed together with the possible flows of capital, goods, services or technology.

Any multi-lateral focus that is adopted should also consider the regional economic aspects that exist within each nation. The reason for this is that, just as FDI is concentrated in the most developed countries, a similar concentration of this FDI also exists in the most developed regions of these countries. The unequal distribution of FDI is not merely an international phenomenon but a regional one as well and is endangering regional convergence within the target economies.

Indeed, FDI should not be seen as a mere compensating instrument for a country’s negative balances of payments. Far from being considered as a short-term investment-type portfolio, it must be considered a part of a long-term investment strategy, with the permanent objective of increasing the production level of the receiving countries. This concept should be kept in mind when any sort of national or international policies on FDI are being designed.

5. SUMMARY AND CONCLUSIONS

Throughout the nineties, the international flows of FDI have been reaching bench-mark levels that would have been unthinkable a decade earlier. The greater liberalization seen, not only in capital markets, but in international trade as well, has been the main

cause for this massive inflow of foreign capital to so many different economies. According to the figures shown in this paper, the international distribution of these flows, however, clearly favours the more developed economies. There is not only remarkable divergence among the more and the less developed countries, but also within them, and the differences are only getting wider. In this paper we presented arguments and maintain that the above-cited factors, help to explain the growing gulf between the rich and the poor countries.

The transnational corporations, which are the main catalysts of FDI, provide a series of tangible and intangible assets that complement domestic investment and, as such, generate positive effects in terms of economic growth. However, their concentration in the more developed countries implies that they are the main beneficiaries in economic terms. The analytical model and the data presented here serve to offer a new explanation of the gulf between the more and the less developed countries. The current allocation of worldwide FDI inflows could be a factor, which actually helps to hinder economic convergence.

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