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EUROPEAN CAPITAL FLOWS IN LATIN AMERICA[1]

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and

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1. Global capital flows to Latin America

The key to a full understanding of European flows to Latin America is to put them in the context of overall capital flows because of the increasing globalization and integration of financial markets. Many of the trends seen at global level are reflected at regional level. A prime example is the securitization of flows, in other words the growing importance of portfolio flows.

It is not easy to produce a systematic picture of changes in total global flows as most of the available statistics and analyses focus either on flows between industrialized countries or flows from all the industrialized countries to developing countries. It is unusual to find tables which present consistent data for all countries. As the International Monetary Fund compiles comparable data in its Balance of Payments Statistics Yearbooks, we have used their data base to draw up Tables 1.1 and 1.2.

Although these data are the best available for this purpose, there are, as the IMF itself acknowledges (for example in IMF, 1996), major discrepancies in the global statistics since in the 1990s global capital inflows exceed total capital outflows by an annual average of USD 150 billion (by definition, global capital inflows and outflows should be the same). The IMF mainly attributes this difference to the fact that the countries receiving capital inflows are in a better position to measure flows than the countries where investors and creditors live, and can therefore record them more accurately. These discrepancies mainly occur in portfolio flows and other investment flows not connected with foreign direct investment. In this study capital inflow data are used which, according to the IMF, are the most accurate. The IMF and institutions such as the Bank for International Settlements in Basel have for some years been working together and also with the US authorities to try to improve these statistics (for more details see IMF 1992 and IMF 1996). Furthermore, in some cases the figures based on the IMF Balance of Payments Statistics Yearbooks include Brady bond issues in portfolio flows, which considerably hiked up the figures.

Although these bonds are portfolio instruments, they do not represent new net capital flows since they replace commercial bank debt. Given the purpose of our study they should not be included in our estimates. After lengthy consultations by phone with the relevant IMF officials in Washington, we have pared down the data, particularly in the case of Brazil and Argentina. The IMF officials also provided figures which they use internally and which are not published. These figures are given in Annex 1. In addition, IMF officials intimated that they might revise some of the figures published in the next Balance of Payments Statistics Yearbook. As already stated above, despite their limitations, these are the best global figures available.

Table 1.1 shows that foreign direct investment and portfolio flows (both at global level) soared between the end of the 1980s and 1994 (last year for which we have statistics). It was between 1988-89 and 1993, however, that the increase in global portfolio flows was particularly striking, rising from an annual average of USD 299 billion in 1988-89 to USD 734 billion in 1993. This is an increase of 145% in a very brief period. In the same period, global flows of foreign direct investment increased much less, by 14%. It is interesting that in 1994 the trend in portfolio flows changed and they dropped to USD 337 billion which, although significantly lower than the 1993 figure, is still 29% higher than the annual average for 1988-89. The drop in portfolio flows in 1994 was mainly due to upheavals on the bond market. Furthermore, figures provided by other institutions such as the OECD indicate that global portfolio flows picked up in 1995. There is therefore a clear tendency for a rapid increase in portfolio flows at global level.

Table 1.1

Capital flows to developing countries by type of flow and region

(in USD billion and as a percentage of world flows)

	1988-89 (i)		1990-91 (i)		1992		1993		1994		1995
	USD bn	%	USD bn	%	USD bn	%	USD bn	%	USD bn	%	USD bn
Foreign Direct Investment (net)	175.7	100.0%	177.6	100.0%	162.1	100.0%	200.7	100.0%	212.5	100.0%	na
Industrialized countries	149.1	84.9%	141.2	79.5%	113.2	69.8%	127.6	63.6%	128.3	60.4%	193.2
Developing countries	26.6	15.1%	36.4	20.5%	48.9	30.2%	73.0	36.4%	84.2	39.6%	na
Asia	13.4	7.6%	19.5	11.0%	25.6	15.8%	44.8	22.3%	50.2	23.6%	na
Africa	2.1	1.2%	1.7	0.9%	2.2	1.4%	2.3	1.2%	3.2	1.5%	na
Latin America	8.7	5.0%	9.7	5.4%	13.8	8.5%	14.1	7.0%	17.6	8.3%	14.9
Mercosur	4.2	2.4%	3.8	2.1%	6.9	4.3%	8.6	4.3%	5.2	2.5%	7.9
Argentina	1.1	0.6%	2.1	1.2%	4.2	2.6%	6.3	3.1%	na	na	1.3
Brazil	2.0	1.1%	1.0	0.6%	2.1	1.3%	1.3	0.6%	3.1	1.4%	4.9
Chile	1.1	0.6%	0.6	0.3%	0.7	0.4%	0.8	0.4%	1.8	0.8%	1.7
Paraguay	ns	ns	0.1	ns	ns	ns	0.1	0.1%	0.2	0.1%	na
Uruguay	ns	ns	na	na	na	na	0.1	0.1%	0.2	0.1%	na
Mexico	3.0	1.7%	3.7	2.1%	4.4	2.7%	4.4	2.2%	8.0	3.8%	7.0

	1988-89 (i)		1990-91 (i)		1992		1993		1994		1995
	USD bn	%	USD bn	%	USD bn	%	USD bn	%	USD bn	%	USD bn
Portfolio flows (net)	299.0	100.0%	356.6	100.0%	454.5	100.0%	733.6	100.0%	337.4	100.0%	na
International organizations	7.2	2.4%	15.9	4.4%	14.0	3.1%	16.5	2.3%	7.0	2.1%	na
Industrialized countries	283.6	94.9%	313.6	88.0%	397.7	87.5%	621.7	84.7%	277.3	82.2%	472.5
Developing countries	8.1	2.7%	27.1	7.6%	42.8	9.4%	95.4	13.0%	53.2	15.8%	na
Asia	1.2	0.4%	2.0	0.6%	7.1	1.6%	25.1	3.4%	18.8	5.6%	na
Africa	ns	ns	-0.1	0.0%	3.4	0.8%	0.3	ns	1.5	0.4%	na
Latin America	3.1	1.0%	23.6	6.6%	28.3	6.2%	56.0	7.6%	18.2	5.4%	16.7
Mercosur	1.2	0.4%	6.4	1.8%	9.4	2.1%	26.3	3.6%	8.8	2.6%	13.5
Argentina	1.0	0.3%	3.8	1.1%	7.1	1.6%	18.7	2.5%	na	na	3.2
Brazil	ns	ns	2.2	0.6%	1.7	0.4%	6.8	0.9%	7.3	2.2%	10.2
Chile	ns	ns	0.3	0.1%	0.5	0.1%	0.8	0.1%	1.4	0.4%	ns
Paraguay	na	na	na	na	na	na	na	na	na	na	na
Uruguay	0.2	0.1%	0.1	0.0%	0.1	0.0%	ns	ns	0.2	0.0%	na
Mexico	2.0	0.7%	8.1	2.3%	18.0	4.0%	28.9	3.9%	8.2	2.4%	-10.1

(i) Annual average

ns : Not significant, na: not available

Source: Figures calculated from IMF, Balance of Payments Statistics Yearbook 1995 (Part 2)

Table 1.2

Capital flows to developing countries by type of flow and region

(in USD billion and as a percentage of total flows to developing countries)

	1988-89 (i)		1990-91 (i)		1992		1993		1994		1995
	USD bn	%	USD bn	%	USD bn	%	USD bn	%	USD bn	%	USD bn
Foreign Direct Investment (net) to											na
Developing countries	26.6	100.0%	36.4	100.0%	48.9	100.0%	73.0	100.0%	84.2	100.0%	na
Asia	13.4	50.3%	19.5	53.6%	25.6	52.4%	44.8	61.4%	50.2	59.6%	na
Africa	2.1	7.8%	1.7	4.6%	2.2	4.5%	2.3	3.2%	3.2	3.8%	na
Latin America	8.7	32.7%	9.7	26.5%	13.8	28.3%	14.1	19.3%	17.6	20.8%	14.9
Mercosur	4.2	15.8%	3.8	10.5%	6.9	14.2%	8.6	11.8%	5.2	6.2%	7.9
Argentina	1.1	4.1%	2.1	5.9%	4.2	8.5%	6.3	8.6%	na	na	1.3
Brazil	2.0	7.4%	1.0	2.9%	2.1	4.2%	1.3	1.8%	3.1	3.6%	4.9
Chile	1.1	4.2%	0.6	1.5%	0.7	1.4%	0.8	1.2%	1.8	2.1%	1.7
Paraguay	ns	ns	0.1	0.2%	ns	ns	0.1	0.2%	0.2	0.2%	na
Uruguay	0.0	0.2%	na	na	na	na	0.1	0.1%	0.2	0.2%	na
Mexico	3.0	11.4%	3.7	10.2%	4.4	9.0%	4.4	6.0%	8.0	9.5%	7.0

	1988-89 (i)		1990-91 (i)		1992		1993		1994		1995
	USD bn	%	USD bn	%	USD bn	%	USD bn	%	USD bn	%	USD bn
Portfolio flows (net) to											
Developing countries	8.1	100.0%	27.1	100.0%	42.8	100.0%	95.4	100.0%	53.2	100.0%	na
Asia	1.2	14.5%	2.0	7.5%	7.1	16.6%	25.1	26.3%	18.8	35.3%	na
Africa	ns	ns	-0.1	-0.5%	3.4	8.0%	0.3	0.3%	1.5	2.8%	na
Latin America	3.1	38.1%	23.6	87.2%	28.3	66.1%	56.0	58.7%	18.2	34.2%	16.7
Mercosur	1.0	12.1%	6.4	23.6%	9.4	21.9%	26.3	27.6%	8.8	16.6%	13.5
Argentina	-0.1	-1.3%	3.8	14.1%	7.1	16.6%	18.7	19.6%	na	na	3.2
Brazil	ns	ns	2.2	8.1%	1.7	4.0%	6.8	7.1%	7.3	13.7%	10.2
Chile	ns	ns	0.3	1.1%	0.5	1.1%	0.8	0.9%	1.4	2.6%	ns
Paraguay	na	na	na	na	na	na	na	na	na	na	na
Uruguay	0.2	2.2%	0.1	0.3%	0.1	0.2%	ns	ns	0.2	0.3%	na
Mexico	2.0	24.1%	8.1	29.8%	18.0	42.2%	28.9	30.3%	8.2	15.4%	-10.1

(i) Annual average

ns: not significant, na: not available

Source: Figures calculated from IMF, Balance of Payments Statistics Yearbook 1995 (Part 2)

With regard to capital flows to Latin America, net foreign direct investment (FDI) increased systematically from an annual average of USD 8.7 billion in 1988-89 to USD 17.6 billion in 1994 (i.e. an increase of 102%), although it fell a little (15%) in 1995. Preliminary ECLA figures for 1996 show a considerable expansion in FDI in that year (with a 35% rise over 1995 levels), and a particularly large increase for Brazil. According to ECLA estimates, net FDI to Brazil rose from USD 3.5 billion in 1995 to USD 8 billion in 1996 - a rise of 130%.

Not only was there a substantial expansion in FDI to Latin America in the 1990s (particularly large in 1996 to Brazil) but the increase was fairly widespread throughout the region. As a result in 1995-96 FDI reached sizeable amounts in ten countries. The backdrop to this process was the implementation of the capitalization programme for public sector firms in Bolivia, more flexibility in the regulations governing investment in Argentina, Colombia, Chile and Venezuela, while in Brazil and Nicaragua - and especially in Peru - some major privatizations encouraged FDI.

Latin America's share of global total FDI inflows rose substantially from 5% in 1988-89 to 8.3% in 1994 (see Table 1.1). This rise in the share of FDI to Latin America in the overall total is mainly due to the increase in the share of FDI to Mexico. FDI flows to the Mercosur countries - which for the purposes of this study include Chile - rose in absolute values (but not much in percentage terms as can be seen in Table 1.1). Indeed, Table 1.2 shows that the share of FDI flows to the Mercosur countries, as a proportion of FDI flows to the developing countries, fell quite sharply between 1988-89 and 1994. During the same period the share of FDI to Latin America fell as a proportion of total FDI to the developing countries (from 33% in 1988-89 to 18% in 1994), while the share of FDI to Asia rose, particularly FDI to China which grew considerably, reaching USD 36 billion in 1995.

As can be seen in Table 1.1, the trends for net portfolio flows to Latin America are quite different. Net portfolio flows soared from USD 3 billion (annual average) in 1988-89 to USD 56 billion in 1993, i.e. an increase of 1 700% in that period, although they fell in 1994. Thus portfolio flows to Latin America did not just follow the global trend of securitization of capital flows but far outstripped them. Hence the share of portfolio flows to Latin America in the overall total increased from 1% (annual average) in 1988-89 to 7.6% in 1993, although it fell somewhat in 1994 to 5.4%, but still remained very high. Portfolio flows increased significantly for the Mercosur countries, from USD 1.2 billion in 1988-89 to USD 26 billion in 1993, a percentage increase of 2 000%. Portfolio flows also rose considerably (although at a slightly lower rate) for Mexico, from USD 2 billion to USD 28.9 billion in 1993, an increase of 1 300%. In the case of both Mexico and Mercosur these flows dropped quite sharply in 1994. It is also important to point out that the share of portfolio flows to Latin America in total flows to the developing countries was extremely high, accounting for 38% of the total in 1988-89, 87% of the total in 1990-91, 66% in 1992, 59% in 1993, and 34% in 1994 (see Table 1.2). The Asian countries' share in this category of more volatile flows was much smaller.

Table 1.3 gives the sectoral breakdown of foreign direct investment in Mercosur for the period 1985-95. The importance of the primary and tertiary sector in FDI stock in Mercosur grew considerably; the subsectors which most increased their share were mining and petroleum and other services. The share of the secondary sector fell quite fast, although the absolute value of FDI in the secondary sector rose fairly significantly between 1985 and 1995. It is worth noting that among the Mercosur countries the source of FDI varies widely. As yet unpublished[3] ECLA data to 1995 show that for accumulated FDI,

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3 Our thanks to Patricio Rosas of ECLA for providing this information.

Europe's share to Chile was 24.7% of the total (and that of the USA 40%), while in the case of Brazil, Europe's share was 44% of the total (and that of the USA 36.7%). In the case of relatively small countries like Paraguay, the Latin American countries have a bigger share of FDI flows (46%).

Table 1.3 FDI in Mercosur by economic sector, 1985-95 (USD million and as a percentage)

	1985	%	1990	%	1995*	%
Primary sector	**2 967**	**8.6%**	**5 890**	**11.3%**	**11 385**	**14.8%**
Agriculture	453	1.3%	704	1.3%	1,282	1.7%
Mining, petroleum	2 513	7.3%	5 187	9.9%	10 102	13.1%
Secondary sector	**24 445**	**70.7%**	**31 789**	**60.9%**	**37 720**	**48.9%**
Tertiary sector	**7 810**	**22.6%**	**14 830**	**28.4%**	**28 017**	**36.3%**
Distribution trade	1 345	3.9%	2 000	3.8%	2 005	2.6%
Transport and communications	107	0.3%	418	0.8%	499	0.6%
Finance and insurance	2 313	6.7%	4 651	8.9%	5 975	7.7%
Other services	4 045	11.7%	7 491	14.3%	19 539	25.3%
Total	**34 591**	**100%**	**52 239**	**100%**	**77 121**	**100%**

the data cover Argentina, Brazil and Chile.

* the dates of the statistics used varies by country: Argentina (1992), Brazil (1993) and Chile (9/1995)
Sources: Directorio sobre Inversión Extranjera en América Latina y el Caribe, ECLA (1993),
Statistics on International Direct Investment of Dynamic non-member Economies in Asia and Latin America (1994),
Central Bank of Brazil, Committee on Foreign Investment in Chile.

2. European flows to Latin America

It is not easy to obtain data on capital flows from one specific region to another. Organizations such as the IMF, the OECD and others do not usually publish data of this type.

A. Foreign Direct Investment

One category of flows where it is possible to obtain data with this kind of breakdown is for foreign direct investment (see Tables 2.1 and 2.2). The only methodological problem is that flows to Latin America include as a major category flows to offshore centres, for which it is impossible to find out the final destination, although in most cases it is assumed to be Latin America. These flows to offshore centres are not the main subject of this investigation, but it is worth noting that they were as large as

total FDI to the region in 1980-84. Between 1985 and 1989 flows to offshore centres in the region doubled and exceeded FDI to the rest of the region. Since 1990, however, flows to offshore centres have virtually stopped growing and this, combined with the rise in FDI to the rest of the region, meant that flows to offshore centres fell to about 50% of flows to the rest of Latin America (see Tables 2.1 and 2.2).

Table 2.1

Foreign Direct Investment to LA and the Caribbean

includes offshore centres

(in USD billion and as a percentage of total)

annual average	1980-84	%	1985-89	%	1990-94	%
Europe	2.2	37%	3.7	44%	5.5	35%
USA	2.7	46%	2.9	34%	9.6	61%
Japan	1.0	17%	1.8	22%	0.7	4%
Total	**5.9**	**100%**	**8.4**	**100%**	**15.9**	**100%**

Source: OECD and central banks

Table 2.2

Foreign Direct Investment to LA and the Caribbean

excludes offshore centres

(in USD billion and as percentage of total)

annual average	1980-84	%	1985-89	%	1990-94	%
Europe	1.2	41%	1.3	54%	2.1	23%
USA	1.3	44%	0.9	40%	6.7	73%
Japan	0.4	15%	0.1	6%	0.4	4%
Total	**2.9**	**100%**	**2.4**	**100%**	**9.2**	**100%**

Foreign Direct Investment to Mercosur

(in USD billion and as percentage of total)

annual average	1980-84	%	1985-89	%	1990-94	%
Europe	0.9	47%	1.0	44%	1.2	26%
USA	0.7	40%	1.0	47%	3.4	71%
Japan	0.2	13%	0.2	9%	0.2	3%
Total	**1.9**	**100%**	**2.2**	**100%**	**4.7**	**100%**

Source: OECD and central banks

Tables 2.1 and 2.2 show that FDI flows to Latin America increased considerably from the beginning of the 1980s and particularly during the 1990s.

FDI flows from Europe to Latin America also rose significantly and even in the toughest years of the Latin American debt crisis (1983-89) European FDI flows to Latin America (excluding offshore centres) continued to increase (see Table 2.2 for 1985-89 and Griffith-Jones (1995) for 1983-88), while North American FDI to Latin America fell somewhat and Japanese FDI dropped sharply. The conclusion is therefore that European flows proved more stable in the face of adversity, which was vital because in these years the restriction on external flows was particularly damaging for Latin America and its economic growth. This is one of the virtues of European flows which is worth extolling. European foreign investment was also particularly active in the manufacturing sector, whereas the USA and Japan were more involved in the primary sectors (Beetz and van Ryckeghem, 1993).

During the 1990s, however, US foreign direct investment to Latin America has risen sharply. Although European FDI has also grown considerably (see Tables 2.1 and 2.2), its share in total FDI to the region has fallen. Thus for total FDI to Latin America (including offshore centres), European FDI fell from 44% in 1985-89 to 35% in 1990-94. The drop is significantly larger if offshore centres are excluded.

It is worth highlighting the importance of Latin America and the Caribbean as a destination of European FDI, since Latin America and the Caribbean is the main destination of European flows outside the OECD, accounting for 28% of European flows outside the OECD in 1992-93, while 26% went to South-East Asia and 20% to countries in transition. According to data from the US Department of Commerce "Survey of Current Business", in the case of the USA, Latin America was also the main destination of FDI outside the OECD in this period.

As can be seen from Table 2.2, European FDI flows to the Mercosur countries rose steadily from 1980-84 until 1990-94. Once again, however, the increase in US flows to Mercosur was swifter, particularly in the 1990s. As a result, the European share of FDI to Mercosur fell from 47% in 1980-84 to 44% in 1985-89 and to only 26% in 1990-94.

The upshot was that the European share of FDI stock in Mercosur fell somewhat in the period 1985-95, as can be seen from Table 2.3, although its level in 1995 (38% of the total) is still very high. It was in 1995 that the USA overtook Europe in FDI stock in Latin America. There was virtually no drop in the European share of FDI stock in Brazil between 1985 and 1992, whereas Europe's share fell in the case of Argentina, and somewhat more in the case of Chile (despite the fact that European FDI stock in Chile rose substantially from USD 694 million to USD 3.17 billion between 1985 and 1992).

Table 2.3 FDI stock in Mercosur by source country, 1980-1995 (USD million and as % of the total)

	1985	%	1990	%	1995+	%
European Union *	14 705	42.5%	23 008	43.9%	32 693	37.7%
USA and Canada	13 550	39.2%	19 754	37.7%	35 098	40.5%
Japan	2 498	7.2%	4 034	7.7%	4 851	5.6%
Mercosur**	232	0.7%	381	0.7%	2 484	2.9%
Others***	3 606	10.4%	5 177	9.9%	11 515	13.3%
Total	34 591	100.0%	52 354	100.0%	86 641	100.0%

*includes Switzerland

** includes Uruguay

*** includes offshore centres

+ the dates of the statistics vary: Argentina (1992), Brazil (1993) and Chile (9/1995)

Sources: Directorio sobre la Inversión Extranjera en América Latina y el Caribe, ECLA (1993),

Statistics on International Direct Investment of Dynamic non-member Economies in Asia and Latin America (1994), OECD,

Central Bank of Brazil, Committee on Foreign Investment in Chile.

Data complied by the authors.

Privatizations

European FDI has played a major role in privatizations in Latin America, and in investment subsequent to - and linked with - privatization.

Since 1987 there has been a big wave of privatizations in Latin America. The countries first off the mark were Chile and Argentina. In the 1990s many parastatals in the services sector (finance, energy, transport and telecommunications) were privatized. Because of constitutional restrictions on foreign ownership, some Latin America countries such as Brazil have not opened up some sectors to foreign participation.

Telefónica de España stands out for its stake in privatizations in Argentina, Peru, Venezuela and Puerto Rico and its purchase of shares in Chile's CTC. Recently it has invested in Brazil. France-Telecom and Stet of Italy have also been very active. European telephone companies have in general proved more competitive than the US firms which took part in tendering for privatized firms. Firms from both regions sometimes formed consortia as in the case of France-Telecom and Southwestern Bell for the purchase of TELMEX.

In the air transport sector, the Spanish parastatal Iberia acquired 49% of Aerolíneas Argentinas, investing USD 330 million (ECLA, 1995).

To date there have been few privatizations in Brazil but there are plans to privatize several major firms in the future. In July 1996 the Government of Brazil announced a far-reaching privatization programme starting in 1997. The sale of parastatals includes 11 power plants and transmission systems of the utility Eletrobrás (for a sum of between USD 2.5 billion and USD 3 billion); 31 ports and the Companhia do Rio Dolce, a mining company (for about USD 5.5 billion). Privatization of the latter is scheduled for 1997 but the recent discovery of new mineral reserves has held up the sales process. It is hoped that the new telecommunications law enacted in 1996 will encourage FDI in this sector. In December 1996 a consortium led by Telefónica de España bought 35% of CRT, the telephone company of the state of Rio Grande do Sul, for USD 656 million. This consortium, which included firms from Brazil, the USA and Chile, beat the rival consortium of Stet of Italy. Chile had already privatized most of its firms in previous periods, making Argentina the Mercosur country with the greatest number of recent privatizations.

Table 2.4 shows that European holdings in privatizations in Latin America (in terms of number of firms) were higher than those of the USA. In some sectors such as air transport the only foreign participation was European.

Table 2.4 European holdings in privatized firms in Latin America by sector (1986-92)

	total (USD million)	**No privatized firms**	**European* holdings**	**US holdings**	**other foreign* holdings**
Mining	865	3	-	-	2
Petroleum	1 846	1	1	1	1
Energy	2 380	1	1	1	-
Electricity	1 797	3	1	1	1
Steel	3 260	8	1	-	2
Petrochemicals	919	3	1	-	-
Chemicals	672	3	-	-	1
Finance	11 961	20	-	-	-
Air and land transport	1 185	7	3	-	-
Telecommunications	6 036	7	5	4	1
Total	30 921	56	13	7	8

* the figure indicates the number of purchases in which firms from the country or area mentioned were involved.

Source: Directorio sobre la Inversión Extranjera en América Latina y el Caribe, ECLA (1993),

In the case of Argentina, (see Table 2.5) a country for which figures are available by source of privatization, European holdings accounted for 52% of foreign investment (much higher than US investment) and 31% of total financing.

Table 2.5 Argentina. Source of FDI in privatized firms, 1990-1993

Country	Amount(USD million)	%
Argentina	3 109	39%
Foreign	4 724	61%
USA	1 255	27%
Europe	2 458	52%
LA and Caribbean	711	15%
other	300	6%
Total	**7 833**	**100%**

Source: Agosín (1995)

The link between privatizations and FDI flows

Privatizations have provided the launch pad for encouraging additional FDI flows, partly as a result of tender commitments. The main impact has been felt in telecommunications where FDI has helped to improve services (extension of the network, digitalization, shorter connection times, etc). Between 1988 and 1994 CTC invested USD 400 million annually in the Chilean network; USD 5 billion has been invested in Argentina since privatization; in Mexico USD 10 billion; in Peru USD 1 billion; etc. Total investment is in excess of USD 20 billion (IELAR, 1996: 54-55).

The amount invested after privatization has been much greater than the value of the purchase of the firms themselves. As technology continues to develop at an amazing pace in this sector, firms need major investment each year to update constantly and thus compete internationally. An additional factor is the degree to which the sector lagged behind prior to privatization. Protection and an initial absence of competition encouraged the new firms to invest more as they enjoy relative freedom in imposing high tariffs in a temporarily closed market. This time allows them to update and modernize the network before opening up the market to competition from other players. The telecommunications sector illustrates clearly that the injection of foreign capital can expand infrastructure in Latin America, providing large sections of the population with services to which they previously had no access and fostering the region's economic development.

Besides privatizations, since 1992 there have been large FDI flows in the manufacturing sector in Argentina, Brazil and Mexico, where investors are keen to take advantage of the scale of the markets offered by Mercosur and NAFTA. In Brazil and Mexico FDI has mainly gone to the automobile sector. In the case of Mercosur the main automobile companies of Asia (Hyundai, Toyota), Europe (Volkswagen, Mercedes-Benz, Fiat, Scania, Peugeot and Renault) and the USA (General Motors, Chrysler, Ford) have announced plans to invest over USD 13 billion between 1995 and 2000.

Table 2.6 shows that infrastructure is an area of growing importance for private investment in Latin America: total investment in Latin America amounted to USD 61 billion in the period 1990-95, with the biggest private infrastructure projects in Argentina. Regional infrastructure projects have also begun to assume importance, such as the Paraná-Paraguay Hidrovía. Here a very important field is opening up for FDI. Concessions to build, operate and manage ports, roads, railways - and to generate and distribute electricity - offer major opportunities for foreign firms. A growing number of them are beginning to take up these opportunities. Initial estimates indicate that firms from three European countries (Italy, UK and France) lead the field in construction in Latin America, accounting for 39% of total investments as compared with 32% for US firms. Spanish firms are also beginning to play a prominent role in Latin America, where they conduct 62% of their international activities.

Table 2.6 Private infrastructure projects in LA and the Caribbean (1990-95)

Country	Total projects (*)	Cost (USD million)
LA and C total	**235 (170)**	**61 453**
Mercosur	*96(73)*	*28 954*
Argentina	70 (61)	26 485
Brazil	4 (2)	509
Chile	22 (11)	1 960
Colombia	11 (6)	591
Mexico	80 (63)	24 438
Peru	4 (4)	2 915

*the number of projects whose cost is known is given in brackets

Source: World Bank PPI data bank

B. Bank loans

We have compiled innovative data for bank loans with a breakdown of sources by region (and even by EU Member State to Latin America and Mercosur). We were able to do this by using primary information from a BIS publication, "The Maturity, Sectoral and Nationality Distribution of International Bank Lendings". As the presentation has changed recently to include statistics by recipient country, we have specially obtained unpublished BIS data for previous years (with slightly different categories as they refer to European and North American loans, which include the USA and Canada).

With USD 101 billion, the EU Member States' banks accounted for 49% of total bank loans to Latin America in June 1995, which is almost double the level of US loans - USD 55 billion, i.e. 27% of total bank loans. It is also much higher than Japanese credits, which at USD 14 billion accounted for 7% of the total (see Table 2.7). In the case of Asia, the stock of European bank loans is also the biggest but it only marginally exceeds the stock of US bank loans to Asia (see table 2.7).

It is striking to see in Table 2.7.A that European banks had a higher stock of bank loans to Latin America than North American banks during the entire period from 1988 and the extent of the difference grew very considerably between 1988 and 1996, from 3% of the total in 1988, to 23% in 1996.

Table 2.7

International bank credits by source country to developing countries

(in USD billion and as percentage of total European bank credits)

End June 1995

	EU (i)	%	Japan	%	USA	%	Total (i)
Developing countries	275.4	47.9%	129.3	22.5%	83.0	14.4%	574.6
Asia	108.5	38.7%	108.0	38.5%	22.2	7.9%	280.3
Africa	29.1	78.2%	2.3	6.1%	1.6	4.3%	37.3
Latin America	101.0	49.5%	14.5	7.1%	55.2	27.0%	204.1
Mercosur	52.6	49.3%	7.7	7.2%	27.0	25.2%	106.7
Argentina	20.4	54.3%	1.9	4.9%	10.8	28.6%	37.6
Brazil	24.8	47.3%	4.8	9.0%	11.2	21.2%	52.5
Chile	4.6	39.4%	1.0	8.9%	3.8	32.0%	11.7
Paraguay	0.5	45.2%	na	na	0.1	12.5%	1.0
Uruguay	2.2	57.9%	0.0	0.8%	1.2	30.1%	3.9
Mexico	26.2	44.2%	4.4	7.4%	19.6	33.0%	59.2

(i) Excludes Portugal and Greece, (i) EU, Canada, USA, Japan, Norway

International bank credits by source country to developing countries

(in USD billion and as percentage of total European bank credit)

End December 1994

	EU(i)	%	Japan	%	US	%	Total (i)
Developing countries	244.3	46.6%	114.3	21.8%	83.0	15.8%	523.9
Asia	87.6	36.8%	93.3	39.2%	19.8	8.3%	238.1
Africa	28.4	77.5%	2.2	5.9%	1.6	4.4%	36.7
Latin America	92.7	46.9%	13.6	6.9%	57.4	29.1%	197.6
Mercosur	47.3	48.0%	7.1	7.2%	26.1	26.5%	98.4
Argentina	18.6	54.2%	1.7	4.9%	9.9	28.7%	34.3
Brazil	20.6	43.2%	4.5	9.4%	11.4	23.9%	47.6
Chile	6.0	49.0%	1.0	7.8%	3.7	30.1%	12.2
Paraguay	0.4	52.1%	na	na	0.0	4.1%	0.7
Uruguay	1.7	48.1%	0.0	0.9%	1.1	31.5%	3.5
Mexico	25.0	40.5%	4.0	6.5%	22.2	35.9%	61.7

(i) Excludes Portugal and Greece, (i) EU, Canada, USA, Japan, Norway

Sources: figures calculated from Bank of International Settlements, Basel (BIS), The Maturity, Sectoral and Nationality Distribution of International Bank Lending, various editions.

EU banks also play an important role in the Mercosur countries, accounting for 49% of total loans to that region in June 1995 (see Table 2.7). EU banks play an even bigger role in Argentina, as they provide 54% of total loans. It is also worth noting that European bank loans are bigger in the Mercosur countries than in Mexico although EU banks are Mexico's main source of credits (see Table 2.7).

In parallel to the whole of Latin America, European banks had a stock of higher bank loans to Mercosur than North American banks throughout the period 1988-1996, and the difference in Europe's favour has grown very significantly - from 5% in 1988 to 24% in 1996. Yet in 1985 for both Mercosur and the whole of Latin America, the stock of North American loans was greater than the stock of European loans (see Table 2.7.A).

Table 2.7.A : Bank credits in Latin America and Mercosur (USD billion)

	Europe				North America				Total	
	Europe in LA		Europe in Mercosur		USA in LA		USA in Mercosur			
	LA	%	Mercosur	%e	LA	%	Mercosur	%	LA	Mercosur
1985	78.6	33	38.8	34 %	94.2	40	43.7	39 %	236.5	113.3
1988	80.7	37	42.3	38 %	74.6	34	36.9	33 %	220.6	110.2
1990	81.2	44	44.7	48 %	52.6	28	22.8	24 %	184.8	93.7
1992	86.9	46	47.8	50 %	52.5	28	20.9	22 %	187.0	94.7
1995	111.9	53	60.2	53 %	66.5	31	35.1	31 %	212.2	114.2
1996	119.4	54	66.1	54 %	67.8	31	36.8	30 %	221.1	121.5

We are very grateful to Karsten von Kleist of the BIS, who provided unpublished data to compile this Table.

Source: BIS, data calculated especially for this study.

Hence between 1985 and 1996 European banks increased their stock of bank loans to Mercosur pretty considerably - from USD 38.8 billion in 1985 to USD 66.1 billion in 1996 - while during the same period North American loans fell from USD 43.7 billion in 1985 to USD 36.8 billion in 1996. Similar trends were seen in Latin America as a whole (see Table 2.7.A).

It is also interesting to note that the share of EU bank loans to Latin America and Mercosur rose quite considerably between December 1994 and June 1995, i.e. during and immediately after the Mexican peso crisis. This means that European banks were "good friends when the going got tough" as were European direct investors in the worst years of the Latin American debt crisis in the 1980s. In more technical terms, in both cases European flows were counter cyclical as they increased in periods when other flows decreased and hence when it was more vital for the Latin American countries to be able to rely on them. This is a very positive factor.

Table 2.8

Net flows of bank credit to developing countries during the first six months of 1995

(in USD billion)

	First six months of 1995				1994			
	EU (i)	**Japan**	**USA**	**Total (i)**	**EU (i)**	**Japan**	**USA**	**Total (i)**
Developing countries	31.1	15.0	0.0	50.7	36.6	14.3	6.1	67.0
Asia	20.9	14.6	2.4	42.3	24.6	20.6	2.7	54.6
Africa	0.8	0.1	0.0	0.6	-0.3	0.0	-0.4	0.1
Latin America	8.3	0.8	-2.2	6.6	6.5	-5.1	4.8	7.8
Mercosur	5.3	0.6	0.9	8.4	3.1	-5.2	2.5	0.1
Argentina	1.8	0.2	0.9	3.3	3.7	-0.6	0.2	4.0
Brazil	4.3	0.3	-0.2	4.9	-2.7	-4.7	2.0	-6.6
Chile	-1.4	0.1	0.1	-0.5	1.7	0.0	0.4	2.2
Paraguay	0.1	na	0.1	0.3	0.2	na	0.0	0.3
Uruguay	0.6	0.0	0.1	0.4	0.2	0.0	-0.1	0.2
Mexico	1.2	0.4	-2.6	-2.5	1.2	0.4	2.9	6.5

(i) Excludes Portugal and Greece, (i) EU, Canada, USA, Japan, Norway

Sources: Figures calculated from BIS, The Maturity, Sectoral and Nationality Distribution of International Bank Lending, various editions.

Table 2.8 shows that in the first six months of 1995 new net credits from EU banks to Latin America and Mercosur were higher than during the whole of 1994. It is interesting to see that net North American credits were negative (-USD 2.2 billion) in the first months of 1995 and credits from Japanese banks were negligible. This again illustrates the counter cyclical role which European banks played in the first half of 1995. It was mainly French banks, and to a lesser extent German banks, which lent to Latin America (and Mercosur) in the first half of 1995.

Table 2.9

International bank credits by source country to developing countries

(in USD billion and as a percentage of total European credits)

End June 1995

	France	%	Germany	%	Italy	%	Netherlands	%	Spain	%	UK	%	EU (i)	%
Developing countries	65.9	24%	69.8	25%	19.5	7%	21.1	8%	12.9	5%	63.3	23%	275.4	100%
Asia	28.6	26%	26.0	24%	3.5	3%	7.9	7%	1.2	1%	28.9	27%	108.5	100%
Africa	11.9	41%	3.5	12%	4.2	14%	1.1	4%	2.1	7%	2.6	9%	29.1	100%
Latin America	18.8	19%	27.2	27%	9.3	9%	11.1	11%	9.4	9%	21.3	21%	101.0	100%
Mercosur	9.9	19%	15.7	30%	6.2	12%	5.9	11%	4.6	9%	9.1	17%	52.6	100%
Argentina	3.2	16%	6.5	32%	3.9	19%	1.6	8%	2.0	10%	2.8	14%	20.4	100%
Brazil	5.9	24%	7.5	30%	1.6	6%	3.0	12%	1.0	4%	5.2	21%	24.8	100%
Chile	0.6	13%	1.2	27%	0.3	6%	0.7	14%	0.9	19%	0.7	15%	4.6	100%
Paraguay	0.1	11%	0.2	36%	0.1	30%	na	na	0.0	9%	0.1	15%	0.5	100%
Uruguay	0.2	7%	0.3	12%	0.3	13%	0.6	28%	0.6	26%	0.3	14%	2.2	100%
Mexico	5.7	22%	4.5	17%	1.5	6%	2.6	10%	2.5	9%	8.5	32%	26.2	100%

(i) Excludes Portugal and Greece, na: not available

Sources: Figure calculated from BIS, The Maturity, Sectoral and Nationality Distribution of International Bank Lending, various editions.

Table 2.9 gives the breakdown of intra-EU credit to Latin America. German banks play the biggest role (with 27% of loans from EU banks, followed by UK banks (with 21%), French banks (with 19%), Italian banks (12%), Dutch (11%) and Spanish (9%).

C. Portfolio flows

As stated in Section 1, portfolio flows have assumed great importance in capital flows to Latin America in the 1990s. There are two main types of portfolio flows: international bond issues and international share issues.

1) International bond issues

Because of their scale, international bond issues have played a major part in capital flows to Latin America. Table 2.10 shows that Latin American international bond issues started off low in 1990 (USD 3 billion), then peaked at USD 29 billion in 1993, dropped a little in 1994, but picked up again in 1995 when issues reached USD 23 billion. It is worth noting that in the first ten months of 1996, the very high Latin American bond issue (USD 41 billion) far exceeded annual total bond issues in previous years.

Table 2.10 International bond issues (in USD billion) (i)

	1990	1991	1992	1993	1994	1995	1996(ii)
Latin America and Caribbean	2.8	7.2	12.6	28.8	18.2	23.4	41.0
Mercosur	0.0	2.8	5.4	13.2	9.7	13.9	21.9
Argentina	0.0	0.8	1.6	6.3	5.3	6.4	11.3
Brazil	-	1.8	3.6	6.5	4.0	7.0	9.5
Chile	-	0.2	0.1	0.3	0.2	0.3	1.0
Uruguay	-	-	0.1	0.1	0.2	0.2	0.1
Mexico	2.5	3.8	6.1	11.3	6.9	7.6	16.9

(i) Gross financing

(ii) January to October

Source: IMF: International Capital Markets & Private Market Financing for Development Countries, various editions. Data provided by the IMF for 1996.

As indicated by ECLA in its "Informe Preliminar de la Economía Latinoamericano 1996" (Preliminary report on the Latin American economy), a very positive feature of bond issues was the fairly sizeable extension in the average maturity date - from four years in 1995 to seven years in 1996. Issues of ten years and over are also becoming more common.

Clearly this is a very positive trend since increasing the maturity date reduces the potential volatility of bond flows and possible adverse effects on the Latin American economies. It is particularly important because of the high level of Latin America bond issues and their high share of total flows. In 1996, however, interest and concern were aroused when it emerged that a very much higher proportion of Latin American bonds had options than in the period 1992-93 (see Table 2.10 A).

Table 2.10 A Proportion of bonds issued with options (%)

	1990	1991	1992	1993	1994	1995	1996
Latin America	24.6	22.2	8.1	4.8	5.7	5.6	10.8
Argentina	0.0	39.2	14.1	3.5	0.0	3.1	2.1
Brazil	0.0	35.4	7.0	16.2	19.9	13.9	35.8
Chile	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uruguay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Paraguay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mexico	29.1	10.5	8.8	1.7	2.9	4.0	13.3

Source: Own calculations based on data from Capital Market Bondware.

Our thanks to Peter West and Tina Bixon of Merchant West Bank for providing the data.

This increase in options was particularly sudden in the case of Brazil, primarily in order to get round regulatory and tax measures designed to encourage the issue of longer-term papers. Options allow (but do not oblige) the lender to settle his loan before the official maturity date of the loan (usually after 2 or 3 years). As a result the lender not only avoids certain regulatory or tax provisions but also has greater flexibility to get out of a country in a relatively short time. From the point of view of the country, and the borrower, such options mean greater potential volatility which can be more difficult to monitor because they do not always feature in statistics.

It is difficult to obtain precise information on the source of capital for international bonds as they are transacted globally and there is no information on the buyers' nationality. The available information does, however, provide some valuable clues.

A very useful indication of the nationality of bond purchasers is the currency in which the bonds were issued. Table 2.12 shows that a relatively small but rapidly growing proportion of Latin America bonds were placed in European currencies. These currencies (and primarily the German mark) accounted for only 9% of the total issue in 1993, but that figure rose considerably to 22% in 1995. In the first three months of 1996, the share of bonds issued in European currencies again rose substantially, reaching 40%. This marked change in the composition of currencies, moving towards a greater European (and Japanese) presence is to some extent due to a partial withdrawal of US investors from the developing countries' bond markets (a particularly massive withdrawal in the case of Latin America). It is also due to the fact that in 1995 and 1996 the opportunity arose for Latin American lenders to obtain more favourable costs (lower interest rates and margins) and maturity dates by issuing bonds in European currencies or yen.

It is also worth noting that virtually all Latin American international bonds (including those denominated in dollars) are traded in London and listed in Luxembourg, where transactions are conducted in Europe.

In this context it may be worth considering whether information about bond investors should be improved, for example specifying nationality and/or other aspects. Since most of these bonds are traded in Europe, such an initiative could come from the country where they are traded (United Kingdom) or from the Community.

2) International share issues

Table 2.11 International share issues (in USD billion)

	1990	1991	1992	1993	1994	1995	1996(i)
Latin America	6.0	4.1	4.1	6.0	4.7	1.0	2.2
Mercosur	3.0	0.4	0.6	3.0	2.5	0.5	0.6
Argentina	2.7	0.4	0.4	2.7	0.7	-	0.2
Brazil	-	-	0.1	-	1.0	0.3	0.1
Chile	0.3	-	0.1	0.3	0.8	0.2	0.3
Uruguay	-	-	-	-	-	-	-
Mexico	2.9	3.8	3.1	2.9	1.7	-	0.6

(i) January to October

Source: IMF: International Capital Markets & Private Market Financing for Development Countries, various editions. Data provided by the IMF for 1996.

Table 2.11 shows that international share issues were also a major source of capital for Latin America in the first half of the 1990s (although to a much lesser extent than bonds). Unlike bonds, share issues fell sharply after the Mexican peso crisis and picked up slowly in 1996, reaching levels far below those achieved between 1990 and 1994 (see Table 2.11). European participation in international share purchases (as shown in Table 2.12) has grown significantly in recent years, from 23% of the total in 1992 to 30% of the total in 1993, to 49% of the total in 1994. It coincided with decreasing participation by US investors. As a result, in 1994 (but not in the two previous years) European participation in Latin American share issues (49%) was bigger than that of the US (46%).

D. Summary conclusion

Another look at Table 2.12 shows that in recent years European flows have totally dominated bank credits and represent over 100%, (since in 1994 there were net negative Japanese flows and in 1995 net negative US flows) and European flows were the main regional source of shares in 1994. European investors have played a lesser role in foreign direct investment in recent years, which has been dominated by the US. However, they were loyal friends during hard times in the 1980s. European participation in the bond market is smaller than the USA's although the information available does not provide a very exact estimate of regional sources (for example, Latin American investors who return capital in the 1990s probably tend to do so in dollars, which distorts the picture).

It should also be noted that European participation in each category of flows (FDI, bonds, shares and loans) grew between 1992-95. This seems to be an crucial positive sign. However, its significance should not be over-estimated since the period is short and may partly be the result of cyclical factors (such as lower European than US interest rates, which partly explains the increase in bond issues in European currencies).

Table 2.12

Capital flows to Latin America by type and origin

(in USD billion and as a percentage of the total)

	FDI	%	Bonds	%	Shares	%	Bank credit	%
Europe								
1995	na	na	5.2 (i)	22%	na	na	8.3 (iv)	121%
1994	4.6	27%	1.5 (i)	8%	5.3	49%	6.5	105%
1993	1.4	14%	2.6 (i)	9%	4.3	30%	na	na
1992	1.4	19%	na	na	2.2	23%	na	na
USA								
1995	na	na	13.1 (i)	56%	na	na	-2.2 (iv)	-33%
1994	11.6	69%	16.0 (i)	88%	5.0	46%	4.8	78%
1993	8.3	84%	25.5 (i)	88%	9.3	64%	na	na
1992	5.6	77%	na	na	7.0	76%	na	na
Japan								
1995	na	na	5.2 (ii)	22%	na	na	0.8 (iv)	12%
1994	0.6	3%	0.7 (ii)	4%	0.5	5%	-5.1	-83%
1993	0.1	1%	0.8 (ii)	3%	0.8	6%	na	na
1992	0.3	4%	na	na	0.1	1%	na	na
Total								
1995	na	na	23.4	100%	na	na	6.9 (iv)	100%
1994	16.8	100%	18.3	100%	10.8	100%	6.2	100%
1993	9.9	100%	28.8	100%	14.4	100%	na	na
1992	7.2	100%	na	na	9.2	100%	na	na

(i) Eurobonds issued in German marks and other European currencies
(i) Eurobonds issued in dollars
(ii) Eurobonds issued in yen
(iv) First half of 1995
na : not available
Source: IMF, International Capital Markets 1996, IELAR (1996), BIS.

3. Investment characteristics and criteria of different financial agents; regulations which affect these institutions

Investment characteristics and criteria of different financial agents

The final source of capital flows (both global and to Latin America) derives from a wide variety of individuals and institutions. A recent major development in international markets is that individual investors are increasingly handing over management of their assets to professional fund managers. This institutionalization of savings is a key factor in explaining the process of international diversification of portfolios, which has increased the influence of a relatively small number of large international institutional investors on bond and share markets in, for example, Latin America.

Table 3.1 shows that total ownership of the industrialized world's assets amounts to USD 42 600 billion. The main source of these assets are private individuals, who hold estimated assets of USD 28 900 billion. Most of their assets are managed internally (that is by the individuals themselves) but USD 3 700 billion is handled by fund managers and represents their main source of finance. The second source of finance for fund managers is private pension funds.

Perhaps from our standpoint what most needs to be emphasized is that the main source of funds for the purchase of foreign bonds and shares is private individuals, who are the ultimate source of USD 500 billion of foreign bonds and USD 1 000 billion of foreign shares. Since, as we shall discuss further on, individuals' behaviour would appear to be more volatile (even when their funds are channelled through institutions such as mutual funds) the fact that individuals are the main source of both bonds and shares would seem to mean that this more volatile behaviour can have quite an influence, especially on smaller markets such as in Latin America. The fact that an apparently higher proportion of individuals' assets is handled by fund managers in the USA than in Europe could partly explain why US flows appear to be more volatile than European flows (see next section).

Before examining in greater detail potential variations in volatility between different institutional investors, it is worth defining their main characteristics.

Mutual funds (as collective investment schemes are known in Europe) are a relatively pure form of intermediation in which savers purchase shares and the funds invest them. Purchasers may buy or sell shares daily, at the day's net value.

Insurance companies are rather more complex financial intermediaries who assume risk on the principal by investing the assets of insurance companies to produce sufficient income to finance the profits promised to policyholders. Insurance policies are sold by insurance brokers.

Pension funds are more complex intermediaries, which invest tax-exempt contributions to finance the payment of income on retirement. It is worth drawing the distinction between fixed contribution schemes and fixed benefit schemes. In the former, payments are limited to the return on the investment made with the employee's contributions. Hence all the risk is assumed by the employee. In fixed benefit schemes, on the other hand, payments are based on a pre-determined amount, calculated according to a pre-determined formula involving years of service and salary level. It implies that employees use their current revenue to obtain pensions linked to the average long-term return on capital markets, while employers assume the investment risk as they are obliged to pay even when the funds available are insufficient. Hence fixed benefit schemes have a large proportion of shares with a higher average return and also greater risks.

Table 3.1 : Ownership of world investment assets (End 1993 - USD billion)

World (i)	Private individuals	Public Pension Funds	Private Pension Funds	Charities	Insurance companies	Total
Total Assets	28 900	2 200	4 300	400	6 800	42 600
Amount managed internally	25 200	1 300	1 000	200	6 500	34 200
Amount managed externally	3 700	900	3 300	200	300	8 400
Of total assets, quantity invested in :						
Bank accounts	12 700	400	200	-	500	13 800
Domestic bonds	3 600	900	1 000	100	2 600	8 100
Domestic shares	4 800	600	1 700	140	1 300	8 500
Foreign bonds	500	20	140	4	200	800
Foreign shares	1 000	88	431	11	200	1 800
Other assets	6 300	300	900	100	2 000	9 500

Source: Based on data provided by Inter-Sec. in London

(1) Includes all the OECD countries plus Hong Kong

An important distinction is whether funds come from individual or institutional investors. Private individuals who wish to invest internationally can do so via institutions such as mutual funds or - if they are extremely rich - via specialist bank departments. According to one school of thought, advocated by Gooptu (1993) and Reisen and Williamson (1994), there is a volatility ranking of institutions. This approach is shared by several of the people interviewed for this study, although there is still no definite empirical evidence available. Clearly it is an area which needs to be studied more closely. The assumption is that managers of individuals' funds have much shorter-term criteria than managers of institutional investors' funds, since the former are more inclined to follow short-term trends, fashions or rumours. Indeed the main reason why managers of individual investors' funds seem to behave in a potentially more volatile way is because they are afraid that individual investors might withdraw their funds very quickly (they are allowed to do so on the day itself) if the value of the funds falls.

On the other hand, according to this assumption, institutions such as pension funds and insurance companies have longer-term liabilities and their investment decisions are less dependent on short-term demands for funds. It would therefore be particularly useful for the Latin American countries to attract long-term and more stable funds like those from institutions such as pension funds and insurance companies. They would be especially suitable, for example, for financing infrastructure projects which often need very long deadlines.

The distinction, however, between individual and institutional investors is now apparently becoming less clear-cut. This can partly be put down to the fact that there are increasingly frequent performance assessments which compare each fund manager with the market average of pension fund managers. These assessments are conducted very often - once a month in the USA and every three months in the United Kingdom. They are quite an incentive to keep up to the mark as no fund manager wants a below-average score.

There are other major differences according to the nationality of the fund manager. In the United Kingdom, for example, external managers are appointed for a period of three years; monitoring is usually carried out every three months. In the USA, the time frames are shorter, with very frequent monitoring and possible changes of appointment every one or two years.

It is interesting to note that pension funds impose different criteria on their fund managers depending on their nationality. Information gathered from interviews in the United Kingdom indicates that the tendency is for pension funds boards to ask fund managers to achieve a return at least as good as the average. Thus if the return is below the market average, the manager is penalized (possibly even losing his business) whereas an above average return is not rewarded. In the USA pension funds tend to give their fund manager a more precise brief: for example, to invest in Latin American shares. They are also asked to exceed a specific index, such as the Morgan Stanley or the IFC. In Japan pension funds usually require their fund managers to achieve a minimum return.

Generally speaking, the decision-making process for investing pension fund assets is complex. Specialist consultants are playing an increasingly prominent role in deciding how pension funds should allocate their assets. These consultants put forward suggestions for strategic decisions such as the proportion of bonds and shares, the split between national and international and the breakdown between regional blocs. Consultants give different advice, depending on the nature of the liabilities of the pension funds. Hence for a more mature pension fund (with a high proportion of contributors close to retirement), asset liquidity and risk avoidance are important factors. The opposite is true of younger

pensions which can also tolerate more short-term losses if the medium-term outlook on those markets is good.

The instruments chosen also vary widely from one country to another. For example, the proportion of assets that pension funds invest in shares is much higher in the United Kingdom, followed by the USA. Much smaller proportions are invested in shares in continental European countries such as Germany and the Netherlands (see Table 3.2).

Coming back to the differences between mutual funds and pension funds, it should be noted that the total assets of the former have grown much faster in recent years than the latter.[4] In addition, the former have invested a higher proportion of their assets in the so-called emerging markets, including Latin America. Table 3.2 also shows that pension funds' preference for international investments varies widely.

Table 3.2 Percentage of international investments of different countries' pension funds

	1989	1994	1999(i)
Germany	4.5	3.6	5.3
Belgium	33.0	36.0	38.0
USA	3.7	8.0	12.2
France	2.0	6.0	8.0
Netherlands	11.5	18.7	22.8
Ireland	25.0	37.5	37.5
Japan	8.4	7.6	14.4
United Kingdom	22.7	28.0	28.0
Sweden	-	1.1	6.0
Switzerland	4.3	12.3	15.3
Total	**7.0**	**11.2**	**15.1**

(i) Intersec forecasts, based on surveys.

(i) Includes other OECD countries, Hong Kong and others.

Source: Inter-Sec

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4 Interview material. Confidential information provided by Citibank.

Among the countries with relatively large economies it is clearly the United Kingdom where pension funds have seen the most international diversification, while France, Germany, the USA and Japan have diversified less. The EU countries with the greatest international diversification are Ireland and Belgium, partly because their economies are smaller. Another interesting trend which emerges from Table 3.2 is that in the majority of countries and as a whole there is a growing tendency for pension funds to diversify internationally.

Pension funds still channel a relatively small proportion of their assets into investment in emerging markets. We have particularly detailed information for UK pension funds which shows that a very high proportion of their investments in emerging markets go to Asia rather than Latin America. Within Latin America in June 1995 the main recipient of UK pension fund investments in absolute terms was Chile (despite the relatively small size of its economy) which received more than twice as much as Brazil and Argentina together.[5] If this is a general trend, it would indicate that pension funds invest more in countries with high rates of economic growth and domestic savings and low inflation rates, such as the Asian countries and Chile.

This tendency for international diversification of pension fund assets (see Table 3.2) is based on empirical evidence from several studies, which show that in the long term investors who are free to diversify their assets internationally can obtain higher returns and lower risks than if they confine their activities to only one country (Davis, 1995). It has also been argued that diversifying into so-called emerging markets is particularly interesting as there is little correlation between their yields and those of the industrialized countries.

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5 Interview material. Data provided by W.M. Company of Edinburgh.

B. Pension fund regulations

Table 3.3 Regulatory restrictions on foreign investment of pension funds in the main OECD countries (i)

Level of restrictions	Country	Ceiling	Matching requirements
1.Very relaxed	Spain	None	None
	USA(i)(ii)	Id	Id
	Netherlands (i)	Id	Id
	Ireland	Id	Id
	Luxembourg	Id	Id
	United Kingdom	Id	Id
2. Medium	Canada	20%	None
	Japan	30%	80%
	Portugal	40% (only EU)	None
	Switzerland	30% (global) 25% (shares) 30% (debt) 5% (ownerships) 20% (foreign currency)	None
3. Strict	Germany	"small proportion"	100%
	Denmark	Min. 60% in domestic debt 5% (foreign currency)	80%
	Finland	5-10% 0	None
	Sweden		None
	Norway		Not applicable

Sources: OECD; OECD Development Centre, Fisher, B. and Reisen, H (1994) "Pension fund investment from ageing to emerging markets", Policy Brief 9 and International Monetary Fund (1995) International Capital Markets

(i) France and Italy are not included as they have virtually no private pension funds.

(i) Only refers to private pension funds.

(ii) Governed by a special federal law. Investments are subject to the "prudent expert" rule, whereby consideration must be given to diversification and liquidity. There are no explicit restrictions for foreign assets.

(iv) 5% of assets of the technical provision fund and 20% of other restricted assets may be located outside the European Economic Area.

One of the reasons why pension funds - particularly in some European countries - have a relatively low proportion of international assets is the regulations which restrict foreign investment of these pension funds. As can be seen in Table 3.3. these regulatory arrangements differ widely. On the one hand, countries such as the United Kingdom, Netherlands, Spain, Ireland and the USA have no regulatory limits on foreign investment whereas Germany and the Scandinavian countries have quite strict limits on international diversification. Although there seems to be a move towards liberalizing pension fund regulations, progress seems to be slow. It might therefore be useful to include pension funds (and insurance companies) in the OECD Codes of Liberalization. This would have advantages for the industrialized countries since it would allow better returns for the same level of risk, which would reduce the pressure to finance pensions in those countries. It would also be beneficial for Latin America as it would increase access to sources of additional - and apparently more stable - capital.

C. Summary conclusions

Apparently there are major differences between institutions such as mutual funds and pension funds with regard to the potential volatility of their investments in, for example, Latin America. However, empirical evidence is patchy and it would seem wise to pursue the empirical analysis further in order to draw more definite policy consequences and implications.

There are also wide differences between pension funds and fund managers depending on their country of origin. It is particularly important to note that some EU countries' pension funds invest a relatively small proportion of their assets internationally. This is partly due to regulatory restrictions which should be liberalized. The advantages would be twofold: it would allow bigger returns on these assets (which would benefit the European investor) and it would give Latin American countries greater access to larger and apparently longer term and more stable sources of financing.

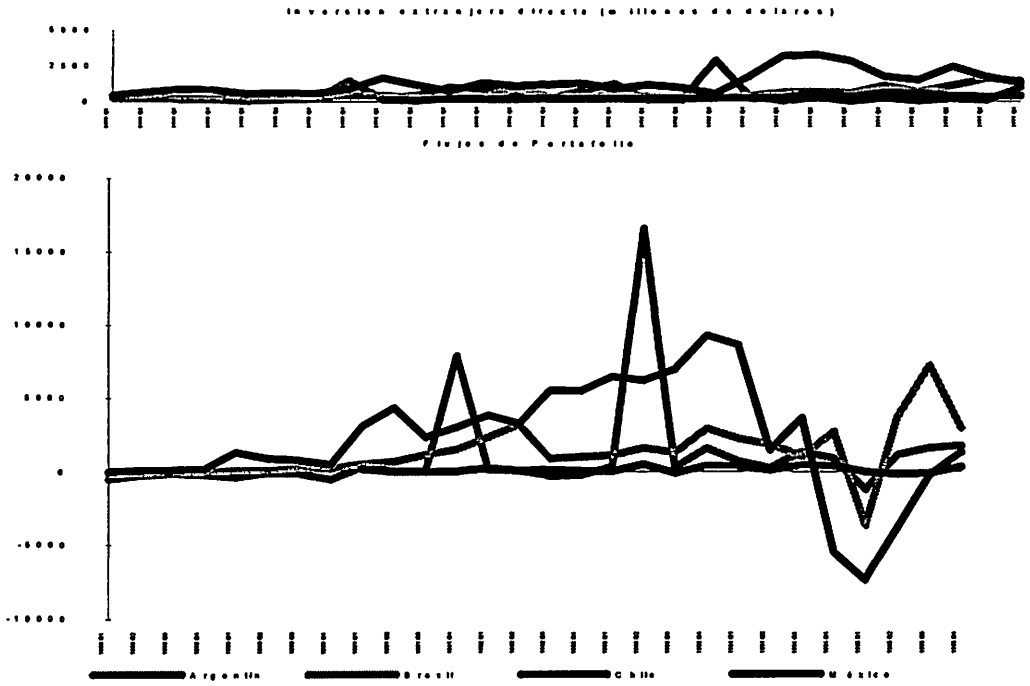
4. Volatility ranking

A key aspect of capital management policy is the ability to establish a volatility ranking, i.e. whether some types of flows are more volatile than others. This was first mooted by the great British economist Keynes and further developed by the Nobel prize winner, James Meade. It has recently assumed far greater relevance because of the much larger scale of international capital flows and their major impact on national economies.

A. Investors from different countries

One of the first questions is whether investors from different countries behave differently. A useful indicator is to examine the speed of turnover (defined as the total volume of share transactions effected by foreign investors divided by the shares held by investors from those foreign countries).

Figure 1



As can be seen in Figure 1, the turnover in foreign shares is higher for US investors (who in 1993 readjusted their foreign share portfolios more than twice a year) than for UK and Swiss investors who readjusted their foreign share portfolios on average only 0.5 times a year. It is worth noting that the turnover rate of both UK and above all Swiss investors, has remained fairly constant since 1986. This is in contrast to Japanese investors whose turnover rate has substantially declined since the middle of the 1980s.

In a recent article Tesar and Werner (1995) state that the turnover rate for US shares and bonds is lower for EU investors than Japanese and Canadian investors. It seems to confirm the evidence given above that European investors' conduct would appear to be more stable than that of investors from elsewhere.

Additional information would have to be sought from the recipient countries in order to analyze the turnover differentials of source countries in Latin America.

B. Different types of flow

As indicated above, the concept of volatility (and its differentials according to flows) has played a central role in economic theory over the last few decades. This argument has, however, gained significance in recent years because of the substantial growth in capital flows since the beginning of the 1980s. At the root of this increase was a far-reaching process of deregulation and financial liberalization in almost all sectors and regions of the world. It was also boosted by technological advances which enable funds to be moved extremely swiftly between countries and sectors (for more details, see Griffith-Jones, 1994).

As we described in Section 1, there has been a substantial increase in private flows to Latin America, with a very high proportion of portfolio flows. Concern was voiced about its sustainability.

The Mexican peso crisis dramatically illustrated the huge scale of possible rapid capital outflows and its adverse effects on a country's economy (Griffith-Jones, 1996). It aroused even more interest in whether there is "volatility ranking" in the different types of capital flow, which would imply, for example, that FDI is more stable than short-term portfolio flows. The discussion which was previously confined to academic analysis, has extended not only to international organizations but also international private banks.

The prevailing view - and which seems intuitively correct - is that there is a volatility ranking and that FDI and long-terms loans are more stable. According to this view, FDI is particularly stable since the stocks cannot leave the country because they largely consist of fixed assets. In the case of portfolio flows, the distinction between long and short-term instruments is less clear-cut as there are mechanisms such as options and secondary markets which can make even longer-term investments more liquid.

An initial empirical study of this subject (Turner, 1991) took a long period for the industrialized countries (see Table 3.4) and confirmed the prevailing view that there is a volatility ranking. Taking a relatively simple econometric analysis of variation coefficients as a basis (see Table 3.5), the study concluded that a stability ranking can be established in the following order: 1) long-term bank loans, 2) foreign direct investment, 3) investment in bonds, 4) investment in shares and 5) short-term credits. It confirmed conventional wisdom.

Table 3.4

Main features of the studies on the volatility of flows:

	Data used	Period	Type of flows	Countries
Turner (1991)	annual	1975-89	long-term bank credit, direct investment, portfolio flows, short-term bank credit	USA, Japan, Germany, Canada, United Kingdom
Claessens et al. (1995)	by quarter	1976- 92	FDI, shares, official and long-term private, short-term flows	France, Germany , Japan, United Kingdom, USA, Argentina, Brazil, Indonesia, Korea, Mexico.
Chuhan et al. (1996)	by quarter	1985- 94	Direct investment, portfolio investment, short-term investment, and other long-term investment	G7, Greece, Portugal, Indonesia, Korea, Pakistan, Argentina, Brazil and Mexico

A somewhat surprising result was obtained by Claessens et al (1995) who analyzed a long period of flows to some developed and developing countries (see Table 3.4) and concluded that different capital flows did not appear to reflect systematic differences in volatility and therefore it is not possible to tell the "temperature" of flows (hot as opposed to cold) just from their name. However, Claessens et al based their analysis only on net, not gross flows; hence they do not reveal the risk of the flows reverting, which is the main concern of the countries' economic authorities. From a methodological point of view, the econometric tests which Claessens et al used were relatively sophisticated - variation coefficient, persistence and predictability as can be seen in Table 3.5 - but they were seriously limited by being only univariate tests.

Table 3.5: Summary of the results:

Indicators	Tests	Results	
Variation coefficient	There is no test	+	Turner
		-	Claessens
Persistence	Stationariness	-	Chuhan
	Univariate Analysis:		
	Univariate AR(4) G7	-	Chuhan
	no G7	+	Chuhan
		-	Claessens
Predictability	Univariate AR(4) MSRE	-	Claessens
Interactivity	Multivariate analysis:		
	Granger	+	Chuhan
	Autoregression vector	+	Chuhan

NB : "+" in the results column confirms conventional wisdom, and "-" rejects it.

A much more sophisticated and above all comprehensive analysis is the recent work of Chuhan et al (1996). This provides strong empirical evidence in support of the prevailing view that short-term flows are "hotter" than foreign direct investment which is colder or more stable. Chuhan et al's econometric analysis begins with an univariate analysis, with which they obtain results similar to those of Claessens et al. However, as the authors point out, univariate analysis provides only a partial view, since similar univariate results for different series can conceal major differences between them. Chuhan et al therefore used multivariate analysis to take account of interactions between flows and between flows to different countries (using both Granger tests and autoregression vector tests). One of the most important empirical conclusions of this work is that it confirms that the "tequila effect " of the Mexican peso crisis was transmitted via changes in short-term flows but that there was little effect from variations in FDI to Mexico on FDI to other Latin American countries.

Another outstanding study was conducted by Frankel and Rose (1996). This provides econometric evidence of a major link as it shows that the greater the proportion of FDI in total capital flows, the smaller the probability that the recipient country will suffer a balance of payments crisis, like that of the Mexican peso. This study again backs the prevailing view that the temperature of flows varies according to categories of flows, and links it directly to the countries' economic performance.

Data recently published by the IMF provide a clear picture of the volatility of FDI (much less) compared with that of portfolio flows (much more) to the main Latin American countries. This can be seen in the next two figures. It should be noted that the data has been adjusted to take account of possible discrepancies in the original calculations.

C. Summary conclusions

The conclusion for capital flows is that existing empirical evidence basically seems to confirm the prevailing and also intuitively logical view that long-term flows (and in particular foreign direct investment) are more stable than other flows. It would allow that the apparent change in the structure of capital flows to Latin America in 1996 (towards a larger proportion of FDI and long-term loans) is quite positive (if somewhat premature). However, this conclusion should be treated with caution both as regards the results of the univariate empirical analysis (Claessens et al, and also Chuchan et al), and the growing sophistication of financial instruments, which makes clear distinctions between types of flow more difficult. The economic policy conclusion is that countries must above all encourage and attract long-term flows (and in particular FDI), but that they must also avoid financing very high current account deficits with capital flows of whatever type.

The existing evidence is rather inconclusive and it would therefore be worth doing further research into flow categories. A first step would be to have more reliable data since, as already pointed out in Section 1 of this study, the data provided in the statistics of the IMF Balance of Payments (and which are used for studies such as Claessens et al, and Chuhan et al) need to be tightened up to obtain more accurate results. It would also be useful to conduct the analysis with gross flows to give a more precise idea of capital movements themselves. Lastly, and more ambitious, it would be interesting to link the differential volatility of capital flows with the macroeconomic results of the recipient countries.

Perhaps of greater urgency and interest, particularly because there is much less empirical analysis (and even less econometric) is to examine possible volatility differentials between flows from different regions (for example, Europe versus US). It would also be worth examining volatility differentials according to different institutional sources (such as pension funds and mutual funds). The link between both is also significant because it would appear that the relative importance of mutual funds in the US is considerably greater than in Europe.

4. Pertinence of more detailed studies on European flows to Latin America, with particular emphasis on flows to Mercosur

This paper clearly shows the need for closer analysis of European flows to Latin America and especially Mercosur, in view of the stakes for both Europe and particularly Latin America and the gaps in our knowledge in part due to the pace of developments in this field.

This study points to two areas which would clearly be worth developing in a possible second stage: 1) the role of European capital in financing infrastructure in Mercosur and 2) differences in the behaviour of different types of source flows and institutions with particular emphasis on the difference between European and North American flows.

A. Role of European capital in financing infrastructure

As stated above (see Table 2.6 in particular), private investment in infrastructure has gained great importance in Latin America and particularly the Mercosur countries. Regional integration requirements will generate a growing need for intraregional infrastructure: to a large extent further trade expansion in Mercosur depends on improvements in road infrastructure. In view of limited public resources, private financing of infrastructure is bound to play an increasing role. Since domestic levels of saving in Latin America are insufficient to finance infrastructure, it would be very helpful if foreign - particularly European - investment were to play a major part. This would bring not only all the

advantages of FDI (such as technological and management know-how), but also large amounts of long-term funding, which is needed for many of the large infrastructure projects. These can be difficult to finance on local capital markets which, possibly with the exception of Chile, are not sufficiently developed for such purposes.

A major topic for this type of study would be:

Design of systems to generate financing packages with an appropriate combination of private and public and domestic and foreign resources.

Governments sometimes have to provide either subsidies or guarantees against certain risks in order to attract sufficient private resources for major infrastructure projects. If the risks can be assumed by the market (as are purely commercial risks) the government should not assume them. On the other hand, risks which the market cannot assume (such as political risks or risks that new investments cause changes in the initial profitability of the concession) must be assumed by the government in order to attract sufficient private funds. The subject is complex since the risks vary at different stages of the projects.

European experience in this area is useful, with the recent establishment of the ECU 3 billion European Investment Fund designed to guarantee private investment in large intraregional infrastructure projects.

There are different methods of sharing risks among participants in large infrastructure projects, which include the state, the contracting authority and the creditors (who can be national or international). Different levels of risk are linked to different profitability requirements.

The Mercosur countries have fairly different institutional arrangements for managing and financing infrastructure projects (for example, Brazil limits participation by foreign constructors whereas Chile and Argentina do not). On the other hand, they face similar challenges, particularly in terms of intraregional infrastructure.

We propose a study to:

1) Analyze the systems, incentives, guarantees etc needed to attract long-term European funds (pension funds, insurance companies, banks etc.) for investment in infrastructure in Mercosur. This study would mainly consist of interviews with potential European investors, discussions with the relevant Community bodies such as the EIB, European Investment Fund, Commission and a review of literature on the subject.

2) Examine relevant European experiences (both national and Community) and draws lessons which could be applied to Mercosur.

3) Examine specific foreign investment needs in Brazil, Chile and Argentina (with the help of experts in those countries) and the changes required to attract such investment, particularly from Europe. As possible consultants would either have high-level links with the Government (in the case of Chile) or a lot of influence on the Government (in the case of Brazil) or represent the private sector (in the case of Argentina), the conclusions of the studies could have a major impact on practical policy decisions to encourage foreign investment in infrastructure.

The study would benefit from the combined experience of *inter alia* S. Griffith-Jones, who wrote a book on loan guarantees for large infrastructure projects for the Commission, which paved the way for

the European Investment Fund; Carlos Cruz, who since 1995 has been General Coordinator of Concessions in Chile's Ministry of Public Works and Tomás de Paula, coordinator of a research project nearing completion on prospects for financial and institutional restructuring of infrastructure, conducted by the IPEA - Advisory Service to the Presidency in Brazil.

Two seminars could be held under the project, one in Latin America and the other in Europe, (which could be organized by IELAR); in both cases participants would include specialist representatives of the private sector (banks, pension funds etc), the public sector (European Commission, European Investment Bank, Governments) and academics.

B. Differences in the behaviour of various types of flow and source institution

It is vital for the economic authorities of countries receiving capital flows to understand the behaviour of different capital flows, since it affects how they react to them, at two levels:

i) Macroeconomic policy. If it can be assumed that flows are fairly constant and stable, there are relatively more grounds for revaluing the national currency and allowing a relatively higher current account deficit. On the other hand, if it appears that a significant share of capital flows is potentially more volatile, a policy which avoids a currency revaluation is much more appropriate - for example by means of a more restrictive tax policy, incentives for private savings, changes in the exchange rate system etc.

ii) Policy towards the flows themselves. If it can be assumed that certain types of flow are more stable than others - for example, FDI is more stable than portfolio flows - or if it could be proved that European flows are more stable than North American flows, then the economic authorities of the recipient countries could make greater efforts to encourage and attract more stable flows and even discourage flows which are much more volatile.

From the European point of view, it would be very useful to prove that European flows to Latin America are more stable than North American flows as this would make them much more attractive.

A study into the question of different degrees of volatility according to source country would have to combine two methods:

i) More detailed research into institutional criteria/regulations/mechanisms for portfolio investors in, for example, three key source countries: United Kingdom, Germany and the USA.

There would be a separate study for each country. The author or co-author of one of the three studies could be a specialist from the private sector (such as Angela Cozzini of Cross-Border Capital for the United Kingdom and Stephen Oxley of Inter-Sec for the USA). The study on Germany could be co-authored by Bernard Fischer, the renowned academic expert in this area. A separate study could be attached on the needs of European institutions (such as pension funds) to invest more internationally, which could be written by a specialist in the matter, Helmut Reisen of the OECD Development Centre.

ii) This more institutional analysis would be complemented by a more quantitative analysis, including the collation of additional data and then an econometric analysis.

Probably using more data from recipient countries (Mercosur plus Chile), as these generally seem to have a breakdown by source (but also information from the private sector, international organizations etc) a rigorous econometric analysis would be conducted to compare volatility differentials between

European and North American flows. This is new ground as there has been no econometric research into this major topic. Although the work will be relatively time-intensive, the results should prove very interesting.

iii) The econometric analysis could also cover two further major areas: causes of volatility and the economic impact of volatility.

With regard to causes, the assumption that the volatility of flows and volatility differentials (for example between FDI and short-term flows) vary according to the characteristics of the recipient countries could be examined in econometric terms. For instance, evidence is emerging from recent studies that Chile - with a longer history of macroeconomic stability - attracts not only more stable flows but also that it has a clearer volatility ranking - than countries like Brazil - with a much shorter history of stable macroeconomic policy.

With regard to the international causes of volatility of capital flows to Latin America, an area of paramount importance, econometric analysis has focused on factors such as fluctuations in US interest rates. Yet there has been no analysis of the impact of variations in European interest rates. If, for example, European interest rates vary less than North American ones, would this not explain - at least in part - a possible lower volatility of European flows. What other international factors explain the differences between flows, both by type of flow and source country?

As for the impact of volatility, it would be worth estimating more accurately what effect the volatility of capital flows has on economic performance (measured by variables such as growth of GDP, investment, employment etc). It would make it possible to quantify how much damage is caused by the volatility of capital flows, and hence how important it is to devise policies which promote more stable flows and macroeconomic policies which ensure a more sustainable position.

The econometric work could be carried out by the current researchers, in collaboration with, for example, Punam Chuhan of the World Bank, who has already taken part in some of S. Griffith-Jones' projects, and who is one of the people who has most contributed to this subject recently. We could also collaborate with economists from the IDB who have worked on the question of volatility in Latin America and other experts such as Guillermo Calvo and Phillip Turner.

The project could kick off with a relatively small initial meeting, mainly of experts (probably in Europe), and then there could be a bigger meeting to present results, which could be held in ECLA (Brasilia and/or Santiago, for example). Our opposite numbers in ECLA could be Ricardo Ffrench-Davis and Barbara Stallings, both outstanding specialists in capital flows.

Annex 1

Capital flows to the western hemisphere and Mercosur (USD billion)

	Foreign Direct Investment		Portfolio Flows		Other investment	
	Western hemisphere	Mercosur	Western hemisphere	Mercosur	Western hemisphere	Mercosur
1988	8.7	5.1	-2.5	-1.1	2.8	7.0
1989	7.2	2.7	0.9	2.3	-1.0	-3.3
1990	6.6	2.3	17.4	-0.4	-4.6	5.0
1991	11.2	2.9	11.4	1.2	0.2	-6.3
1992	13.0	5.9	18.0	1.8	21.6	14.1
1993	13.5	6.6	55.7	32.0	-6.4	-12.6
1994	20.9	3.7	17.1	12.3	9.4	14.3
1995	19.3	6.2	4.5	18.4	35.4	13.1

Source: World Economic Outlook database, October 1996.

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