

Foreign direct investment in Latin America in the era of globalized production

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ABSTRACT

The recent recovery of foreign direct investment in Latin America notwithstanding, it remains an open question whether or not private capital inflows are sustainable and which countries in that region are well prepared to benefit from the ongoing globalization of production and markets. Corporate strategies of transnational corporations and economic policies pursued by Latin American countries are analysed as possible determinants of foreign direct investment patterns during the 1980s and 1990s. The conclusion is that host country policies are of overriding importance. Policy options for improving Latin America's locational advantages are also discussed.

Introduction

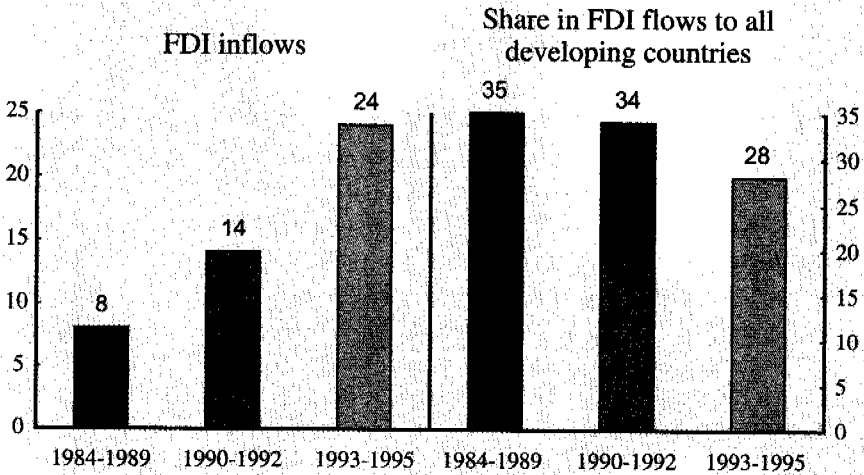
The world economy has witnessed a surge in foreign-direct-investment (FDI) flows since the early 1980s. Global outflows in 1995 exceeded annual average outflows during the period 1984-1989 by a factor of 2.6 (UNCTAD, 1996, annex table 2). Foreign direct investment has grown not only relative to world output, but also relative to international trade (WTO, 1996, chap. IV). This pattern represents a clear indication of the trend towards globalized production.

Globalization means an increasing division of labour on an international scale (Nunnenkamp *et al.*, 1994). It is a process driven by fierce competition in international goods, services and capital markets. New competitors for foreign capital include the transition economies in Central and

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Figure 1. FDI flows to Latin America, 1984-1995 (annual average)

(Billions of dollars and percentage)



Source: UNCTAD, 1996, annex table 1.

Eastern Europe and the developing countries in Asia, all of which have liberalized their local capital markets. At the same time, the microelectronics revolution has resulted in declining information and transaction costs, which in turn have increased the international mobility of capital and transfer of technology. All this has rendered easier the fragmentation of production processes and the relocation of each process to countries offering the relevant comparative-cost advantages.

The recent FDI boom in Latin America suggests that this region is among the “winners” of globalization. Annual average FDI flows to Latin America tripled from \$8 billion during 1984-1989 to \$24 billion during 1993-1995 (fig. 1). This favourable development, however, has to be put into perspective. It is argued here that Latin America is still lagging behind developing countries in Asia in reaping the benefits of the globalization process. It remains uncertain whether Latin America has restored its attractiveness to foreign capital, especially FDI, in a sustainable way. Moreover, the chances to participate successfully in the ongoing trend towards globalized production differ substantially between countries within the region. Prospects for sustained FDI performance are shown to be related closely to economic policies pursued by Latin American countries.

In order to substantiate the above contentions, this article is structured in the following manner. First, Latin America's current position in the global pattern of FDI is portrayed; the sectoral dimension of FDI inflows is stressed; and divergences in trends between major economies within the region are identified. Second, the role of exogenous factors, including global corporate strategies of transnational corporations (TNCs) that may have contributed to FDI developments in Latin America, is discussed. Third, the link between FDI inflows and economic policies of Latin American countries is made with particular attention being paid to Brazil, a country that has gone through tremendous cycles in its attractiveness to FDI. Fourth, FDI prospects and the sustainability of private capital inflows are evaluated. Finally, some policy options for those economies that have fallen behind in the global competition for FDI are presented.

Latin America's position in international competition for FDI: stylized facts

Latin America versus Asia

In varying degrees, all developing countries have become involved in the globalization of production through FDI. Taken together, developing countries attracted nearly 35 per cent of total FDI inflows during 1993-1995, compared with less than 20 per cent during 1984-1989 (UNCTAD, 1996, annex table 1). If, as some observers argue, starting conditions make the more advanced developing countries the favourites for attracting FDI, Latin America should have been the first candidate to benefit from the globalization of production. In 1980, the average per capita income of Latin America exceeded that of Asia nearly sixfold (UNCTAD, 1995a). The share of agriculture in Latin America's GDP was already below 10 per cent at that time, compared with 25 per cent in Asia's developing countries. Manufacturing—the focus of corporate globalization strategies—accounted for nearly a quarter of GDP in Latin America, a share comparable to that of such developed countries as France and the United States.

Traditionally, Latin America used to be the preferred host developing region for FDI; its share in FDI flows to all developing countries was close to 70 per cent in 1980. However, Latin America fell considerably behind other regions in the competition for FDI during the "lost decade" that followed the outbreak of the debt crisis. Its share in worldwide manufacturing

value added dropped from 6 per cent to 5 per cent during 1983-1993, while the share of developing countries in East and South-East Asia doubled from 3 per cent to 6 per cent (unpublished UNIDO database).¹ At the same time, the focus of foreign investors shifted from Latin America to Asia. South, East and South-East Asia received nearly two thirds of FDI flows to all developing countries during 1993-1995, compared with 37 per cent in the first half of the 1980s (UNCTC, 1992 and UNCTAD, 1996). Figure 1 reveals that the decline in Latin America's FDI share continued in the early 1990s, although absolute FDI inflows picked up substantially.

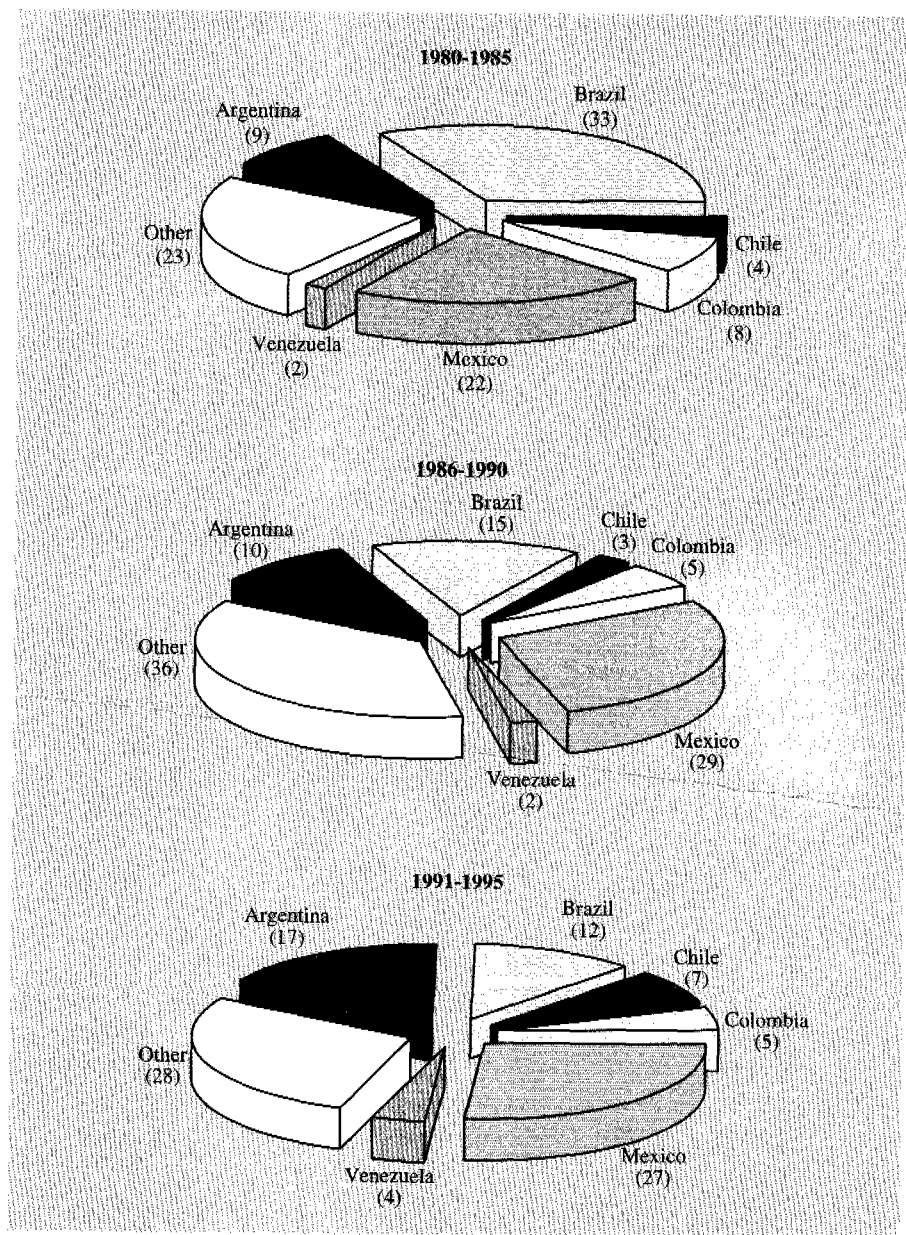
Country developments

The regional pattern of FDI inflows obscures remarkable differences among individual Latin American economies. Figure 2 shows that it was mainly Brazil which lost its attractiveness as an investment location. Traditionally by far the most important recipient of FDI inflows in the region, Brazil saw its share of these inflows dwindle to about 12 per cent during 1991-1995. Brazil was surpassed not only by Mexico, but recently also by Argentina. The latter's share of Latin American FDI inflows doubled to more than 17 per cent during 1991-1995, owing largely to FDI received in the context of privatization (see below). Mexico's share of Latin America's FDI inflows in 1995 (26 per cent) was only slightly below its average share during the period 1986-1995 (UNCTAD, 1996, annex table 1). This suggests that FDI was less subject by far to the "stampede effect" that characterized the reaction of portfolio investors to the peso crisis in 1994-1995. In Venezuela, FDI inflows were exceptionally high in 1991 when the privatization of State-owned enterprises took place. Not surprisingly, Colombia's share of Latin American FDI inflows peaked in the mid-1980s, when flows to many of the heavily debt-ridden countries in that region were at a low ebb. Colombia could not maintain that share when the major debtor countries began to tackle their economic problems and regained competitiveness. Investment flows into Chile were clearly rising even when controlling for the debt conversions in the late 1980s (IADB and IRELA, 1996, table 9). During 1991-1995, average annual FDI inflows per capita in Chile amounted to \$110; among the Latin American economies (shown in fig. 2), in per capita terms, Chile ranked first (followed by Argentina with \$107).

¹ The discrepancy is even more obvious when calculating shares in the manufacturing value added of all developing countries. During 1983-1993, the share of Latin America dropped from 44 per cent to 29 per cent, while East and South-East Asia recorded a rise from 21 per cent to 33 per cent.

Figure 2. FDI flows to major Latin American countries as a share of total flows to the region, 1980-1995

(Percentage)



Source: UNCTAD, 1992, 1996.

A cross-country comparison of per capita FDI inflows reveals that the frequently noted concentration of FDI in just a few host countries (UNCTAD-DTCI, 1995a, p. 69) is misleading when assessing the attractiveness of smaller economies to FDI. The high concentration of absolute flows is mainly due to a large-country bias. In per capita terms, various small countries proved to be more attractive to FDI than larger countries (see also IADB and IRELA, 1996, p. 31). Within a sample of 18 Latin American economies, the three smallest countries (in terms of population in 1993) were indeed among the best performers in attracting FDI:

- Per capita FDI inflows for Trinidad and Tobago during 1991-1995 (annual average: \$242) were more than twice those for Argentina and Chile.
- In the same period, Costa Rica received higher per capita inflows than Mexico. Per capita inflows increased nearly threefold in Costa Rica from an annual average of \$23 during 1980-1985 to \$67 during 1991-1995.
- Jamaica experienced a dramatic change from slightly negative annual average FDI flows during 1980-1985 to per capita inflows of \$52 (annual average) during 1991-1995, close to the per capita inflows of Mexico (\$63).

However, the attractiveness of some small Latin American countries remains fairly slight. For instance, per capita FDI inflows during 1991-1995 were below \$16 (Brazil's level) in Bolivia, El Salvador, Guatemala and Honduras. It is thus not surprising that a simple correlation between per capita inflows and population size, calculated for a sample of 18 Latin American economies, turned out to be insignificant.²

Sectoral and industrial trends

Data constraints prevent a full assessment of FDI patterns in particular sectors and industries in Latin America. Comprehensive OECD statistics on the structure of FDI inflows are available only for Mexico (OECD, 1996); while OECD data are fragmentary for Argentina and Brazil (OECD, 1994) and completely lacking for other Latin American countries. Data collected

² This applies to both the first half of the 1980s and the first half of the 1990s. By contrast, per capita FDI inflows were correlated in a significantly positive way with per capita incomes of recipient countries.

Table 1. Inward FDI stock, by sector, in selected Latin American countries, 1980 and 1995

(Percentage of total FDI stock)

Country	Primary		Secondary		Tertiary	
	1980	1995	1980	1995	1980	1995
Argentina	15	10 ^a	63	53 ^a	22	37 ^a
Brazil	4	2 ^b	74	58 ^b	22	40 ^b
Chile	48	59	31	15	21	26
Colombia	6	61	71	20	23	18
Ecuador	28	51 ^c	38	31 ^c	34	18 ^c
Mexico	5	2	78	54	17	45
Peru	44	21	34	14	22	66
Venezuela	2	3	62	58	37	39

Source: IADB and IRELA (1996, tables 49-57), based on data provided by national authorities.

^a 1992.

^b 1993.

^c 1994.

from national authorities on the structure of inward FDI stocks of nine countries are presented in IADB and IRELA (1996). The assessment that follows is based mainly on these data because they provide a roughly comparable and consistent picture.³

The share of investment stocks in the primary sector of the three largest FDI recipients—Argentina, Brazil and Mexico—was small and declining during 1980-1995 (table 1). This is in line with the relative decline of the primary sector in worldwide FDI over time. Yet both the growth of absolute FDI in the primary sector worldwide and the experience of individual host countries indicate that this sector continues to offer favourable opportunities to foreign investors. In terms of absolute values, global FDI growth in the primary sector persisted in the 1990s, especially in oil and other non-renewable resources. In resource-rich Latin American countries, such as Chile, Colombia and Ecuador, the primary sector accounted for more than half of the inward FDI stock in 1995. This is in sharp contrast with Brazil, for which primary-sector FDI inflows became negative during 1990-1992 (OECD, 1994), its vast endowment of natural resources notwithstanding.

³ Bolivia is not considered here because FDI inflows during 1984-1995 were minuscule.

With few exceptions, Latin American countries have in common that the tertiary sector accounts for a rising share of their inward FDI stocks. Again, this can be attributed partly to global developments in services FDI and partly to country-specific factors. Worldwide, the contribution of services industries to overall FDI has risen significantly since the 1970s (UNCTAD, 1993, table III.1; OECD, 1996). The complementarity between FDI in manufacturing and services has been strengthened by the growing number of firms that have engaged in globalized production and marketing. At the host-country level, privatization has played a major role in shaping the sectoral pattern of inward FDI in Latin America. Peru provides the most striking example in this respect: FDI inflows of \$2 billion, the outcome of the privatization of the State-owned telecommunications firm in 1994, represented about 60 per cent of total FDI inflows during 1988-1995 (IADB and IRELA, 1996, p. 48; UNCTAD-DTCI, 1995b). Although single privatizations are typically less important than in the case of Peru, privatization of State-owned services firms have figured prominently in other Latin American economies, including Argentina and Venezuela.

The tertiary sector has acquired importance even in countries such as Brazil, in which privatization was undertaken only recently.⁴ Brazil's services share of about 40 per cent in 1993 was very similar to the corresponding shares for Argentina, Mexico and Venezuela. The tertiary sector's role in inward FDI in Brazil was fairly significant by the standards of Asian economies, such as the Republic of Korea and Taiwan Province of China (OECD, 1994). Nevertheless, Brazil's services are less transnationalized than those of other countries in Latin America. In per capita terms, both the level of, and the increase in, Brazil's inward FDI stock in the tertiary sector have been clearly below the respective figures for Argentina, Chile and Mexico. Furthermore, those services industries that appear to be of particular importance when production and marketing are globalized were under-represented in Brazil's inward FDI stock. For example, the share of financial services and the share of transport and communications in the total FDI stock were lower in Brazil than in seven other Latin American countries.

Traditionally, FDI in the secondary sector of major Latin American countries has been concentrated in relatively sophisticated manufacturing activities. In 1980, chemicals, machinery and transport equipment accounted

⁴ Privatization in Brazil gathered momentum in 1995 when new initiatives were launched by the Government and regional authorities. Consequently, FDI inflows related to privatization are likely to increase.

Table 2. Inward FDI stock, by manufacturing industry, in selected Latin American countries, 1980 and latest available year

(Percentage of total stock in manufacturing)

Country/Year	Resource-intensive		Labour-intensive		Capital/technology-intensive		
	Food ^a	Minerals and metals	Textiles ^b	Other manufacturing	Chemicals ^c	Machinery	Transport equipment
Argentina 1980	10	22	5	10	19	11	24
1992	9	12	3	10	24	13	30
Brazil 1980	8	16	4	6	24	24	18
1993	8	17	3	6	25	22	19
Chile 1980	32	24	2	8	24	10	..
1990	23	9	6	22	27	14	..
Colombia 1980	10	7	5	13	39	26	..
1995	15	11	4	10	41	18	..
Venezuela 1980	24	11	4	7	25	30	..
1995	18	17	1	13	21	31	..

Source: IADB and IRELA (1996, tables 49-57), based on data provided by national authorities.

^a Including beverages and tobacco.

^b Including leather and clothing.

^c Including rubber and plastics.

NOTE: The table follows the UNCTAD classification of industries.

for more than half of manufacturing FDI stock of almost all economies in table 2.⁵ The share of these capital- and technology-intensive industries continued to be high even after several countries implemented trade policy reforms, although trends differed among individual countries. In Brazil, the share of capital- and technology-intensive industries in manufacturing FDI stock was exceptionally high in 1980 (66 per cent). Changes in the industrial composition of its manufacturing FDI stock were marginal until 1993. However, the persistently high share of capital- and technology-intensive industries masks one important fact: the FDI stock in these industries expanded much less in Brazil than in neighbouring countries. In per capita terms, the stock increased by a factor of 1.6 in Brazil during 1980-1993, compared with a factor of 2.5 in Argentina during 1980-1992.

The facts portrayed so far may be summarized in the following manner: Latin America has fallen behind Asia as a host to FDI. Latin American countries differ significantly regarding the extent of their involvement in globalized production and marketing. Until the early 1990s, Brazil appears

⁵ Chile is a major exception.

to have been the major loser as far as its participation in the globalization of production is concerned.

Explaining the FDI performance of Latin America: different hypotheses

Two opposing hypotheses can be advanced to explain the different experiences of developing countries in the era of globalization. First, recent FDI patterns may be attributed to factors that are beyond the control of host-country governments. In particular, changing TNC strategies may have worked against Latin American economies. Second, a link may exist between regional and country-specific FDI developments on the one hand, and the economic policy pursued by governments on the other hand. Latin America represents an interesting case for testing the validity of this hypothesis, because it hosts both front runners and latecomers in the pursuit of economic reform.

The role of exogenous factors and corporate strategies

A widely held view maintains that only a few developing countries can benefit from the trend towards globalized production and marketing, and that most of them run the risk of being de-linked from the growth dynamics of globalization. As a matter of fact, a consequence of factor endowments typically prevailing in developing countries is that few companies based in those countries have become part of technologically motivated cooperative inter-firm agreements, such as strategic alliances (Freeman and Hagedoorn, 1994). Nevertheless, even technologically less advanced economies can compete successfully for FDI. Note that low-income China emerged as the most important location for FDI among all developing countries (UNCTAD, 1996, annex table 1), while Brazil lost much of its attractiveness, although its per capita income was 5.6 times the per capita income of China in 1994 (World Bank, 1996b, p. 188f). For developing countries, it is the application of internationally available technologies, rather than the *generation* of technological innovations, that matters most for inducing catching-up processes. Besides international trade in capital goods and traditional forms of non-equity arrangements for technology transfers (e.g. licensing), FDI represents an important means of gaining access to internationally available technologies.

The frequently noted concentration of FDI in some major developing host countries is largely irrelevant for identifying “winners” and “losers” of the globalization process. As shown before, various small Latin American economies have recently reported sharply increasing per capita inflows of FDI. Moreover, both winners (such as China) and losers in globalization (such as Brazil, until recently) are included in the group of typically large countries that account for the bulk of FDI flows to all developing countries.

This is not to ignore that the position of Latin America as a location for FDI was affected by the changing international environment and the ensuing adaptation of corporate strategies. Declining communication and transaction costs—brought about by the microelectronics revolution, multi-lateral as well as unilateral trade liberalization, and widespread deregulation of FDI regimes—encouraged an increasing number of companies to go global.⁶ In addition, the changing environment broadened the range of entrepreneurial options regarding *how* to internationalize production and marketing (Nunnenkamp *et al.*, 1994). Most notably, the trend towards liberalization of international trade and investment relations implied that TNCs were less constrained in their choice to export to, or invest in, a particular region or country.

Vanishing constraints concerning the mode of going global may have supported the shift of FDI to developing countries in Asia. Many Asian host countries (notably China) opened up to FDI during the 1980s. As a result, TNCs had better opportunities to invest in, rather than export to, that region. At the same time, trade liberalization figured prominently in structural adjustment programmes of many Latin American countries. This weakened incentives for TNCs to undertake FDI in Latin America in order to surmount protectionist obstacles.

Furthermore, globalization has altered the form and purpose of FDI (UNCTAD, 1996, chap. IV). Geographically dispersed manufacturing and the combination of markets and resources through investment and trade have become an integral and important part of the world economy. As a consequence, “one of the most important traditional FDI determinants, the size of national markets, has decreased in importance. At the same time, cost differences between locations, the quality of infrastructure, the ease of

⁶ The number of TNCs headquartered in 15 developed countries quadrupled between the late 1960s and 1993, from 7,000 to 27,000 (UNCTAD, 1996, p. 96).

doing business and the availability of skills have become more important'' (UNCTAD, 1996, p. 97). Efficiency-seeking FDI—investment motivated by creating new sources of competitiveness for firms and strengthening existing ones—appears to be the hallmark of TNC responses to the changing international environment. These responses may put Latin America—where, traditionally, the bulk of FDI was market- rather than efficiency-seeking—at a disadvantage.

However, the widely different FDI trends among Latin American economies are in conflict with the view that recent changes in corporate strategies have negative implications for the ability of the region as a whole to attract such investment. Moreover, various structural characteristics seem to have played only a minor role in shaping the chances of Latin American countries in the locational competition for FDI. As noted earlier, the size of Latin American economies is not correlated with per capita inflows of FDI. Argentina and Brazil both suffered from serious external debt problems during the 1980s; nevertheless, Argentina attracted sizeable and rising FDI, while Brazil lost much of its attractiveness. Likewise, the share of manufacturing in GDP during the early 1980s had little impact on Latin American countries' subsequent attractiveness to FDI.⁷

Most important, however, the implicit assumption made so far—namely, that recent changes in TNC strategies represent an *exogenous* factor that worked in favour of Asia—deserves more thought. Corporate strategies are adapted to local factor endowments and specialization patterns. The latter are related to economic policies pursued by host-country governments. For instance, the development of sophisticated manufacturing industries that often lacked competitiveness by world market standards was promoted by import substitution policies in various Latin American countries in the past. Factor endowments, too, can be shaped by host country policies that encourage human capital formation and private investment in physical capital. This suggests that success or failure in becoming involved in international production by TNCs depends on variables influenced by national governments.⁸

⁷ In 1980, the share of manufacturing value added in total GDP in Bolivia, Costa Rica, Chile and Honduras was considerably below the Latin American average of 25 per cent (World Bank, 1996b, p. 210f). This group of countries comprises both large and small FDI recipients. At the same time, the share of manufacturing value added exceeded the Latin American average significantly in both Argentina and Brazil.

⁸ For further discussion, see Gundlach and Nunnenkamp (1996).

The case of the automobile industry in Brazil and Mexico exemplifies the interplay between corporate strategies and local conditions. Automobile TNCs made significant investments in both countries, but the underlying motivations were different. Their engagement in Brazil was motivated primarily by the potential for tapping the large domestic market. The integration of affiliates in Brazil into the regionalized or globalized TNC structures was less advanced than in Mexico.⁹ In the case of OECD members, the size of import shares of road motor vehicles and parts thereof (SITC 78) from Brazil suggests that the international competitiveness of that country's automobile industry was rather poor compared with Mexico's (Gundlach and Nunnenkamp, 1996, pp. 28-30). Brazil's share in OECD members' imports was only 0.3 per cent during 1984-1993, although its share in world automobile production increased from 2 per cent to 3 per cent during the same period. In striking contrast, Mexico reported increasing shares in both world production (from 0.8 per cent to 2.3 per cent) and OECD imports (from 0.4 per cent to 2.2 per cent) during the same period.

Recently, automobile TNCs seem to have revised their corporate strategies in Brazil. Transnational corporations from several home countries have launched ambitious plans for investing in Brazil's automobile industry—about \$10 billion for the period 1995-2000 (IADB and IRELA, 1996, p. 41). The example of Volkswagen's greenfield investment for the production of buses and trucks in Resende suggests a radical change towards modular production in Brazil, involving a high degree of cooperation with suppliers of parts and components. It is probably not just by pure coincidence that corporate strategies were revised after Brazil had initiated economic stabilization and liberalization measures. Hence the next section focuses on the link between economic policies of host countries and their attractiveness to foreign investors.

The role of economic policy

In order to explain the FDI performances of Latin American economies, three policy areas are addressed:

⁹ Note that the share of transport equipment and machinery in Brazil's total exports increased only modestly from 17 per cent to 21 per cent during 1980-1993 (UNCTAD, 1995a, table 4.1). This share soared from 4 per cent to 49 per cent in the case of Mexico.

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- *The regulatory regimes governing FDI.* Recent survey results point to far-reaching liberalization of FDI regulations in several Latin American countries. In a report by the European Round Table of Industrialists (ERT, 1996), Argentina and Mexico were given credit for extensive liberalization of FDI regimes during 1987-1992. Brazil and Ecuador joined the group of countries on a “very fast track of opening” during 1993-1996 (ERT, 1996, p. 305). Measured by the level of FDI impediments remaining in 1996, Argentina, Ecuador and Guatemala are considered “very open”. Even Brazil, Colombia and Mexico, which are classified as “quite open”, have a level of FDI impediments that is comparatively low by the standards of a group of 28 developing countries.¹⁰ By and large, the findings of the ERT survey are corroborated by the World Economic Forum’s evaluation of different elements of FDI regimes in Latin America (WEF, 1995). On average, these regimes turned out to be more favourable to FDI in Latin America than in a group of major Asian FDI recipients. A notable exception was investment protection, especially in Brazil, Mexico and Venezuela. Compared with other Latin American countries, the World Economic Forum regarded as difficult the acquisition of control of Brazilian companies, as well as the employment of foreign skills and the negotiation of cross-border ventures in Brazil and Venezuela (WEF, 1995). All in all, however, FDI regimes in Latin America have converged on FDI regulations that are rather open. The remaining differences are too small to account for the contrasting experiences of Latin American countries in attracting FDI.
 - *Transaction cost-related impediments to a closer integration of Latin American countries into the corporate strategies of TNCs.* Latin America compares less favourably with developing countries in Asia when it comes to transaction cost-related barriers to FDI. As mentioned before, globalization has been supported by an overall decline in transaction costs. It follows that countries in which transaction cost-related barriers to FDI continue to be high are less likely to receive such investments. According to the survey results (summarized in table 3), Latin America suffers in several respects from competitive disadvantages in terms of transaction costs *vis-à-vis* the control group of Asian countries.¹¹ Most notably, Latin American

¹⁰ The ERT survey does not include Latin American countries other than those mentioned in the text above.

¹¹ Latin America enjoys a significant competitive edge over developing countries in Asia in just one area, namely, access of foreign companies to local capital markets. This reduces financial transaction costs for FDI that rely on local co-financing.

Table 3. Transaction cost-related barriers to FDI in Latin America^a

(Ratings)

Barrier	Argentina	Brazil	Chile	Colombia	Mexico	Peru	Venezuela	Latin America ^b	Asian economies ^c
1. Cultural barriers	8.0	8.2	7.8	7.4	6.7	7.8	7.6	7.6	7.2
2. Country image	6.2	3.5	6.7	2.7	3.5	4.1	5.6	4.6	5.1
3. State control	7.4	4.0	5.0	6.2	5.6	6.2	2.3	5.2	5.5
4. Transparency	4.7	4.5	5.2	3.8	2.1	4.7	1.6	3.8	5.1
5. Bureaucracy	4.1	2.7	3.9	4.6	2.0	3.3	1.8	3.2	4.0
6. Corruption	3.1	3.1	6.9	2.4	2.0	4.1	1.9	3.4	4.1
7. Lobbying	4.6	3.9	5.6	3.8	4.9	5.8	3.1	4.5	4.8
8. Local capital markets	9.1	7.0	8.2	7.8	6.3	8.4	7.2	7.7	6.5
9. Distribution system	4.5	5.0	7.0	4.0	4.4	4.7	4.2	4.8	5.4
10. Telecommunications	5.6	5.3	9.0	4.9	5.0	5.5	4.5	5.7	6.3
11. Technological infrastructure	3.8	4.2	5.9	2.3	2.8	3.7	3.3	3.7	5.0
12. Overall assessment	5.6	4.7	6.5	4.5	4.1	5.3	3.9	4.9	5.4

Source: World Economic Forum, 1995.

^a Survey results are scaled from 0 (least favourable to FDI) to 10 (most favourable to FDI). The criteria listed are as follows:

1. National culture is closed 0/open 10 to foreign cultures.
2. Image of the country abroad is distorted 0/reflects reality accurately 10.
3. State control of enterprises distorts 0/does not distort 10 fair competition in the country.
4. The government does not communicate often its intentions successfully 0/is transparent 10.
5. Bureaucracy hinders 0/does not hinder 10 business development.
6. Improper practices (e.g. bribery and corruption) prevail 0/do not prevail 10 in the public sphere.
7. Lobbying by special interest groups distorts 0/does not distort 10 government decision-making.
8. Local capital markets are not accessible to foreign companies 0/are equally accessible to both domestic and foreign companies 10.
9. Distribution systems are generally inefficient 0/efficient 10.
10. Telecommunications infrastructure does not meet 0/meets business requirements very well 10.
11. Technological infrastructure is developing slower 0/faster 10 than in competitor countries.
12. Average assessment according to criteria 1-11.

^b Average for seven Latin American economies.

^c Average for China, Hong Kong, India, Indonesia, Malaysia, Philippines, Republic of Korea, Singapore, Taiwan Province of China and Thailand.

standards appear to be lagging behind Asian standards as regards the development of technological infrastructure (table 3, row 11). This represents a serious bottleneck with regard to closer integration of Latin America into the corporate globalization strategies of TNCs, considering that the transfer and application of internationally available technologies depend on the availability of complementary factors of production in the recipient countries.¹² A similar discrepancy between Latin America and Asia prevails with respect to the transparency of public decision-making (table 3, row 4). Lack of transparency, which is considered to be most serious in Mexico and Venezuela, translates into higher information and transaction costs. The same applies to bureaucratic interference with business decisions (table 3, row 5) and to the prevalence of corruption (table 3, row 6). Finally, higher transaction costs in Latin America result from less advanced distribution and telecommunications systems (table 3, rows 9 and 10).

Taken as a whole, table 3 indicates that Chile has been the most successful Latin American country in reducing transaction costs, a fact which helps to explain its favourable performance in attracting FDI. Likewise, FDI flows to Argentina have been encouraged by rather low transaction cost-related barriers to FDI. Nevertheless, the strikingly different pattern of FDI flows to Latin American economies can be attributed only partly to differences in transaction costs. For instance, Mexico performed better than Brazil in attracting FDI, although transaction costs appear to be higher in Mexico than in Brazil.

- *Major aspects of the overall policy environment.*¹³ The impact of FDI regulations and transaction cost-related variables was probably dominated by the overall policy environment prevailing in the host countries of FDI. Major factors shaping the competitive position of developing countries in globalized production concern (i) macro-economic stability; (ii) investment in physical and human capital; and (iii) openness to world markets (Gundlach and Nunnenkamp, 1996). Comparative evidence for these factors, set out in table 4, reveals why Latin America as a whole has been less successful in attracting FDI than developing countries in Asia, and why some Latin American economies are well ahead of their neighbours in competing for FDI.

¹² Technological infrastructure is considered deficient especially in Colombia, whereas Chile is more advanced in this respect than Asian developing countries as a group.

¹³ A detailed evaluation of policies pursued in these areas is beyond the scope of this article. The focus here is on policies that are of considerable relevance in the context of FDI and globalization.

Macroeconomic stability, notably the absence of high and volatile rates of inflation, is the primary indicator of a business environment that helps to induce FDI (see Hiemenz, Nunnenkamp *et al.*, 1991). High inflation reduces the informational content of changes in relative prices and results in misallocation of resources. In sharp contrast to Asia, which is reputed for macroeconomic stability, inflation has been excessively high in a number of Latin American economies in the past. Only Chile, Colombia and Costa Rica have prevented annual inflation rates from exceeding the 20 per cent mark considerably since 1984. All three countries have been quite successful in attracting FDI. Mexico and Argentina regained their FDI attractiveness when comprehensive stabilization programmes were launched. The Brazilian experience underscores the close link between macroeconomic stabilization and inward FDI.¹⁴ Investment inflows remained low until 1993, when annual inflation peaked at nearly 2,500 per cent (UNCTAD, 1996, annex table 1; ECLAC, 1995, table A3). The ‘Plano Real’ in mid-1994, involving currency reform, resulted in a sudden drop in the inflation rate to 26 per cent in 1995. In contrast to various earlier stabilization attempts that foundered shortly after their initiation, the ‘Plano Real’ tackled inflation in a more sustainable way.¹⁵ The responses of TNCs were impressive: FDI inflows nearly quadrupled from \$1.3 billion in 1993 to \$4.9 billion in 1995 (UNCTAD, 1996, annex table 1).

A comparison of investment rates in physical and human capital underlines the relevance of domestic economic policies in explaining the recent experiences of developing countries with globalization. This is not surprising: investment can be expected to be higher in a stable macroeconomic environment because that reduces risks in the longer run. Gross fixed capital formation as a ratio of GDP has traditionally been high in low-inflation Asia. Investment ratios of many developing countries in Asia rose considerably in the early 1990s. Likewise, human capital formation (measured by average years of schooling) is more advanced in Asia than in Latin America.¹⁶ Consequently, Asia has better prospects of participating

¹⁴ Brazil is studied in detail in Nunnenkamp (1997).

¹⁵ The inflation rate was expected to fall to 13 per cent in 1996.

¹⁶ The discrepancy between the two regions becomes more pronounced when human capital formation is measured by secondary school enrolment ratios in 1992. The World Bank (1995) reports an average enrolment ratio of 47 per cent for seven Latin American countries (no data were available for Argentina), while that ratio was 55 per cent for seven developing countries in Asia (no data were available for Hong Kong, Singapore and Taiwan Province of China).

in globalized production. A qualified workforce and high and rising investment ratios improve a host country's endowments of complementary factors of production and encourage the diffusion and application of new technologies.

In contrast to Asia, "foreign investment has all too often substituted for, rather than supplemented, the development of a domestic investor base"¹⁷ in Latin America. However, the (physical and human) investment record varies significantly between individual countries (table 4):

Table 4. Selected indicators of the overall policy environment

(Percentage, number and rating)

Country	Inflation ^a (Percentage)	Investment ^b (Percentage)		Schooling ^c (Number of years)	Openness ^d (Rating)
		1985-1989	1990-1994		
Argentina	317	18	17	7	9
Brazil	900	23	21	4	6
Chile	19	20	23	6	9
Colombia	26	18	17	5	8
Costa Rica	18	19	22	5	n.a.
Mexico	40	19	20	4	7
Peru	492	18	16	6	9
Venezuela	36	20	18	5	5
Latin America^e	231	19	19	5	8
Asian economies^f	7	25	29	6	7

Sources: World Bank, 1996b; Jaspersen *et al.*, 1995; Gundlach, 1995, table A1; World Economic Forum, 1995.

^a Annual average for the period 1984-1994.

^b Annual average; as a ratio to GDP.

^c Average years of schooling of the working age population in 1985.

^d Survey results scaled from 0 (national protectionism prevents foreign products and services from being imported) to 10 (national protectionism does not prevent foreign products and services from being imported).

^e Average for the Latin American economies listed in the table.

^f Average for China (except investment and schooling), Hong Kong (except investment), India, Indonesia, Malaysia, Philippines, Republic of Korea, Singapore (except investment), Taiwan Province of China (except inflation and investment) and Thailand.

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- The ratio of gross fixed capital formation to GDP declined in Brazil, but still remained above the Latin American average. As regards human capital formation, Brazil has been clearly lagging behind other Latin American countries.
 - Chile has been the top performer: increasing physical capital formation resulted in the highest investment ratio within the region. Chile ranked next to Argentina in terms of human capital formation.¹⁸
 - The indicators of physical and human capital formation also suggest that Costa Rica has been competitive in these respects: this accords with that country's favourable performance in attracting FDI.
 - The evidence for the remaining sample countries is more ambiguous. Argentina, Peru and Venezuela are above or very close to Asian standards in terms of average years of schooling, while all three countries are characterized by rather low and declining investment ratios.¹⁹ Mexico's position is favourable with regard to the investment ratio, but fairly weak with regard to schooling.

Finally, openness to world markets may shape prospects for attracting FDI. For analytical reasons, the relationship between trade and FDI is not straightforward. In several empirical studies, however, the correlation between trade and FDI proved to be significantly positive.²⁰ This supports the view that both trade and FDI flows are driven by a common set of determinants. The relevance of openness to world markets is increasing under conditions of globalized production. Developing countries that restrict imports of capital goods and trade in intermediate and final goods are unlikely to become integrated into international sourcing and marketing networks. Conversely, countries that have avoided persistent discrimination against world market-oriented activities, such as a number of Asian economies, have emerged as preferred FDI locations. This in turn has contributed to sustained export growth (Agarwal *et al.*, 1995).

As regards Latin America, notable changes in the trade regime have taken place in many countries. According to recent survey results, Latin

¹⁸ Secondary school enrolment in Chile (72 per cent) was exceptionally high by Latin American standards.

¹⁹ Human capital formation is considerably less advanced in Peru and Venezuela when measured by secondary school enrolment ratios (World Bank, 1995).

²⁰ For a detailed evaluation, see Nunnenkamp *et al.* (1994, pp. 82-88).

America is indeed considered more open, on average, than the control group of Asian countries (table 4). At the same time, the significance of protectionism continues to vary greatly within the region. Venezuela and Brazil are perceived to be quite restrictive in this respect. By contrast, Argentina, Chile, Colombia and Peru are fairly open by international standards. Chile ranked fifth in a sample of 48 industrialized and developing countries analysed by the World Economic Forum (1995). On the whole, the survey results regarding the significance of import protection in Latin America are in line with the proposition that relatively open economies have better prospects for attracting FDI.

Sustainability and prospects for FDI

It has been shown that economic policy reforms have helped Latin American countries to become involved in globalized production through FDI. Although Mexico fits well into this picture, the peso crisis of 1994-1995 revealed that the sustainability of private capital inflows cannot be taken for granted even after policy reforms have been undertaken. The issue of sustainability has several dimensions. First, the volatility of capital inflows overall is likely to depend on the structure of capital inflows. Second, the recent FDI boom in some Latin American countries may prove to be a temporary phenomenon if it is the outcome of short-term effects of single events. Third, the question of policy coherence is relevant (this is discussed in the concluding section).

With regard to the sustainability of private capital inflows, it has been noted already that the effects of the peso crisis on Mexico's FDI inflows were modest. Flows to all Latin American countries continued to grow by 37 per cent between 1993 and 1995 (UNCTAD, 1996, annex table 1). By contrast, the portfolio investment boom was interrupted suddenly in 1994. For Latin America as a whole, portfolio equity flows decreased to 52 per cent of the 1993 figure (World Bank, 1996a).²¹ This difference in reaction patterns is not surprising. FDI typically involves a lasting commitment to the recipient economy and seeks long-term benefits. Other types of capital inflows are not as closely linked to corporate globalization strategies of TNCs as FDI is. Portfolio equity flows, for example, may add to productive

²¹ According to preliminary figures, portfolio equity flows declined further to \$6 billion in 1995, compared with \$25 billion in 1993.

investment in the recipient country, but frequently they are speculative in nature and are withdrawn easily if higher returns are offered elsewhere, or if risk perceptions change abruptly—as in the case of Mexico during the peso crisis—(see also UNCTAD, 1995b). Put differently, “stampede effects” are more likely to occur if external financing is largely by institutional investors “whose overriding need is for liquidity and to show favourable short-term returns” (IRELA, 1996, p. 3).

The relative importance of exogenous factors and incoherent domestic policies in triggering “stampede effects” is open to debate. It is now widely accepted that the Mexican financial crisis was due, at least partly, to domestic policy failures (Langhammer and Schweickert, 1995; Fischer and Schnatz, 1996). The observation that volatility “was far less evident in capital flows in Asia than in Latin America” (IRELA, 1996, p. 3) underlines the relevance of domestic factors, including sustained economic growth and sound financial systems.²² However, the structure of capital inflows provides insights into the sustainability of external financing and countries’ prospects of becoming involved in TNC-led globalization. Table 5 reveals significant differences between Latin American economies in these respects:

- The significance of debt inflows that clearly dominated external financing until the early 1980s has decreased. However, that decrease has been modest for Argentina and Brazil, whose reliance on debt inflows during 1993-1994 was still fairly high by the standards of both Latin American and other developing countries.
- Brazil and Argentina differ in one important respect: in Brazil, the shift in the structure of capital flows has been from debt to portfolio investment. The contribution of FDI to Brazil’s total capital inflows has declined. Argentina has relied far less on portfolio investment and significantly more on FDI.
- Mexico’s external financing structure in 1993 proved to be unsustainable only one year later. The remarkable decline in the share of debt was offset primarily by the boom in portfolio investment in the early 1990s. In 1993, the reliance on the latter was exceptionally high (65 per cent of all capital inflows) (World Bank, 1996a). At the same time, the share of FDI in Mexico’s total external financing of (at 20 per

²² Portfolio equity investment in 1995 amounted to 68 per cent in East Asia and 25 per cent in Latin America of their respective peaks in 1993 (World Bank, 1996a).

Table 5. Structure of capital inflows, 1980 and latest available years

(Percentage of total net resource inflows)

Country/year		FDI	Portfolio equity investment	Debt ^a	Grants ^b
Argentina	1980	19	0	81	0
	1993/1994 ^c	30	19	51	0
Brazil	1980	29	0	70	0
	1993/1994 ^c	18	42	40	1
Chile	1980	9	0	90	0
	1993/1994 ^c	43	20	34	2
Colombia	1980	16	0	83	1
	1993/1994 ^c	82	20	-8	6
Mexico	1980	24	0	76	0
	1993/1994 ^c	32	49	19	0
Latin America	1980	21	0	77	2
	1994/1995 ^{c,d}	39	19	37	5
East Asia and the Pacific	1980	10	0	81	9
	1994/1995 ^{c,d}	50	13	34	3
All developing countries	1980	6	0	79	15
	1994/1995 ^{c,d}	39	13	33	15

Source: World Bank, 1996a.

^a Net flows of long-term debt, excluding IMF loans.

^b Excluding technical cooperation grants.

^c Period average.

^d Preliminary.

cent) remained substantially below that of other developing countries, although nominal FDI flows to Mexico doubled between 1980 and 1993.

- The structure of capital inflows suggests that prospects of sustaining external financing are most favourable for Chile and Colombia. Both countries have drawn on portfolio equity flows only to a limited extent; the shift in the structure of external financing has been mainly from debt to FDI.

The positive impact of a high FDI share on the stability of external financing makes it all the more important for Latin American economies to sustain the recent growth momentum of these investments. It may be argued that the sustainability of FDI is at risk, particularly for those countries in which single events with an immediate, though temporary, impact have been responsible for the recent FDI boom. Foreign direct investment related to

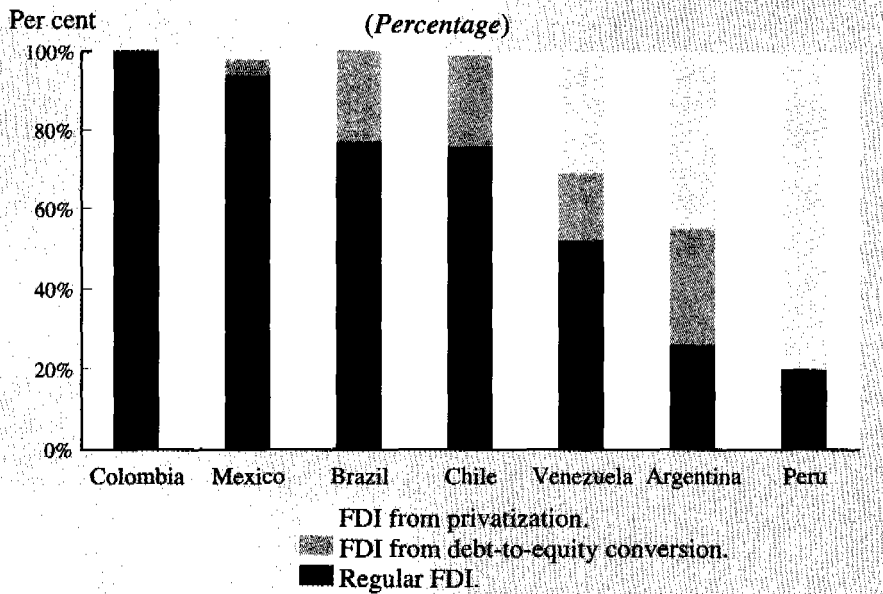
privatization and the conversion of foreign debt into equity are cases in point. It may well be that FDI fades away once the potential for privatization and debt conversion is exhausted.

Foreign direct investment related to privatization and debt conversion has played an important role in several Latin American countries. In 1991, FDI in the context of privatization accounted for 38 per cent of total FDI flows to a group of seven major host countries (IADB and IRELA, 1996, p. 48). However, that share declined substantially in subsequent years (to about 8 per cent in 1995). The significance of privatization and debt conversion in total FDI differs remarkably from country to country (fig. 3).²³ In Argentina, "regular" FDI (i.e. FDI not related to either privatization or debt conversion) represented just a quarter of total FDI inflows during 1988-1995. This was mainly due to the broad-based privatization programme in the early 1990s. As noted before, FDI from the privatization of telecommunications has been of overriding importance in the case of Peru. In sharp contrast, FDI flows to Colombia and Mexico have not been linked to such single events. Foreign direct investment in Brazil could increase in the second half of the 1990s, even though debt-to-equity conversions seem to have been completed. This is because privatization in Brazil gathered momentum only in 1995. Foreign investors have shown considerable interest in acquiring Brazilian State assets.

While FDI flows related to privatization and debt conversion may result in exceptionally high peaks in overall FDI, such inflows are not necessarily one-off events. In many cases, privatization contracts specify further investment to be undertaken after the original purchase, sometimes stretching over several years. Changes in ownership have often been associated with significant additional investment in the rationalization and modernization of privatized firms (UNCTAD, 1995, p. 75; IADB and IRELA, 1996, p. 53). Reinvested earnings of firms which foreign investors have acquired through privatization or debt conversion may lead to additional FDI flows beyond those associated with the initial transaction. Furthermore, privatization and debt reduction programmes may improve the climate for FDI in indirect ways. In particular, privatization signals a government's commitment to economic reforms and reduces uncertainty about the sustainability of the reform process. Privatization is also instrumental as regards competition on

²³ Bolivia represents an extreme case. Investment inflows were due solely to privatization or debt conversion in those years for which a breakdown of FDI data is available (UNCTAD, 1995a).

Figure 3. FDI from privatization and debt-to-equity conversions as a share of total FDI flows to selected Latin American countries, 1988-1995



Source: IADB and IRELA, 1996.

a playing-field level. If governments stop subsidizing inefficient firms, this can ease a country's fiscal situation and contribute to macroeconomic stability, which in turn provides better prospects for attracting FDI. Strict budgetary constraints imposed on enterprises also help to remove distortions in the allocation of productive resources. As a result, new FDI may be generated in sectors which suffered previously from insufficient access to capital and labour markets.

The indirect effects of privatization and debt conversion on FDI flows are almost impossible to quantify. Tentative evidence for seven Latin American economies points to an ambiguous relationship between the significance of privatization and debt conversion as single events and longer-term FDI trends. What Argentina, Brazil and Mexico have in common is that growth of "regular" FDI has been relatively low, although the significance of FDI related to privatization and debt conversion has differed remarkably among those countries (fig. 3).²⁴

²⁴ The growth of "regular" FDI is measured by the ratio of "regular" FDI inflows in 1995 to "regular" FDI inflows in 1988.

High growth of "regular" FDI has been recorded in Chile, Colombia and Venezuela, although FDI related to privatization and debt conversion has played a more important role in Chile and Venezuela than in Brazil and Mexico.

In summary, the major Latin American host countries are facing somewhat different challenges in reducing the volatility of external financing. The structure of external financing suggests that the prospects for sustained capital inflows are favourable for Chile. In countries such as Mexico, "stampede effects" will become less threatening to the extent that external financing is restructured towards more FDI. As regards FDI prospects, Argentina and Brazil are facing contrasting challenges. For Argentina, the issue is how to attract "regular" FDI inflows during the second half of the 1990s, taking into account that the potential for receiving FDI in connection with privatization is almost exhausted. Brazil's prospects for FDI may improve considerably if foreign investors are invited to participate in the ongoing privatization.²⁵ Yet, for all Latin American countries, FDI prospects depend on the consistency and coherence of domestic economic policies.

Policy issues

The ongoing trend towards globalized production and marketing has important implications for foreign investors and host countries. Transnational corporations had to adjust their corporate strategies in order to remain competitive in a changing international environment. Geographically dispersed production by TNCs to take advantage of both markets and resources has as a consequence a change in the relative importance of FDI determinants. Specifically, the size of host-country markets has become less important, while efficiency-seeking FDI appears to be on the rise.

It follows that host countries, too, are facing adjustment pressures. Host countries are no longer free to pursue economic policies of their own liking in the era of globalized production because:

- Countries reluctant to follow the worldwide trend towards the liberalization of FDI regulations run the risk of being de-linked from corporate globalization strategies pursued by TNCs.

²⁵ For a more detailed assessment of Brazil's opportunities for receiving privatization-related FDI, see Nunnenkamp (1997).

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- Countries in which transaction costs are high (because of, for example, government interference with business decisions, lack of transparency and inadequate infrastructure) are likely to receive little FDI.
 - Countries characterized by macroeconomic instability, low investment in physical and human capital and restrictive trade regimes are likely to fail in attracting FDI.

Developing countries have responded to the challenges of globalization in varying degrees and at different times. On average, Asia has been well ahead of Latin America in reducing transaction costs, ensuring macroeconomic stability and improving the local supply of complementary factors of production. Hence, it is not surprising that Latin America as a whole has lost ground *vis-à-vis* Asian economies in attracting FDI. However, such a regional comparison masks remarkable differences between individual countries in the two regions. Several Latin American countries have made considerable progress in restoring their attractiveness to FDI. But in other Latin American countries, inward FDI remains depressed and the sustainability of private capital inflows is still in doubt. These differences are related closely to the timing and coherence of economic policy reforms. On the one hand, countries with a strong and lasting reform record, notably Chile, have been successful in attracting FDI in a sustainable way. On the other hand, Mexico's peso crisis testifies to the susceptibility of private capital inflows to changing risk perceptions of foreign investors. Such changes may occur abruptly once policy inconsistencies become obvious, as for example in the context of exchange rate-based stabilization programmes.²⁶ Yet it is primarily countries such as Brazil that have experienced serious setbacks in their FDI performance because of incoherent and delayed reforms or lack of policy credibility.

The case of Brazil is revealing in various respects. It indicates clearly that there is no promising alternative to macroeconomic stabilization and opening up as inducements to FDI inflows. Policy constraints are binding not only for small countries, but also for economies that offer large domestic markets, such as Brazil. Conversely, recent developments show that stabilization and liberalization measures have a significant and immediate impact on FDI inflows. In other words, policy adjustment pays off in terms of attracting FDI, even for latecomers.

²⁶ For a detailed account of the risks and inconsistencies entailed in Mexico's exchange rate-based approach to macroeconomic stabilization, see Langhammer and Schweickert (1995).

Brazil's experience illustrates the major policy challenges and potential risks as regards Latin America's integration into TNC international production structures. First, the sustainability of macroeconomic stabilization is primarily a matter of budget discipline on the part of national public authorities. As argued below, governments have an important role to play in improving the local supply of complementary factors of production. This may constrain fiscal consolidation through public expenditure cuts. Hence, the need for tax reform is likely to become more pressing. The sustainability of macroeconomic stabilization can be enhanced if reforms focus on broadening the tax base and enforcing tax collection, especially in countries with a traditionally narrow tax base.

Second, government credibility is at stake in the area of trade policy. Substantial import liberalization notwithstanding, some Latin American countries, including Brazil, continue to take recourse to discretionary trade restrictions in the case of unexpectedly high import growth. For example, Brazil raised tariffs and imposed quotas on imports of automobiles in 1995. Such discretionary restrictions may interfere with the investment strategies of TNCs. Moreover, they have created tension among MERCOSUR member countries. The potential for a more efficient regional division of labour can be exploited fully only if the freedom of movement of goods, services and factors of production within MERCOSUR is enforced rigorously. The establishment of appropriate rules and adherence to these rules by MERCOSUR countries depend critically on Brazil, which accounts roughly for two thirds of GDP and four fifths of manufacturing output of the member countries. Intra-MERCOSUR trade remains regulated in important industries, notably, automobiles and autoparts. For example, the bilateral agreement between Argentina and Brazil makes tariff-free treatment of automotive imports from one country conditional on compensating exports of automotive components by the other country (Bundesstelle für Außenhandelsinformation, 1996, pp. 25-27). Such balancing requirements delay structural change in accordance with the comparative advantages of MERCOSUR members.

Third, related to this, it remains open to debate whether or not MERCOSUR represents an "open" integration scheme in the sense that intraregional trade supplements, rather than replaces, trade with non-members. In contrast to several optimistic assessments of booming intra-MERCOSUR trade (Foders, 1996),²⁷ a recent World Bank study by

²⁷ "A survey of MERCOSUR: remapping South America", *The Economist*, 12 October 1996.

Alexander Yeats suggests significant trade diversion effects at the expense of non-members.²⁸ In particular, it was shown that intra-MERCOSUR trade expanded most rapidly in capital- and technology-intensive industries (machinery and transport equipment) that were heavily protected against imports from non-members. This raises the question of how to prevent regional integration from causing mis-specialization in industries that are not competitive by world standards. Much depends on whether old-fashioned import-substitution strategies are abandoned at both the national and regional levels. Regionalization may provide a training ground for successful integration into the world market. If regarded as an alternative to globalized production and marketing, however, regional integration tends to nourish the perception that market size is sufficient to generate FDI inflows.

Fourth, Latin American governments have an important role to play in improving the local supply of complementary factors of production. This applies especially to countries such as Brazil, in which the development of efficient business services lags behind international standards, physical capital formation is in conflict with the country's comparative advantages and the human resource base is poor. Efficient business services are more and more important as production and marketing become globalized, and this implies closer linkages between the manufacturing and services sectors. Governments can contribute directly to upgrading business services and reducing transaction costs by reviewing public investment priorities. However, the trade-off between macroeconomic stabilization and public spending suggests that governments have to rely increasingly on indirect means. They can encourage private investment through deregulating services industries and abolishing public monopolies, for example, in telecommunications, transport and energy. Moreover, the recent experience of several Latin American countries has shown that FDI can contribute to upgrading business services if the participation of foreign investors in the privatization programmes is not restricted.

High overall investment in physical capital facilitates structural change. The rate of investment can be increased if excessive business taxation is avoided. In this context, FDI inflows must not be regarded as a substitute for domestic capital formation. While globalization tends to spur international capital mobility, there are few examples of large and sustained net capital inflows even among the most successful developing countries in

²⁸ For a summary of this study, see Guy de Jonquières, "MERCOSUR trade group under fire", *Financial Times*, 24 October 1996, p. 5.

Asia. Empirical evidence suggests that countries are essentially constrained by their own domestic savings (Feldstein, 1995). Consequently, Latin American countries have to increase domestic savings in order to ease constraints on physical capital formation, which in turn would help them to exploit fully their FDI potential.

With regard to physical capital formation, the rate of investment is not the only thing that matters. Governments can also induce a more efficient allocation of private investment funds by removing distortional incentive systems. The process of trade liberalization is crucially important in this respect, since high rates of effective protection underlie the traditional bias in favour of capital- and technology-intensive manufacturing in several Latin American countries.

Finally, governments bear major responsibility in the area of human capital formation. It seems almost impossible to achieve international competitiveness in technologically advanced industries and attract efficiency-seeking FDI in these industries, unless serious deficiencies in the endowment of human resources are overcome. The amount and quality of compulsory formal education, which reflects a government's attitude to the provision of public goods, is one important element in this respect. Vocational training and technical qualification of the workforce are also important elements. Increased efforts by the private sector to create new sources of competitiveness through training and better qualifications may be supported by appropriate government incentives. Trade liberalization and deregulation of markets play a role in this respect. Enterprises are more likely to engage in human capital formation if they can no longer count on protected markets. Reforms encouraging public and private human capital formation should be very high on the policy agenda, it being taken into account that the positive effects of such reforms may materialize only with considerable delay. ■

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