3. The Dynamics of Foreign Direct Investment and A-B-C Competitiveness

by Andrea Goldstein*

ABSTRACT

Argentina, Brazil and Chile (A-B-C) have attracted substantial amounts of FDI, but this, in contrast to Mexico, has had a limited impact on trade specialisation. In A-B-C most foreign investments were directed to primary good sectors and non-tradable infrastructure services. There was a surge in FDI inflows in the second half of the 1990s, mainly related to privatisations. There has been relatively few technology-sharing by local firms, although some supply linkages have been created, as documented by case studies both in the non-tradable (*e.g.* retail trade) and tradable (*e.g.* mining) sectors. Similarly, FDI has contributed somewhat to institutional strengthening. This chapter proposes specific framework conditions to be improved to attract more FDI and discusses how to achieve more synergies between multinationals and local firms.

* OECD Development Centre. Without implication, he thanks Kiichiro Fukasaku, Matías Kulfas, Nanno Mulder, Joaquim Oliveira Martins, Paulo Bastos Tigre, and seminar participants at ECLAC (Buenos Aires) and IPEA (Rio de Janeiro) for comments and suggestions on earlier drafts. The views expressed do not necessarily reflect those of the OECD, or the OECD Development Centre.

Foreign direct investment and competitiveness

Foreign direct investment (FDI) flows are one of the defining features of globalisation. Between 1991 and 1995, the average annual growth rate of FDI was 21 per cent compared to 9 per cent for exports of goods and non-factor services. Between 1996 and 1999, the difference increased with FDI growing at an average rate of 41 per cent and exports growing at 2 per cent (WTO, 2001). Not only is FDI becoming more important for developing countries in relation to GDP, it is also overshadowing other capital flows such as official development assistance (ODA) or export credits. While ODA has decreased in absolute terms over the 1992-99 period, FDI flows nearly quadrupled. Although portfolio flows are also playing an increasingly larger role in the total financial flows towards developing countries (approximately 10 per cent in 1999), in light of recent Asian experiences, FDI seems a more reliable form of finance (Soto, 2000).[1] It should not be overlooked, however, that despite their rapid rise in recent years, equity portfolio flows still comprise a much smaller fraction of the total inflows than do portfolio debt instruments (such as bonds, certificates of deposit, and commercial paper). Between them Argentina, Brazil and Chile (A-B-C) account for the bulk of South America's FDI flows.[2]

In deciding to engage in production activity overseas, foreign investors take into account a variety of factors and this is in turn reflected in the mode of entry they choose (Box 3.1). Assessing the contribution of FDI to growth and development, however, necessitates more than the analysis of aggregate evidence. Grasping the opportunities that may open up thanks to globalisation is a complex process that requires paying attention to multiple macroeconomic, microeconomic, and mesoeconomic factors. More fundamentally, it is well known that the responses of business agents to identical threats and opportunities are heterogeneous and highly idiosyncratic. For these reasons this paper documents the evolution of FDI in the 1990s from multiple angles (aggregate, industry, and firm) to assess its contribution and to highlight the most contentious issues.

Box 3.1. **What drives foreign direct investment?**

The literature on FDI identifies four different reasons why firms invest across national borders (Odenthal, 2001):

- *Market-seeking* investments, to access new markets that are attractive due to their size, growth or a combination of both.

- *Efficiency-seeking* investments that aim at taking advantage of cost-efficient production conditions at a certain location. Important factors that are taken into consideration are the cost and productivity levels of the local workforce, the cost and quality of infrastructure services (transport, telecommunication), and the administrative costs of doing business (resources needed in terms of finance and time to deal with government institutions). This motive is predominant in sectors where products are produced for regional if not global markets and competition is mostly based on price (such as in textiles and garments, electronic or electrical equipment, etc) and not on quality differentiation.

- *Natural-resource seeking* investment to exploit endowments of natural resources. Naturally, the production and extraction of these resources is bound to the precise location of the resources. However, given that most resources can be found in a relatively large number of locations, companies may usually choose on the basis of differences in production cost and conditions in different locations.

- *Strategic-asset seeking* investment, oriented towards man-made assets, as embodied in a highly-qualified and -specialised workforce, brand names and images, shares in particular markets, etc. Increasingly, such FDI takes the form of cross-border mergers and acquisitions, whereby a foreign firm takes over the entire or part of a domestic company that is in possession of such assets.

In reality, these motives are seldom isolated from one another. In most cases, FDI is motivated by a combination of two or more of these factors. Other analytical questions concern the identity of buyers (*Who?*), the choice of the target region (*Where?*), the timing of the expansion (*When?*), and the market entry strategy (*How?*).

A recipient economy can greatly benefit from FDI, particularly in the developing world. The conventional approach to examining the relationship between FDI and growth relies on a variant of the so-called 'resource-gap' model, in which the lack of financial resources prevents the attainment of optimal growth rates. Benefits at the aggregate level include income and employment generation as well as higher tax revenues – if foreign-owned firms make greater profits and/or export more to increase their own profitability. Additional benefits may accrue to the economy at large in the variety of industries, in the composition of exports, possibly reducing the vulnerability to terms-of-trade shocks, and if affiliates of multinational

corporations (MNCs) compete more forcefully among themselves than domestic-capital firms.[3] By deploying tangible and intangible assets MNCs sometimes also increase competitiveness – *i.e.* resource base, capacity to produce, reach and expand markets for their products, and ability to restructure the economies through state-of-the-art technology, research and development (R&D) capacity, and organisational and managerial practices – in host countries. Technology transfer and diffusion work via four interrelated channels: vertical linkages with suppliers or purchasers in the host countries; horizontal linkages with competing or complementary companies in the same industry; migration of skilled labour; and the internationalisation of R&D. As the share of firms that engage in some form of cross-border activity – including intra-firm trade – increases, FDI are also gaining in importance as a conduit to access markets.

The chapter is organised as follows. Part I provides some background information on the role of foreign capital in A-B-C industrialisation in the 20th century and analyses main trends in FDI since the structural reform process started in the late 1980s and early 1990s (depending on the case). In line with the approach used in this chapter, FDI figures are separated into non-tradable and tradable – and these in turn are classified according to the industry taxonomy (Oliveira-Martins and Price, 2004). Part II examines the effects on competitiveness at the macroeconomic level, while Part III explores the success of FDI in generating positive spillovers for host economies, focusing on three separate industries – car-making, mining, and retail distribution – where some firm-level case studies are also included as boxes. Part IV concludes by summarising the contribution of FDI in raising the competitiveness of the business sector in A-B-C countries and explores what are the main policy issues that arise at the domestic, regional, and multilateral levels.

Part I. Main trends

FDI in A-B-C: A long-term perspective

Unlike China or Eastern Europe, the A-B-C countries are familiar territory for many multinationals, which have been operating there for up to a century. Foreign capital played a leading role in these economies' insertion into the world economy in the late 19th and early 20th centuries, providing the investment both to augment the productive capacity of primary commodities such as coffee, (frozen) meat, and wheat, and to build the necessary infrastructure to ensure their shipment to Europe. Foreign entry usually took the form of fully-owned subsidiaries (Sourrouille *et al.*, 1984, p. 16 in the case of Argentina), although in the case of late-comers such as Italy, which could count on a sizeable community in the region, different forms of joint-ventures were successfully adopted.

The 1930s Depression and then World War II witnessed a sharp reduction in FDI inflows into the region, and in the immediate post-war period nationalistic governments erected new barriers to foreign capital to nurture an indigenous industry. The steady growth of the state-owned enterprise sector found its origin in nationalisations of German interests during the War (creation of Argentina's *Dirección Nacional de Industrias del Estado* in 1945) and of the utilities in the second half of the 1940s. This strategy came to an end in the 1950s as the continuation of import-substitution industrialisation behind high trade and non-tariff barriers was combined with an increasing reliance on MNCs. Exemplary in this sense was the 1953 law in Argentina (No. 14.222) that included measures on duty reductions, tax holidays, preferential credits, and profits remittance. The import-substitution industrialisation (ISI) policies implemented by presidents Frondizi in Argentina (1958-62) and Kubitschek in Brazil further emphasised capital-intensive manufacture of consumer durables. Manufacturing growth rates accelerated considerably and remained very high until the early-to-mid 1970s. In sectors such as motor-mechanical, electrical, pharmaceutical, and chemical goods, foreign investors quite obviously came to dominate the scene. By the 1970s, foreign-controlled firms in Brazil accounted for a quarter of manufacturing output, a third of the output, more than a third of the sector's exports, and 55 per cent of the

largest industrial companies' turnover (Willmore, 1986, p. 490 citing various sources). Census statistics for Argentina in 1973 show similar values – foreign-owned firms accounted for more than 30 per cent of manufacturing output, with a clear positive correlation with the degree of market concentration, and for 45 per cent of the 300 largest companies' turnover (Azpiazu and Kosacoff, 1985).[4]

From around 1975 until the end of the 1980s the A-B-C countries all recorded much lower FDI inflows than in the past despite following different policies. In particular, Argentina and Chile abruptly liberalised the economy in a context of appreciating real exchange rates, before entering into severe recession in the early 1980s. Chile subsequently adopted a more realistic package of market reforms, that included measures of liberalisation, and institutional strengthening, while in Argentina and Brazil social demands unleashed upon their return to democracy made it difficult to redress macroeconomic imbalances and embrace privatisation. What proved generally common across countries was the retrenchment of large foreign investors, especially in Argentina and Chile where long-established MNCs such as Citroën, Fiat, General Motors, Renault, either divested completely or downsized their plants to simple commercial and trading subsidiaries. This phenomenon was part and parcel of the de-industrialisation process experienced in these two countries as a result of the adoption of conservative economic policies. In Argentina, industrial production shrank by 20 per cent in 1975-82, industry's share of GDP fell from 28 per cent to 22 per cent, and 400,000 manufacturing jobs (a third of the subtotal) were lost (Sourrouille *et al.*, 1984, p. 141).

Main reforms in FDI policies

During the 1990s, regulations on foreign capital flows were relaxed around the world, with Latin America leading the removal of capital flow regulations. After decades of hyperinflation and slow growth, the three major South American economies now have very few regulations or limits on foreign investment in most sectors, and provide national treatment to foreign investors. The progressive removal of tariff and non-tariff barriers to intra-area trade in Mercosur, as well as between Chile and Mercosur, Canada, Mexico, EU and the United States also widened the size and scope of the regional market.

In Chile, across-the-board FDI liberalisation started in the 1970s, allowing full foreign ownership in virtually all sectors, absolute freedom to repatriate earnings, and national treatment for foreign investors, including in tax. The formal route for foreign direct investment (FDI) was regulated by Decree Law 600 of 1974. An alternative, less formal route for bringing

foreign capital into Chile is Chapter 14 of the Central Bank's Compendium of Foreign Exchange Regulations. However, DL 600 offers a series of unique advantages. Under this mechanism, the investor signs a legally binding investment contract with the Chilean State, which the Government cannot unilaterally modify even if it subsequently adopts new legislation.[5] There are few limited exceptions to non-discriminatory treatment.[6]

Brazil began major FDI liberalisation in 1988 by entitling foreign investors to repatriate their investments and/or profits abroad at any time. In September 1993, Decree No. 1853 modified both Foreign Investment Law and Technology Transfer Law, allowing foreigners to organise their companies, fully own them, and make use of local credit with the same rights, obligations and conditions as local firms. The 1995 constitutional amendments eliminated the distinction between foreign and national capital and opened formerly closed sectors, such as petroleum exploration and extraction, mining and banking, to private investors. Foreign capital, however, remains excluded from airports and air services, broadcasting, shipping, and fisheries, and face restrictions in financial services and health care. In January 1996, the government freed remittances for foreign investments registered with the central bank; abolished withholding taxes; and opened the insurance sector to authorised foreign investors. New or expanded foreign investment in the banking sector remains technically forbidden. However, since 1995, the government has approved foreign bank entry or expansion, case by case, according to the national interest, obligations under international agreements or reciprocity. Professional services is another area that has remained closed – at least until mid-2002 when one of the largest international law firms (Clifford Chance) was finally registered by the São Paulo section of the Brazilian Bar Association (OAB). Finally, a *Medida Provisória* was issued in October 2002 to regulate the 30 per cent participation by foreign capital in Brazilian media, provided for by a recent constitutional amendment passed by Congress. The regulation places some limits on participation by investment funds, and applies the 1967 legislation for radio and TV. The responsibility over editorial and programming decisions is reserved for Brazilian citizens.

In Argentina, the 1993 decree on foreign investment repealed procedural requirements that had served to limit foreign participation under pre-existing law. Prior approval for FDI is not needed unless special laws apply, such as in defence, and registration is required for statistical purposes only (some intra-company transfers of technology do require registration for tax purposes). Repatriation of all funds is now immediate and unconditional, whereas previously investors could not repatriate invested capital for a 3-year period (ten years if made through a debt-equity conversion). Foreign investors receive national treatment and are eligible for incentive

programmes and state procurement. A few sectors (shipbuilding, fishing, and nuclear power generation) remain closed to foreign investors. Argentina has also found itself at loggerheads with foreign investors in the area of patents legislation.[7]

To reduce sovereign risk for investors, each A-B-C country also has bilateral investment promotion and protection treaties with many European, American, and Pacific countries.[8] Such treaties allow arbitration of disputes by the International Center for the Settlement of Investment Disputes (ICSID) or any other arbitration institution mutually agreed by the parties. Six foreign firms have invoked the treaty's provisions in on-going disputes with Argentine national or provincial authorities.[9]

FDI in the 1990s

Different indicators provide evidence of the explosion of FDI in A-B-C countries in the second half of the 1990s (Table 3.1). First, the average combined annual inflows rose almost seven-fold from USD 5.4 billion in 1989-94 to USD 35.9 billion in 1995-2001. The most dramatic increase was in Brazil, that has gone from USD 1.5 billion to USD 21.1 billion per year; the increases in Chile and Argentina, however, were also far from negligible, of four and three times respectively. Second, the A-B-C region's participation in global FDI activity increased substantially, from 2.70 per cent of the world's total in the first sub-period to 5.1 per cent in the second. The same near-doubling also shows in the data for FDI to developing countries, from 9.1 per cent to 18.4 per cent. Third, the analysis of multi-year averages obviously masks year-by-year developments.[10]

Table 3.1. **Net FDI inflows to A-B-C and other regions**
Million USD

Host country/region	1989-94 (annual average)	1995	1996	1997	1998	1999	2000	2001
Argentina	2 694	5 609	6 949	9 162	7 281	24 147	11 152	3 181
Brazil	1 498	5 475	10 792	18 993	28 856	28 578	32 779	22 457
Chile	1 220	2 956	4 633	5 219	4 638	9 221	3 674	5 508
Sub-total A-B-C	5 412	14 040	22 078	33 124	40 399	64 730	48 373	30 419
Total South America	7 647	19 546	32 232	48 166	51 886	70 880	56 837	40 111
Total Latin America	17 506	32 311	52 856	74 299	82 203	109 311	95 405	85 373
Total developing countries	59 578	113 338	152 685	191 022	187 611	225 140	237 894	204 801
World total	200 145	331 068	386 140	478 082	694 457	1 088 263	1 491 934	735 146

Source: UNCTAD (various years), *World Investment Report*.

In terms of FDI inward stock, the sub-region represented 5.23 per cent of the world's total in 1998, from a low of 2.92 per cent in 1995, although by 2000 it had decreased to slightly above 5 per cent (Table 3.2). A very similar dynamic emerges from data on the A-B-C's share of FDI stock in developing countries. A comparison between 1980 and 2000 clearly shows that in stock terms the increasing importance of A-B-C for foreign investors is largely accounted for by Chile, which has seen its weight pass from 0.14 per cent to 0.71 per cent. In *per capita* terms, while in 1980 each Argentinean had more than double the FDI than Chileans (USD 190 *vs.* USD 79, with Brazilians mid-way at USD 144), twenty years later the ranking has changed. In 2000 Chile's *per capita* FDI stock stood at USD 2 822, compared to USD 1 983 for Argentina and USD 1 160 for Brazil. In the second half of the 1990s, inward FDI flows have also represented a substantial percentage of gross fixed capital formation, especially in Chile but in Argentina and Brazil as well, generally at higher levels than in other developing countries or in the world at large (Table 3.3).

Table 3.2. **FDI inward stock in A-B-C and other regions**
Million USD

Host country/region	1980	1985	1990	1995	1998	1999	2000	2001
Argentina	5 344	6 563	9 085	27 991	47 114	62 289	73 088	76 269
Brazil	17 480	25 664	37 143	42 530	132 734	164 105	196 884	219 342
Chile	886	2 321	10 067	15 547	30 038	39 258	42 933	48 441
Sub-total A-B-C	23 710	34 548	56 295	86 068	209 886	265 652	312 905	344 052
Total South America	29 253	42 136	66 699	111 666	268 593	330 174	377 008	417 580
Total Latin America	49 960	79 673	116 678	201 426	404 621	520 282	613 094	692 978
Total developing countries	240 837	347 237	487 694	849 915	1 240 976	1 740 377	2 002 173	2 181 249
World total	615 805	893 567	1 888 672	2 911 725	4 015 258	5 196 046	6 258 263	6 845 723

Source: UNCTAD (various years), *World Investment Report.*

Table 3.3. **Inward FDI flows as a percentage of gross fixed capital formation in A-B-C and other regions**

Host country/region	1984-94 (annual average)	1995	1996	1997	1998	1999	2000
Argentina	8.6	12.1	14.1	16.1	11.5	47.2	24.2
Brazil	1.7	3.8	7.2	11.9	18.6	28.2	28.4
Chile	13.7	19.0	23.2	23.2	22.4	59.9	23.1
Total South America	4.5	7.4	11.8	15.9	17.4	32.9	25.4
Total Latin America	6.2	9.6	12.6	16.6	17.1	25.9	20.7
Total developing countries	5.2	7.7	9.1	11.1	11.4	13.4	13.4
World total	4.1	5.3	5.9	7.4	11.0	16.5	22.0

Source: UNCTAD (various years), *World Investment Report*.

The year 2002 has been characterised by a marked slowdown in global investment flows and the A-B-C region has been far from immune from such trends. Very little FDI activity has been registered in Argentina, where the only major operations have been the purchase of the largest brewery (Quilmes) and the largest domestic-owned oil company (Pecom) by Brazilian investors (Ambev and Petrobrás, respectively). In Brazil, Central Bank data show that in May 2002 the 12-month FDI accumulation was USD 21 942 million – versus a peak of USD 31 583 million as of May 2001, a decline of 30.5 per cent. The accumulated FDI in the first five months was USD 8.1 billion, *vs.* USD 8.8 billion in the same period in 2001.

In 2001-02, the interactions between developments in world financial markets and events in the region have been of two kinds. On the one hand, the economic crisis in Argentina has hit hard results and stock prices of corporations exposed in this country. For Spanish MNCs in particular the country accounts for a sizeable share of profits – at least 10 per cent at Endesa and 15 per cent at Telefonica – and two-fifths of revenues at Repsol-YPF. The banks are exposed to over USD2 billion-worth of government debt apiece. On top of that, the devaluation of the *peso* led to a rise in bad debts, since over two-thirds of the loans to Argentine companies and individuals, most of whom receive income in pesos, are denominated in dollars. The banks had put aside over USD 1 billion in provisions over the previous years to cushion against bad times. Companies that have already withdrawn from Argentina or that announced their intention to do so include the German autoparts makers, Kautex, the US grain trader, Tradigrain, and the Spanish meat-processing and packaging firm, Campofrio. Total investment in foreign affiliates declined by 30 per cent in 2001, reaching its lowest level since 1996 (the previous trough in the economic cycle) (UNCTAD, 2002).

On the other hand, the Enron and WorldCom fraud scandals shook Latin American markets as these companies had sizeable investments in the region. WorldCom/MCI purchased Embratel in July 1998 and encountered difficulties in rolling over debts of BRL 1.3 billion that fell due in 2003. WorldCom/MCI intended to sell Avantel in Mexico, but it could not sell Embratel until July 2003, although Anatel was considering possible intervention. A number of North American and European telecommunications companies also held talks with Brazilian investors to sell their holdings.[11] Enron announced the sale of its 12 foreign assets including three in Brazil – Elektro power distribution in São Paulo, its share in the Brazil Bolivia gas pipeline project, and the gas turbine electricity generation unit in Cuiabá (Mato Grosso).

By sector

The sectoral composition of FDI flows is an important determinant of national competitiveness – *i.e.* the ability of a country to generate an increasing stream of export earnings. A first approximation is provided by the respective role of tradable and non-tradable goods – although with the important caveat that FDI can indirectly improve competitiveness by improving the quality and efficiency of supplying those non-tradable services that are needed to manufacture export goods. This, however, is largely a function of the regulatory regime, an issue that escapes the scope of this paper.

The profile of FDI in A-B-C and Mexico in the 1990s is presented in Table 3.4 and a number of contrasting features are almost self-evident. First, oil and mining represents a large share of FDI flows to Argentina (a third) and Chile (one fourth) while barely appearing in Brazil and Mexico. The contrast between Argentina, on the one hand, and Brazil and Mexico, on the other, is mainly explained by the privatisation of YPF, the Argentine oil company. However, as it will be shown below, foreign companies have not been deterred from investing in Chile by the unchanged public-sector nature of Codelco, the copper producer. Second, the weight of services in the FDI portfolio is much higher in Brazil and Chile than elsewhere. In the former, this is due to the post-1995 privatisation wave in banking, electricity, and telecommunications; in the latter, to the acquisition by Italian and Spanish companies of already private utilities companies. In Argentina, of course, privatisation took place on an equally large scale, and indeed earlier than in Brazil, but assets there fetched lower prices. The third, and possibly most telling contrast, concerns the manufacturing sector. Following the creation of the North American Free Trade Agreement (NAFTA), the Mexican economy has become increasingly integrated with the US market and its industry has correspondingly benefited from substantial FDI. While the apparently much greater potential of Mexico as a manufacturing platform shows up in all sectors, it is particularly evident in electronics. On the other hand, in food, beverages, and tobacco FDI flows are usually intended to serve the domestic market and predominantly take the form of acquisitions of existing assets (see below).

Table 3.4. **Sectoral distribution of FDI in A-B-C and Mexico in 1992-2002**

	Argentina (1992-2000)	Brazil (1996-Apr 2002)	Chile (1996-2000)	Mexico (1994-98)
Primary sector	**33**	**3**	**25**	**1**
Agriculture			1	1
Oil, mining	33		24	
Industry	**31**	**21**	**11**	**62**
Food, beverages, tobacco	7	4	4	16
Chemicals, paper	7	4	6	9
Non-electrical chemical equipment				4
Electronic equipment		1		13
Motor vehicles	4	5		9
Other manufacturing	13	8	1	11
Services	**36**	**76**	**64**	**37**
Commerce	4	8		12
Electricity, gas, water	12	12	27	
Transport and communications	9	22	7	7
Banking and finance	11	14	20	9
Other services		20	10	9

Sources: ECLAC (2000), ECLAC (2001), Kulfas *et al.* (2001), SOBEET (2002), *Carta*, No. 23.

Focusing on industrial FDI in A-B-C countries, the car sector has attracted most flows – and is covered separately below. The sub-region has also been one of the main destinations for FDI in capital and scale-intensive industrial commodities like steel, paper and pulp, aluminium, and petrochemicals (Box 3.2). New technologies, on the other hand, account for a very minor share of total FDI inflows. In the mid-1990s, Brazil and Chile unsuccessfully competed with Costa Rica for the location of Intel's first manufacturing facilities in Latin America.[12] In 1994, Compaq opened a factory near Campinas to supply the whole of South America with PCs and small servers. It now exports 60 per cent of its production. Although for the moment local components account for only 30 per cent of the value of Compaq's Brazilian PCs, that share may rise as an incipient cluster of high-technology businesses around Campinas develops. On the other hand, in 2002 Dell postponed a planned expansion of its computer assembly plant in southern Brazil because of the slump in the electronics industry and weak economic growth.

Box 3.2. **Foreign investment in the Argentine petrochemicals industry**

Under state ownership and/or regulation, the Argentine petrochemicals industry grew fast in the 1980s and increased its participation in manufacturing output and fixed capital formation. The process, however, suffered from some typical government failures – disregard for market signals, lack of vision, capture by lobbies – and failed to generate spillovers, both inside individual firms and across the supply chain. In the 1990s, in a context of privatisation and deregulation, firms adopted defensive strategies, integrated vertically, reduced R&D expenses, and tried to collude.

Between 1998 and 2002 output capacity in the Argentine petrochemicals industry rose dramatically from 3 to 7 million t/y thanks to USD 2.5 billion investments. A major contributor during the period was the USD 720 million green-field investment by Dow Chemicals and Repsol-YPF to build a polyethylene plant in Bahia Blanca. The plant is one of the three largest in the world and a high share of its output is exported. Together with Petrobras, the same two companies also invested USD 440 million in the Mega project, an ethane, propane, butane and gasoline producing plant that supplies Dow's and other petrochemical facilities in the Bahia Blanca region. Repsol-YPF also embarked in Profertil, a joint project with Perez Companc and Agrium to build one of the world's biggest fertilizer plants. Other recently completed FDI projects include a PET plant by Eastman Chemical built at a cost of USD 110 million, and a USD 120 million expansion of its sodium hydroxide, chlorine and PVC plant by Solvay Indupa, controlled by Belgium's Solvay. Finally, Perez Companc is the sole investor in the USD 450 million PASA project, scheduled to be completed by 2002. The PASA plant will produce ethylene, BTX, benzene, PET and other products.

Source: The Economist Intelligence Unit.

Thanks to the availability of skilled labour and a very competitive telecoms infrastructure (in terms of both prices and quality) Chile has registered a number of recent successes in attracting high-tech FDI. In 2001, for instance, Motorola set up a software development centre for mobile Internet solutions in Valparaiso, which will require investments of USD 12 million over four years. A number of service companies, such as Delta Airlines, have decided to locate their back-office and call centre for Latin America in Chile. This operation was reinforced in late 2001 when, facing the slowdown of global aviation in the wake of the 11 September events, Delta closed its call centre in Mexico.[13] Skyteam's partner Air France also opened a similar centre in Chile. Also in 2001 BSCH, the Spanish bank, inaugurated its systems back-office for the region in Santiago. America Latina Tecnologia (Altec) is a fully-owned subsidiary which will develop and maintain the computerised systems for the BSCH group's

17 banks in 12 Latin American countries. Altec required an initial investment of USD 5 million, and another USD 10 million is expected to follow.

By country of origin

In each of the A-B-C countries, the United States and Spain together account for at least 40 per cent of FDI flows (Table 3.5). Obviously, the world's largest economy has a long-running tradition of Latin American investment, while Spanish big business only started investing abroad on a large scale in the 1980s. Suffice it to remark here that their experiences are both different and similar. Different *in primis* because US MNCs have mostly invested in manufacturing while Spanish corporations have been particularly interested in banking and public utilities and have entered throughout privatisation. Unsurprisingly, because of the different features of FDI in Mexico, the United States account for more than two thirds of FDI in that country since the birth of NAFTA, while Spain is a smaller player (3.7 per cent of the total), although still the third largest after Japan. The similarity has to do with the history of outward FDI activities in these countries. The market-seeking strategy that characterises Spanish MNCs nowadays bears a distinct resemblance to the behaviour of American companies in the 1920s (Wilkins, 1974).

Table 3.5. **FDI in A-B-C and Mexico by source country, 1990-2002**

	Argentina (1992-2000)	Brazil (1996-Apr 2002)	Chile (1990-2001)	Mexico (1994-Mar 2002)
Australia			6	
Canada			15	
France	7	8	2	-2
Germany	2	2	1	3
Italy	4	2	3	0
Japan			4	3
Spain	40	19	16	4
The Netherlands	4	10	2	9
United States	25	23	31	67
United Kingdom	2	2	6	3
OECD				
Argentina	..		1	
Brazil		..		
Chile	4			
South Africa			4	
Non-OECD				
Other countries	12	34		13
Total	100	100	100	100

Sources: ECLAC (2000), ECLAC (2001), Kulfas *et al.* (2001), Laplane *et al.*, (2001).

Focusing now on each of the three A-B-C countries, the different importance of individual source countries is mainly a reflection of the sectoral characteristics of FDI. Chile, for instance, represents a large share of the Latin American FDI of two OECD countries, Australia and Canada, in which the mining sector plays a leading role. For the same reason, South Africa also has an unusually heavy weight in Chile. On the other hand, Dutch and French industrial, retail distribution, and insurance companies have concentrated their ventures in Argentina and Brazil. Finally, it should be mentioned that since the second half of the 1990s intra-A-B-C FDI flows have gathered momentum. In particular, then domestic-owned Chilean utilities invested in the Argentine electricity sector; a number of Trans-Andean gas pipelines were built and operated by Argentine-led consortia; and food and beverages companies from Argentina and Brazil – notably Arcor, the world's largest candies producer, and Ambev, the world's fifth largest brewery – have concluded some very important deals in each other's markets.

A mirror form for analysing the geographical dimension of FDI is by studying the importance of host countries as a destination of FDI outflows for selected OECD Members (Table 3.6). As far as the G7 countries are concerned, in 1990 the sub-region accounted for 7.9 per cent of Italy's outflows, for 4.4 per cent of the United States' ones, and for much lower percentages in the other instances. In the mid-1990s, these values were higher for all countries except Italy (and were basically unchanged in the case of Japan). The year 1999 marks a relative deterioration, as higher absolute values of FDI to the A-B-C countries were insufficient to match the phenomenal increase in intra-OECD FDI flows. As Table 3.6 is based on OECD statistics, it does not include Spain, which did not report such data. It does however include Portugal, a country for which Brazil was by far the single most important FDI target in 1999.

Table 3.6. **The importance of A-B-C countries as FDI destinations for selected OECD countries (USD million)**

	1990	1995	1999
United States			
In Argentina	2 531	7 660	14 187
In Brazil	14 384	25 002	35 003
In Chile	1 896	6 216	9 886
In A-B-C as % world total	4.4	5.6	5.2
Japan			
In Argentina	431	787	
In Brazil	6 560	8 849	610 400
In Chile	311	430	
In A-B-C as % world total	2.4	2.2	2.0
Germany			
In Argentina	1 427	1 908	3 608
In Brazil	5 313	11 017	13 381
In Chile	174	11 981	690
In A-B-C as % world total	3.1	6.7	3.0
France			
In Argentina	1 967	7 169	15 525
In Brazil	6 898	18 682	43 091
In Chile	1 936	1 625	764
In A-B-C as % world total	1.9	3.0	4.6
United Kingdom			
In Argentina	172	455	1 130
In Brazil	1 250	2 323	2 376
In Chile	207	666	964
In A-B-C as % world total	1.4	1.8	1.1
Italy			
In Argentina	1 426	2 300	3 965
In Brazil	3 598	3 798	8 026
In Chile	0	0	0
In A-B-C as % world total	7.9	4.0	3.8
Canada			
In Argentina	123	1 335	2 465
In Brazil	1 698	2 458	3 067
In Chile	285	2 673	4 625
In A-B-C as % world total	2.1	4.0	4.0
The Netherlands			
In Argentina	n.a.	2 038	2 863
In Brazil	n.a.	3 436	7 706
In Chile	n.a.	439	1 203
In A-B-C as % world total	n.a.	2.1	2.7
Switzerland			
In Argentina	n.a.	491	1 085
In Brazil	n.a.	4 385	4 375
In Chile	n.a.	903	686
In A-B-C as % world total	n.a.	3.5	2.5
Portugal			
In Argentina	n.a.	1 253	3 132
In Brazil	n.a.	3 676	400 601
In Chile	n.a.	0	168
In A-B-C as % world total	n.a.	0.8	23.9

Source: OECD.

A complementary way of assessing the relevance of the major Latin American markets is by their weight in the worldwide turnover of the 20 top MNCs (Table 3.7). Clearly it is only for one company, Repsol-YPF that the A-B-C region accounts for more than 20 per cent of its global turnover in 2000. Although Brazil is an important market for them all, Mexico accounts for a larger share of turnover in the case of producers of vehicles (General Motors, Ford, DaimlerChrysler, and Volkswagen), electronics (General Electric and IBM), and food (Nestlé), although not for oil companies (ExxonMobil and Royal Dutch/Shell).

Table 3.7. **The presence of the World's Top 20 MNCs in Argentina, Brazil, and Mexico in 2000**

Company	Country	Sector	Percentage of worlwide turnover in: Argentina	Brazil	Mexico
General Electric	United States	Electronics	0.00	0.00	**2.02**
ExxonMobil	United States	Petroleum	0.59	**1.51**	0.00
Royal Dutch/Shell	Netherlands/UK	Petroleum	**1.53**	**2.62**	0.00
General Motors	United States	Motor vehicles	0.31	**1.97**	**5.23**
Ford	United States	Motor vehicles	0.60	0.91	3.30
Toyota Motor	Japan	Motor vehicles	0.00	0.00	0.00
DaimlerChrysler	Germany	Motor vehicles	0.43	**2.34**	**6.05**
Total Fina SA	France	Petroleum	0.00	0.00	0.00
IBM	United States	Computers	0.82	**1.84**	**4.29**
BP	United Kingdom	Petroleum	0.00	0.00	0.00
Nestlé S.A.	Switzerland	Food/beverages	**1.05**	**3.50**	**4.43**
Volkswagen Group	Germany	Motor vehicles	**1.10**	**5.57**	**9.68**
Nippon Oil Co. Ltd	Japan	Petroleum	0.00	0.00	0.00
Siemens AG	Germany	Electronics	0.59	0.81	**1.78**
Wal-Mart Stores	United States	Retailing	0.29	0.32	**4.64**
Repsol SA	Spain	Petroleum	**20.49**	0.00	0.00
Diageo Plc	United Kingdom	Beverages	0.00	0.00	0.00
Suez	France	Utilities	**1.61**	0.00	0.00
BMW AG	Germany	Motor vehicles	0.00	0.00	0.00
Weighted average			0.90	1.23	2.54

when 1%<weight<2%; when 2%<weight<5%; when 5%<weight<10%; when weight>20%.
Companies' ranking based on UNCTAD (2001), Table III.1; no data available for Mannesmann AG (now Vodafone Plc)
Source: Author's calculations based on AméricaEconomía (2001), *Especial 500* and Fortune (2001), *Global 500*.

By mode of entry

One of the key features of current FDI global trends is the increasingly large part of FDI that takes the form of cross-border mergers and acquisitions (M&As), including privatisation (UNCTAD 1999). The annual average of cross-border M&A sales jumped more than six times from USD 132 billion in 1993-95 to over USD 810 billion in 1998-2000. During the latter period, cross-border M&As amounted to 80 per cent of global FDI inflows and their share in total M&A activity has jumped to 2.3 per cent in 1999, from 0.6 per cent in 1992. M&As by TNCs are becoming a common form of foreign entry in Latin America and Africa, and more recently in Asian countries affected by the financial crisis. In 1998-99, Argentina and Brazil dominated cross-border M&A sales by developing countries. Excluding Bermuda, a tax haven, Argentina is the only non-OECD economy with target companies (YPF and Aeropuertos Argentinos) in the top 50 cross-border M&A deals completed during 1987-99.[14] As regards privatisation, three companies each from Argentina and Brazil appear among the world's largest deals involving foreign investors concluded in 1987-99.

Summary indicators for 2000 show the prominence of telecoms and banking (with a combined weight in excess of 70 per cent) among the 40 largest M&A deals (Table 3.8). Foreign investors accounted for 87 per cent of total activity – and they were the only buyers in the case of oil and manufacturing (in this last case there were three deals only). Although the sample is far too small to draw any kind of meaningful inference, it is interesting to note that domestic investors were particularly active in non-tradables (although not necessarily sheltered) sectors of the economy such as banking, finance, and media. Post-2001 data confirm these results (Table 3.9).

Table 3.8. **Summary indicators for the 40 largest M&A deals in A-B-C and Mexico in 2000**

Sector	Total value	Nr of deals	By nationality of buyer		Foreign/total %
			Foreign	National	
Telecoms	24 720	10	23 592	1 128	95
Banking	11 332	10	8 807	2 525	78
Oil	4 824	2	4 824	0	100
Energy	4 553	7	4 233	320	93
Media	2 132	3	1 225	907	57
Finance	1 788	3	555	1 233	31
Non-durables	752	1	752	0	100
Mining	530	1	0	530	0
Industrial commodities	510	1	510	0	100
Capital goods	415	1	415	0	100
Water	336	1	336	0	100
TOTAL	51 892	40	45 249	6 643	87

Source: Author's elaboration based on *Latin Trade*, April 2001.

Table 3.9. **Top Latin American targets M&A deals announced since January 2001**

Date	Target name (country)	Acquiror name (country)	Industry	Value (USD million)
May 2001	Banacci (Mex)	Citigroup (US)	Banking	12 821
Mar 2002	Banco Sudemeris (Bra)	Banco Itaú (Bra)	Banking	1 440
Jan 2002	Afore Banamex (Mex)	Banacci (Mex-US)	Banking	
Jul 2002	Pecom (Arg)	Petrobrás (Bra)	Oil	1 125
Jan 2001	Global Telecom (Bra)	Telesp (Bra-Spa)	Telecoms	1 116
Sep 2001	Bancomer (Mex)	BBVA (Spa)	Banking	1 094
Jan 2001	Iusacell (Mex)	Vodafone (UK)	Telecoms	973
Jan 2001	Portugal Telecom (Bra)	Telefónica (Spa)	Telecoms (mobile)	965
Feb 2001	Tess (Bra)	Telecom Americas	Telecoms	950
Aug 2001	Banco Edwards (Chi)	Banco de Chile (Chi)	Banking	943
Mar 2002	Pegaso (Mex)	Telefónica (Spa)	Telecoms	884
Jul 2001	Petrobrás (Bra)	Investors	Oil	807
Jun 2001	Seguros América (Mex)	ING (Nth)	Insurance	791
Feb 2001	Edenor (Arg)	EDF International (Fra)	Electricity	786
Mar 2002	Kaiser (Bra)	Molson (Can)	Beverages	772
May 2002	Quilmes (Arg)	Ambev (Bra)	Beverages	600

Source: *América Economia*, various issues.

Perhaps no single policy has characterised market reforms in Latin America in the 1990s as much as privatisation, and foreign investors have played a role that is difficult to underestimate. In the macro-region, 36 per cent of FDI in the 1990s were represented by foreign investment for privatisations (Lora 2002). The withdrawal of the state from the economic arena has been total in the case of electricity distribution, petrochemicals, railways, steel, and telecommunications. Foreign investors, in particular Spanish and US ones, acquired most of the utilities, whereas they played a less prominent role in manufacturing privatisation. In other domains progress has been either uneven across countries – this is the case of airports, banking, and electricity generation – or equally modest in all of them, such as in water and sanitation. What is constant, however, is the association between state divestiture and FDI.

Sometimes companies are sold because of succession struggles, a common instance in emerging markets where founding entrepreneurs are reluctant to separate ownership and control by seeking stock market listing. Sometimes the current owners are made an offer they cannot refuse. But more often owners sell because they lack the technology or the capital to compete in a more open market. In sectors where sunk costs, related to brands in particular, are crucial in building competitive advantage, MNCs have found it more expedient to acquire existing firms, and then inject their superior marketing and managerial skills. This form of entry, however, does sometimes give rise to worries regarding its developmental value, in particular for the risk of asset stripping and of seeing large inflows become large outflows when the investments are liquidated, contributing to exchange rate volatility (Lall, 2000). The impact on employment may also turn out to be adverse, although this may be part of a rationalisation effort that can raise productivity. Often, the first thing multinationals did to modernise their Latin American operations was knock down the walls that divided identical but separate operations in each country. Examples include Nestlé's reorganisation of its food factories throughout Mercosur, siting them where the raw materials are cheapest; Royal Dutch/Shell's creation of a new management post in London to co-ordinate purchasing by its operating units throughout Latin America; the transformation of IBM business activities in Latin America into individual profit centres and the fusioning of 16 back-office operations, one for each country, into a single one for the region.[15]

On the other hand, where the investor makes a long-term commitment to the acquired firm and invests in upgrading and restructuring its technology and management, M&As are very similar to a green-field investment and may yield significant economic benefits. In Argentina, cross-border M&As accounted for almost 60 per cent of FDI in 1992-99 – with a heavier weight

for privatisation deals in the first part of the decade (Chudnovsky and López, 2000). Although the difference is statistically not significant, comparisons of similar firms show that M&A firms performed better than non-M&A ones, especially if acquired by foreign investors. In Brazil 60 per cent of M&As saw foreign investors in the role of buyers, with a concentration of activity in the years of more intense privatisation – in this case the later part of the 1990s (Ferraz and Iootty, 2000). Contrary to what may be expected, foreigners tended to buy smaller target companies than domestic investors, a phenomenon that may be partly explained by the latter's concentration in capital-intensive sectors such as mining, steel and non-ferrous metals, and paper and pulp. For a panel of 120 target companies, Rocha *et al.* (2001) find a positive effect on performance (with a two year lag), that is largely explained by ownership transfer from the public to the private sector, and not from any significant modification of the investment behaviour nor to the presence of foreign investors.

Part II. Main effects

This section of the paper analyses the role of MNC affiliates in the A-B-C economies using standard measures and indicators. The aim is to put the sharp increase in FDI in the 1990s in the wider picture of the main changes that have characterised these economies, in particular the process of export reorientation (in terms of products and trade partners) and the widening of balance of payments imbalances – in particular in the case of Argentina and Brazil.

The weight of MNCs in A-B-C economies

In each of the three countries, the FDI boom has been reflected in a large increase in the participation of foreign-owned companies in big business's consolidated turnover, that has itself grown in importance. In Argentina, there were 249 (fully- or partly-owned) MNCs among the 500 top companies in 1999 and they accounted for 71.1 per cent of value added, 68.9 per cent of fixed capital formation, 50.3 per cent of employment, 56.2 per cent of wages, 64.8 per cent of exports, 78.2 per cent of imports, and 80.3 per cent of profits in the panel (INDEC, 2002).[16] Data covering the 1990s also show a very rapid increase in the weight of MNCs among the 100 top corporations (Table 3.10, Panel A). They went from less than a fourth of total sales in 1991 to half in 2000. Since joint-ventures also rose in importance, domestic-owned firms which accounted for 64.3 per cent of sales in 1991 now only represent 29.4 per cent.

The situation in Brazil is slightly different insofar as domestic conglomerates have resisted better to market opening and privatisation (Goldstein and Schneider, 2004). In the 1990s the 23 percentage point decline in the participation of SOEs to the total sales of the 100 largest corporations has benefited both private national companies (+9 per cent) and MNCs (+14 per cent) (Table 3.10, Panel B). Interestingly, in terms of size large domestic firms have become relatively smaller: in 1998 each was on average responsible for 0.7 per cent of sales (*vs.* 0.9 in 1990) while over the same period each MNC's average weight has grown from 1 per cent to 1.2 per cent.

Table 3.10. **Ownership distribution of the 100 largest corporations in the 1990s**

A. Argentina

	1991		1995		2000	
	No. firms	% sales	No. firms	% sales	No. firms	% sales
State Owned	4	33.5	3	3.8	3	2.8
Private national	49	30.8	48	35.9	34	26.6
Multinational	28	23.9	32	28.2	47	49.6
Joint-ventures	9	11.8	17	32.1	16	21.0
Total sales (USD billion)	36.8	..	63.8	..	84.1	..

Source: Kulfas, Matías (2001), "El Impacto del Proceso de Fusiones y Adquisiciones en la Argentina sobre el Mapa de Grandes Empresas. Factores Determinantes y Transformaciones en el Universo de las Grandes Empresas de Capital Local", *Estudios y Perspectivas*, No. 2, ECLAC, Buenos Aires.

B. Brazil

	1990		1995		1998	
	No. firms	% sales	No. firms	% sales	No. firms	% sales
State Owned	38	44	23	30	12	21
Private national	35	30	44	32	54	39
Multinational	27	26	31	38	34	40

Source: Siffert Filho, N. and C. Souza e Silva (1999), "Large Companies in the 1990s: Strategic Responses to a Scenario of Change", *mimeo*, Economics Department, BNDES, Rio de Janeiro.

Table 3.11 presents summary data on the 50 largest non-financial companies in each country in 2000 (34 largest in the case of Chile). Unsurprisingly, Brazil-based companies are consistently larger – in terms of sales, profits, assets, and employment – than those in Argentina and Chile regardless of ownership. As far as MNCs are concerned, they are on average larger than private national companies and smaller than the few SOEs that remain after privatisation – and that are concentrated in capital-intensive sectors exploiting natural resources. Compared to private domestic firms, MNCs do on average employ more capital and less labour. Regardless of nationality, privately-owned companies appear to have a rather similar export propensity in the two smaller economies, but MNCs a considerably lower one in the case of Brazil (although the ratio for domestic companies excluding Embraer is considerably lower at 11.5 per cent).

Table 3.11. **Summary data on the 50 largest non-financial companies in 2000**
Average value (USD million) per each indicator, corrected for the number of reporting companies

	#	Sales	Profits	Assets	Exports (X)	X/Sales	Employees
ARGENTINA							
MNC	32	1 407	116	2 576	101	7.2	5 823
PN	17	946	-6	1 409	76	8.0	9 839
SOE	1	1 586	..	..	0	0.0	500
BRAZIL							
MNC	25	3 745	224	4 465	189	5.0	11 314
PN	22	2 532	214	3 739	581	22.9	14 754
SOE	3	12 655	2 161	27 527	549	4.3	..
CHILE							
MNC	11	1 187	57	4 271	112	9.4	4 855
PN	20	938	76	1 614	86	9.2	7 008
SOE	3	1 919	76	2 626	1 155	60.2	10 232

Note : MNC= multinational company ; PN= private national ; and SOE= state-owned company.
Source: Author's calculations based on América Economía (2001).

The contribution of MNCs to the external sector

Trade has traditionally been the principal mechanism linking national economies. Following Mundell (1957) it was long thought that trade and direct investment were substitutes – crudely, in a world of differential factor endowments, either factors move or goods move. Most recent models emphasise potential complementarities between trade and FDI (Ethier, 1994 and Markusen, 1995). The trade effects of FDI depend to a large extent on whether it is undertaken to gain access to natural resources or to consumer markets, or whether FDI is aimed at exploiting locational comparative advantage and/or other strategic assets such as research-and-development capabilities. Such trade effects are the result of the package of tangible and intangible assets that MNCs can bring to a host country through FDI or such other relationships as subcontracting, and which, in an increasingly liberalised and global world economy, acquire considerable importance, particularly as regards developing countries, for competing successfully in world markets.

Trade

A key feature of trade competitiveness in the A-B-C countries is the concentration of exports in a small group of large firms, most of them foreign-owned. In Brazil, in both 1990 and 1999 – that is before and after trade opening – roughly 45 per cent of manufacturing exports originated in firms selling abroad at least USD 50 million per year (Pinheiro and Moreira 2000, Table 2). The number of such "large" exporters increased from 53 to 93 (consistent with the increase in the total number of exporting firms from 6 686 to 14 034). Although the share of local branches of multinationals in this sub-set of firms has remained stable at roughly half, their weight in total manufacturing export in 2000 has risen from 30.8 per cent to 38.3 per cent (*ibid*, Table 4). Brazil's FDI census provides additional information on such trends.[17] The firms included in the sample recorded exports for USD 33.2 billion (60 per cent of total exports) in 2000, an important increase over the 1995 total of USD 21.7 billion (47 per cent of the total). Import growth, however, has been even more substantial, from USD 19.4 billion in 1995 (39 per cent of total) to USD 31.5 billion (57 per cent) in 2000. Intra-firm trade registered a particularly fast increase – in the case of imports from USD 8.5 billion to USD 18.2 billion and in the case of exports from USD 9 billion to USD 21 billion. This last figure corresponds to 63 per cent of exports by sample firms (42 per cent in 1995) – and it equals the increase in their sales abroad. A simple comparison between 1995 and 2000 export figures shows that the increase recorded by firms with foreign participation (USD 12 billion) is larger that the rise in total exports (USD 9 billion), *i.e.* that foreign sales by fully-Brazilian companies decreased over the period.

In the case of Argentina, the number of MNCs among the 1 000 largest exporters almost doubled to 360 in 1998 and their participation rose from 32 per cent in 1990 to more than 54 per cent (Chudnovsky and López, 2001, Table 3-8). The increase was much more impressive when looking at data on importing firms – from 417 importing MNCs (61.9 per cent of imports) in 1995 to 524 (71.7 per cent) in 1998 – to reflect the import-intensity of fixed capital formation in privatised utilities. In Chile, the number of exporting firms has risen from 4 100 in 1990 to 6 022 in 1999 (Alvarez and Crespi 2000, Table 2). The degree of concentration, however, remain very high: firms exporting more than USD 100 million annually (23 in both 2000 and 2001) accounted for half of total shipments.[18] Of the ten largest exporters, responsible for 38.8 per cent of 2001 exports, half were foreign-owned, with a combined 13.6 per cent share (Prochile, 2002).

Among the 100 largest importing and exporting firms in Latin America, the subsidiaries of MNCs are significantly more represented among importers (57) than among exporters (47). Given that the number of state-

owned enterprises in the sample is roughly equal, this difference is due to the relatively large share of private, domestic exporters. Interestingly, such companies appear to be numerous in Argentina – as exporters of agro-business products – and in Mexico – especially in industrial commodities (cement, glass), light manufacturing (food, beverages) and services – whereas they are few in Brazil. The large numbers of drugs and chemical foreign-owned companies (Basf, Dupont, Dow, Aventis, Novartis, Bayer, and Roche) among Brazil's largest importers is also evident.

A second issue is the propensity to access international markets, and which ones. Multinationals tend to export more than Brazilian firms, but not as much as from their operations in other countries (Pinheiro and Moreira 2000).[19] Brazil-based multinationals' exports to Latin America accounted for 47 per cent of their total exports in 1997, up from 26 per cent in 1990, whereas the share of their exports going to OECD countries fell from 70 per cent to 44 per cent over the same period. In Argentina, the propensity to both import and export remained consistently higher for foreign firms across different industries, although in 1998 the export ratio between the two classes of exporting firms (2.1:1) was slightly lower than in 1992 (2.7:1) (Chudnovsky and López, 2001). Nonetheless, in both countries the Mercosur, or ALADI, bias is not significantly different between foreign- and national-owned industrial exporters. Castillo and Zignago (2000) also find that in both countries FDI is positively (and significantly) related to import and negatively (but weak) to export – with a positive and strong relation of integration on investment flows in the case of Brazil and a weaker or inexistent relation in the Argentinean case.

In Chapter 2 of this book, Oliveira-Martins and Price propose a classification of trade by industries on the basis of the degree of market fragmentation and R&D intensity. Unfortunately it is impossible to replicate their analysis for FDI as industry classifications are not homogenous. An approximation is possible for Brazil on the basis of the 1995 and 2000 censuses, with the important caveat that for the most recent year manufacturing industries only represent 30.8 per cent of foreign investors' assets, although a much higher share of other variables (Table 3.12). The segmented (high sunk costs), high R&D (SH) cluster tops the others in terms of assets and revenues, and not surprisingly trails the fragmented (low sunk cost), low R&D cluster (FL) in terms of employment. In 2000 each of these two clusters contributed roughly two-fifths of exports by foreign firms in the sample (which in turn contribute more than 87 per cent of total exports by foreign-owned companies in the census), but the trade surplus recorded by the FL cluster (USD 5.2 billion) is more than offset by the deficit recorded by the SH cluster (USD 5.4 billion). The SH cluster increased its participation in both imports (from 64 per cent to 70 per cent) and exports

(from 30 per cent to 40 per cent). Although no precise data is available on the intensity of intra-firm trade in the different clusters, extrapolating from the more general picture provided suggests that SH MNCs have kept buying from their international network of suppliers.

Table 3.12. **FDI data in Brazil according to industry taxonomy, in per cent**

	Assets		Revenues		Taxes paid		Profits		Imports		Exports		Employees	
	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000
FL %	41.7	37.2	37.6	37.0	45.8	34.2	44.7	55.5	29.6	24.1	42.1	38.0	50.6	48.2
SH %	41.7	43.0	51.9	51.4	42.8	52.6	36.6	-1.2	63.5	70.3	29.9	40.2	39.8	42.5
SL %	16.6	19.8	10.54	11.6	11.4	13.2	18.7	45.7	6.9	5.7	28.0	21.8	9.6	9.3
memo item: percentage of total FDI	53.1	30.8	65.6	55.7	73.1	75.4	82.4	-60.6	86.3	77.0	94.0	87.4	77.6	57.2

Note: FL = low sunk costs and low R&D; SH = high sunk costs and high R&D; SL = high sunk costs and low R&D;.
Source: Central Bank of Brazil (1995 and 2000), *Censo de capitais estrangeiros.*

Balance of payments

One of FDI's main contributions to a country's economy comes through the financing of balance of payments disequilibria. Moreover, relative to short-term (speculative) portfolio flows, MNCs should take a long-term view in their investment decisions and therefore be less volatile (and possibly more counter-cyclical) in their behaviour. For most of the 1990s FDI inflows have fully covered balance of payments deficits in Chile and, to a slightly lesser degree, in the other countries as well. The relative stability - if not upward trend as in the Chilean case – of long-term investment flows since the Asian and Russian crises is worth noting.

A key macroeconomic issue in the long-term sustainability of FDI flows is their form of financing. Two main mechanisms are capital contribution and profit reinvestment. Time and country variations are significant (Table 3.13). In the 1990-94 period there is a clear contrast between the largest economies of Brazil and Mexico, where capital accounted for 3/5 of financing, and the smaller ones, where the share was much higher. Profit reinvestment was substantial in Mexico and, to a smaller degree, in Argentina and Brazil – where other forms, such as debt for equity swaps, were also significant – but almost irrelevant in Chile. In the second half of the decade the clearest change happened in Brazil, where capital contribution went from 60 per cent to 90 per cent. Profit reinvestment lost ground in countries where it had previously been very important, but gained relevance in Chile. Finally, other forms became very important in Mexico, the country showing the most balanced FDI financing structure among the four.

Table 3.13. **Forms of FDI financing**

	1990-94			1995-2000		
	Capital contribution	Profit reinvestment	Other capital	Capital contribution	Profit reinvestment	Other capital
Argentina	88.9	11.7	0.0	83.8	6.1	10.0
Brazil	60.4	11.6	28.0	90.2	0.8	9.0
Chile	99.1	0.9	0.0	85.7	14.2	0.0
Mexico	59.9	28.8	11.3	52.2	22.6	25.2

Source: ECLAC.

Part III. Supply linkages

Beyond the gains from higher productivity of the foreign-owned establishments themselves, one area that has had little attention is the supply linkages between MNCs' foreign affiliates and local firms. Foreign affiliates, local companies, and host countries can all gain from the creation of linkages. By using suppliers in a host country, foreign affiliates can obtain inputs in a cost-effective, flexible and revenue-yielding manner. A local company can benefit through increased sales and by becoming linked to the global production network of a MNC and its stock of information and knowledge. Some MNCs have organised special programmes to assist their suppliers to upgrade the suppliers' technology, productivity and ability to compete internationally. However, the extent to which foreign affiliates forge linkages with domestic suppliers (as opposed to, say, using imports) is determined by the cost-benefit ratio of such efforts. The lack of effective local suppliers can be an efficient obstacle to the creation of such supply links. Policy makers can influence the willingness of foreign affiliates to use local suppliers by raising the benefits and/or reducing the costs involved. Specific policy measures that have been applied include the provision of information and matchmaking; encouraging foreign affiliates to participate in programmes aimed at upgrading the technological capabilities of domestic suppliers; and various schemes to enhance access to finance.

Host-country factors promoting vertical linkages are the strength of political commitment, the quality of infrastructure, and the size and the conditions of the local components supply industry. Experienced affiliates, joint ventures, and acquired affiliates also exhibit more extensive vertical linkages. Restrictive trade policies have a detrimental effect and local content regulations, although they may have a positive impact, do not stimulate procurement from locally-owned suppliers. However, the most important argument against investment incentives focusing exclusively on foreign firms is based on the evidence that spillovers are not automatic, but depend crucially on the ability and motivation that local firms have to learn from foreign MNCs and to invest in new technology. This implies that investment incentives aiming to increase the potential for spillovers may be inefficient unless they are complemented with measures to improve the local learning capability and to maintain a competitive local business environment. Features of such pro-active policies include collaboration with

the private sector, selectivity, and focus on particular services such as matchmaking, training, and financial assistance. The recent example of foreign aerospace companies investing in Brazil to better interact with Embraer (Box 3.3) shows that the interactions between lead firms and FDI in the global economy are multiple.

Box 3.3. **A-B-C firms as catalyst for high-tech FDI inflows: The case of Embraer**

Embraer, a Brazilian aircraft manufacturer, transformed itself after privatisation to become a world market leader in a high-tech industry traditionally dominated by companies based in OECD countries. Several component-suppliers aerospace firms from Europe and the Americas chipped in as "risk-sharing partners" for its aircraft, directly investing in cash and materials and providing liquidity via deferred payment provisions. In the case of the new ERJ 170/190 family, development costs are substantial (about USD 850 million) and by far the largest investment ever made by Embraer. No less than one-third of such costs will be contributed in cash by risk-sharing partners, which will be responsible for developing, producing, and delivering entire systems as well as major components. Some foreign suppliers (such as Pilkington Aerospace, Parker Hanefin, and Sonaca) have already set up operations in Brazil, while others (such as Latecoere) are planning to do so. Sobraer, a subsidiary of Sonaca, for instance, opened a plant to perform the junction of the pylons in the rear fuselage supplied for the ERJ-135/145 programme and its final assembly, in a process that will be transferred progressively from Belgium. It will also produce approximately 250 milled parts of the Central Fuselage II of the ERJ-170/190 programme. C&D do Brasil, a subsidiary of C&D Aerospace, was established in 2000 in Jacareí to manufacture overhead bins and PSU structures. The total investment is estimated at USD 3.1 million.

Sources: Cassiolato *et al.*, (2002) and Goldstein (2002).

The car industry in Argentina and Brazil

Worldwide, the automotive sector has been a vitally important source of employment, revenue generation, and manufacturing growth as well as a main conduit for spearheading new management techniques and introducing innovative organisational structures in both manufacturing and services (distribution, finance). Inputs of which this industry is a heavy user include metals, plastics, textiles, and electric and electrical machinery. Since the 1950s, very few are the developing countries that have not tried to increase FDI in this industry, expecting the indirect results on other industrial sectors, through demand and supply linkages, to far offset the cost of the incentives that are usually offered to car companies. Policy tools have included high

tariff barriers and local content requirements. As already mentioned in Part II. above, while considerable diversified development took place under this protective regime (including the maturing of some indigenous car part manufacturers), the industry was also afflicted by the common ailment of a high cost production structure exacerbated by excessive proliferation apparent in the large number of models and makes of vehicles being assembled in low volumes.

Over the past decade, the sector has been increasingly exposed to international competition, although the extent of trade liberalisation has been lower than in the rest of the economy. In the framework of Mercosur, automobiles are dealt with by a separately managed trade regime, under which the value amount of every vehicle or auto part exported from Argentina to Brazil must be matched by a similar amount imported from Brazil. If it is not, then duty-free treatment does not apply and a levy of 70 per cent is applied. An imbalance of 5 per cent was allowed in 2000, 7.5 per cent in 2002 and 10 per cent in 2003. Surpassing this limit exposes firms to financial penalties. Complete free trade in automobiles will not come into effect before January 2006. The common external tariff (CET) for passenger vehicles was set at 35 per cent, and for buses and trucks, at 35 per cent for Brazil and 18-25 per cent for Argentina, a level that will gradually increase to that of Brazil.

With interest rates being characteristically high, it is expensive for automakers based in Mercosur to obtain credit and this subsequently pushes up the price charged to the consumer for the finished vehicle. Since the rate of auto tax that consumers pay depends on the size of the car, demand tends towards the small, economy passenger car. Manufacturers therefore chose Brazil as the major production base for these economy models over other countries in the region, partly as a result of its comparatively cheap production costs. Union opposition to new working arrangements is, although currently on the increase, still far lower in Brazil than it is in OECD countries, including Mexico. More contentiously, incentive-based competition has been very intense for attracting car assemblers – sub-national governments have significant autonomy in fiscal matters and the federal government refrained from imposing any kind of control on their action. The result has been a steep increase in productive capacity since 1996.

What has been particularly innovative in some of these new projects is the attempt to involve components suppliers in the vehicle manufacturing process to a much higher degree than in traditional assembly arrangements. Volkswagen first demonstrated the viability of this strategy through its innovative truck plant in Resende. Although the parts are manufactured off-site, they are installed into the trucks by the components suppliers

themselves, rather than by Volkswagen. In the new-generation factories, the proportion of components that can be manufactured on-site has reached unprecedented levels and, as a result, far fewer suppliers are now required. If automakers are able to cut production costs, as they are able to do at these new, innovative plants, their ability to price the cars competitively increases. Despite the fall in domestic demand in 2002, additional small-car manufacturing was added in 2002 and industry expectation is that the country has already gone some way towards gaining a reputation as a global small-car specialist.

The effects on local outfits have been dramatic. Brazil in particular had developed what appeared to be a rather sophisticated industry. In the case of pistons and connecting rods, for example, Metal Leve held more than 60 per cent and 98 per cent, respectively, of the internal market, set up a research facility in Michigan, and opened production facilities in South Carolina, in a non-unionised region. Another supplier that invested abroad, in Portugal, was Cofap. Trade opening abruptly showed their lack of global competitiveness and most – including Metal Leve and Cofap – were bought or merged with foreigners. By 2001 the share of domestic capital in the industry had fallen to 22.8 per cent of fixed assets (from 51.9 per cent in 1994), to 26.7 per cent of sales (from 52.4 per cent), and to 15.6 per cent of investment (from 52 per cent) (Sindipeças 2002, Chart 10). A few domestic-capital stalwarts were restructured and have survived. Sabó Retentores in particular is a global supplier of oil rings, rubber hoses, and gaskets for Volkswagen and has followed its largest customer by setting up plants in Mexico, China, and Germany.[20] It is also a seven-time recipient of General Motors' Worldwide Supplier of the Year award, now in its tenth edition.

The best-known example of active policies implemented by a lead firm to improve the lot of its suppliers is Fiat's "mineirização" programme.[21] In co-operation with the government of the state of Minas Gerais, Fiat Automóveis began a programme to increase its purchase from local suppliers in 1989. This has included both public incentives – such as tax holidays by the local government and subsidised BNDES credit lines – and a commitment by Fiat to sign long-term contracts of up to five years with qualified suppliers. *Minerização* has to some extent meant *italianisation*, insofar as most new investors have been firms that already co-designed with Fiat in Italy. This phenomenon is known as "follow sourcing". Since 1990, more than 70 suppliers have invested more than USD 600 million in the state. Sample results from 1994 and 2000 show that domestic suppliers have gone from 81 per cent to 20 per cent of the total, with a corresponding increase in foreign-owned suppliers from 5 per cent to 60 per cent. Fiat uses the threat of modifying its purchasing channels to maintain its profit margins. In other words, *mineraização* can be seen as an attempt, and a

rather successful one at that, to benefit from a high degree of vertical integration without the costs and risks of direct ownership and excessive diversification.

Another interesting example is the Mercedes-Benz plant inaugurated in Juiz de Fora (MG) in 1999 to produce the A-class car.[22] To attract the German assembler, the local government offered a wide range of subsidies, including tax and duties exemption for 10 years, free availability of the land, investment in subsidiary services, and financial capital at below-market rate. In exchange, Mercedes promised to invest BRL 845 million in 1996-2001, fill as many as possible of the 1 500 vacancies with local staff, give priority to local suppliers, convince its global suppliers to invest in Juiz de Fora, and contribute to enhancing technological collaboration between German and Brazil institutions. This venture, however, has failed well short of the company's – and by extension the local authorities' – expectations. At less than 13 000 units in 2001, production is a fraction of the maximum output capacity of 70 000. As the potential of the just-in-time production system cannot be exploited at such levels, only ten Tier-I suppliers set up shop in Juiz de Fora.

The mining industry in Chile

Mining generates more than 8 per cent of Chile's GDP. The total value of mineral exports in 1999 was over USD 6.9 billion, or 44 per cent of total exports. The country is the largest copper producer and exporter in the world. Additionally, it has approximately 38 per cent of the world's copper reserves. Copper alone accounts for 37.8 per cent (USD 5.9 billion) of total exports. The giant state-owned Codelco company produces 15 per cent of the world's total copper production and its current reserves account for approximately 20 per cent of the world's known resources. Chile is also the largest producer and exporter of potassium nitrate and sodium nitrate; the second-largest producer of rhenium, lithium, iodine and molybdenum; the fifth-largest producer of boron; the seventh-largest producer of selenium; the eighth-largest producer of silver; and the ninth-largest producer of gold. Eighty per cent of the medium-sized and large mines in Chile are open-pit mines. Copper production has increased from 1.3 million tons/year in 1987 to 4 million tons/year in 2000. Gold has increased from 20 to 50 tons/year, and silver has increased from 500 to 1,370 tons/year in the same period.

Chile's political stability, abundant natural resources and favourable regulatory regime for foreign investors has made it one of the most attractive emerging mining markets in the world. The private sector has taken over the government's traditional dominance of the mining sector, currently accounting for about two-thirds of copper production (from just 10 per cent in 1985) and almost all gold production. In the private sector the largest

open-pit copper mine worldwide is Escondida, jointly owned by Australia's BHP (57.5 per cent) and UK's Rio Tinto (30 per cent). Escondida opened in 1990 and now has a capacity of 900 000 t/y of concentrates. Escondida is currently implementing its Phase IV expansion, which involves a total investment of USD 1.3 billion. It is also conducting engineering studies for the exploitation of its rich Escondida Norte deposit. If this project is approved Escondida could reach 1.4 million t/y by 2002. Another Australian investment which started operations in May 2001 is AMP's (39 per cent ownership) El Tesoro, a USD 280 million copper project developed in partnership with Chile's Luksic group. The mining treaty with Argentina will also act as a catalyst to unleash investments in Chile's frontier border. Such is the case of the USD 950 million Pascua/Lama gold mine project and the USD 890 million copper project El Pachon.

Mining is notoriously a capital-intensive activity directed towards exports: only 3 per cent of copper production is consumed in Chile. The literature on the so-called "resource curse" argues that, for a variety of reasons, a country with a rich endowment in non-renewable assets finds it difficult to sustain high rates of growth. A counter-argument, however, is that in such countries the large demand for specialised equipment and know-how can be the basis for industrial development (Wright and Czelusta, 2002). In the case presented in Box 3.4, the experience gained from interacting with foreign-owned companies in the domestic mining industry allowed a small Chilean company to acquire an important fraction of the world market for large-scale (300 ton) mining dump bodies.

Box 3.4. **Turning resource abundance into hi-tech exports**

Desarrollos Tecnológicos, a small company headquartered in Santiago, introduced in a relatively short time an innovative and successful design now praised in mining operations around the world. Mining operations need trucks with thick bodies in order to increase their wear life but they also have to be as light as possible. The "Hi-Load" load-carrying tip bodies manufactured by DT differ from traditional ones since they are rounder, without most of the beams and used thicker steel. Based on the experience obtained with over 400 units operating around the world, the company can also confidently assure that maintenance costs for its bodies are less than for conventional bodies. The Hi-Load bodies can be used for many specific job sites.

Source : Fischer (2001) and "Light and tough", *Mining Magazine*, Vol. 187, No. 1, July 2002.

Retail distribution

In the past two decades retail trade in Latin America and other emerging regions has been reorganised from small owner-operated shops to supermarket chains and shopping centres. In A-B-C, supermarkets now account for between half and three-quarters of the food market, more than in Mexico, and also show larger densities. Foreign investors have played a leading role in this process. In the first half of the 1990s, local retailers entered into a series of alliances and mergers with major foreign players to introduce cutting-edge technologies and supply chain management techniques.[23] In general, these alliances and mergers failed to last, owing to cultural differences relating to company management and the foreign partners' desire to rapidly expand the network of branches and increase sales. Retail trade was also hit hard by the economic crises that hit Mexico and Argentina in 1995, Chile in 1998, and Brazil in 1999. For example, because of their weaker financial position, in 1998-99 eight of Brazil's top 20 supermarket chains were sold. This has led to increased concentration and "multinationalisation", especially in Argentina and Mexico (Table 3.14).

Table 3.14. **The evolution of supermarkets in the A-B-C and Mexico, (2000)**

	Nr of supermarkets	Supermarkets p/million population	Market share food (%)	Instant fruit and vegetables market share (%)	Top 5 market share (%)	Foreign market share (%)
Argentina	1 306	35	57	30	76	64
Brazil	5 258	31	75	50	47	43
Chile	654	44	50	5	55	10
Mexico	1 026	10	45	30	80	71

Source: Reardon and Berdegué (2002).

The introduction of hypermarkets of up to 13 000 square metres of floor space is offering customers a wider variety of products and services at lower prices. This development is squeezing out smaller supermarkets which cannot compete in either product selection or price. In Brazil, only one among the big chains, *Pão de Azucar*, is local. The few Argentinean retailers that had not been taken over in the 1990s are now succumbing under the weight of financial obligations. Following the default of its local partners (Velox Retail Holdings) in June 2002, Ahold took full control of the Disco 236-shop chain with 2001 sales of € 2.1 billion. Only in Chile, local retailers (Santa Isabel, Distribuidora de Servicios-D&S, Unimarc-Multiahorro, and Jumbo) have managed to remain competitive by investing in information technology, increasing the size of warehouses, introducing incentive

bonuses and flexible working practices. Since many of these occupy prime locations – an advantage that foreign newcomers cannot always match – the highest return on investment, however, has come from refurbishing the firms' old-fashioned neighbourhood supermarkets. US and European international chains only started investing in Chile in the late 1990s (Box 3.5).[24] On the other hand, a number of Chile's top chains have expanded abroad.

The concentration of the industry into fewer and larger companies has influenced wholesale distribution practices. The size of today's top chains is increasing their bargaining power with local suppliers, who used to be able to dictate their prices when the industry was more fragmented. Moreover, following established practices in the United States and Europe, major chains are introducing their own store brands.[25] These phenomena have important consequences for all those industries that produce non-durable goods – such as for instance fresh fruit and vegetables (FFV) or textiles and clothing – where global, large-scale, and concentrated buyers provide governance to commodity chains. For a more thorough analysis of agribusiness competitiveness, see the companion chapter by Brooks and Lucatelli in this volume. Suffice it here to refer briefly to some positive developments brought about by the presence of multinational retailers and to some pending issues.

Because of the perceived inadequacy of the services provided by traditional wholesalers in terms of quality, standards, and reliability, supermarkets are increasingly resorting either directly to producers through contact farming or to new forms of more sophisticated wholesalers (Reardon and Berdegué, 2002). Some A-B-C producers are benefiting from the regional and global sourcing networks of supermarket chains. For example, melon and salmon producers, in Brazil and Chile respectively, that entered into long-term contacts with Carrefour to cater for the domestic markets are now selling through the French company's global network. Domestic suppliers, however, are also challenged by the fact that large chains, regardless of their ownership, may use the option of importing as a means to negotiate lower prices. In Chile, for instance, it is customary for supermarkets to receive credit of more than 45 days from their suppliers. To find a solution to problems that derive from unequal bargaining power and unfair practices, in Argentina the government negotiated a commercial practices agreement in 2000.[26] Carrefour and Wal-Mart did not initially sign this agreement, arguing that the obligation to respect minimum prices run counter to their business models.[27] In the dairy industry, where multinational supermarket chains have global relationships with a handful of international suppliers – and therefore the respective bargaining position is less skewed –

it is the relationship between milk producers and dairy companies that causes concerns.

Box 3.5. **Retail trade: the Wal-Mart experience**

With USD 216 billion in sales, Wal-Mart has bypassed General Electric to become the world's second-largest company after ExxonMobil. With 1.2 million staff, it is the biggest private-sector employer in the world. It broadcasts more live television than any network. The computer controlling its logistics is the world's most powerful after the Pentagon's. Eight years ago it sold almost no food, yet today it is America's biggest grocery retailer. In less than four decades, Wal-Mart has come to account for 60 per cent of America's retail sales and 7-8 per cent of total consumer spending (excluding cars and white goods).

Although no other retailer comes close when measured by sales, with a presence in nine countries only, Wal-Mart remains far less international than France's Carrefour, which has stores in 31 countries, and the Netherlands' Ahold, which operates in 23. Its first overseas investment was in Mexico in 1991, when an equal-shares joint venture was set with Cifra, an association that has been characterised by prudence from the outset. Cifra's diversification (including the Vip restaurants and the Suburbia department stores) allowed it to finance the projected expansion. In 1997, Wal Mart bought an additional USD 1.2 billion stake in Cifra, thereby taking its share to 51 per cent and completing the definitive merger. In February 2000 the name changed to Wal-Mart de Mexico, which currently employs more than 81 000 associates and operates 572 units with annual sales of USD 9.8 billion.

Wal-Mart began operations in Brazil in May 1995 and entered Argentina in August 1995 – in both cases with the opening of a Sam's Club in suburban areas of each country's greatest city. The company employs more than 4,000 people in Argentina and around 6 000 in Brazil, where it is present in four states – São Paulo, Minas Gerais, Rio de Janeiro, and Paraná – and does business with approximately 5 000 suppliers. Its venture in Argentina, however, has been a partial failure, accompanied by heavy losses. As it also did in Indonesia and Germany, it made the mistake of exporting its culture wholesale, rather than adapting to local markets. To counter Wal-Mart, Carrefour slashed prices, remodeled, and even relocated stores.

Sources: ECLAC (2002) and "Selling to Argentina", *The New York Times*, 12 May 1999.

Part IV. Conclusions: The A-B-C area in comparative perspective

Both economic theory and recent empirical evidence suggest a beneficial impact of FDI on developing countries, for instance through new management techniques, different forms of enterprise linkages, and intensification of information flows between economic agents. The growth process can become self-sustained if backward and forward linkages emerge from MNEs to the host economy and if FDI contributes to raising the profitability of domestic investment. But recent work also points to some sources of potential risks and excesses: FDI flows can be easily reversed through financial transactions in some circumstances; there is an FDI bias in the composition of capital inflows, because of adverse selection and "fire sales". A large statistical effect of FDI on the level of domestic investment is likely to be the result of an endogeneity bias, and of heavy reliance by multinationals on borrowings from domestic lenders. The high share of FDI in a country's total capital inflows may reflect its capital-market institutions' weakness rather than their strength. Though the empirical relevance of some of these sources remains to be demonstrated, they do appear to make a case for taking a nuanced view of the likely effects of FDI.

The evidence presented in this chapter allows a balanced appreciation of the development contribution of FDI in the A-B-C countries, both in general terms and more specifically with respect to their competitive participation in global markets and supply chains. A first feature that clearly emerges is that MNCs have come to represent a very important portion of economic activity, employment, and trade flows – and this in countries where their presence is long-standing and has traditionally been important. Complementary to this is the observation that this expansion has often come through mergers and acquisitions, with implications that are not easy to discern. On the one hand, in keeping with standard hypotheses, a takeover should only take place when the new owners expect to increase corporate efficiency and returns on investment. The aggregate effects should therefore be positive. On the other hand – and even discounting the possibility that such consolidation may increase industrial concentration and hence dampen market competition – there is a risk that domestic sources of competence,

capability, and innovation turn too thin to sustain the process of continuous catch-up. This last point is crucial if transitions to high economic growth, far from being sparked by blueprints imported from abroad, result instead from country-specific institutional innovations that often depart from prevailing orthodoxy, are targeted on domestic investors, and are tailored to domestic institutional realities (Rodrik, 2000).

Further analytical considerations can be made on the basis of disaggregated indicators. In all three countries foreign-owned affiliates have increased their participation in external trade, although import intensity has increased more than export intensity. This is generally a natural outcome of the increased relevance of intra-firm trade in the global economy. Evidence from the car industry, for instance, shows that Brazil has increased its participation in the segmented-differentiated cluster through subsidiaries of global assemblers. What is more disquieting, however, is that local suppliers have not been able to surf on this trend – this is again well shown in the automotive industry, where the contrast between Brazil and Mexico is rather stark. Whereas FDI can greatly assist in technology-sharing, the real adaptation of these technologies is done in large part by local firms who then localise these technologies to improve their efficiency. This, however, does not mean that supply linkages have not been created, as documented for FDI in both non-tradable (*i.e.* retail trade) and tradable (*i.e.* mining) sectors. Similarly, FDI has somehow contributed to institutional strengthening. Where this process remains incomplete, such as in public utilities in Argentina, it cannot be inferred that the foreign ownership of the regulated companies is the explanation – although it is certain that these have not pushed for regulation that prevent them from extracting rents.

The list of policy issues that arise as a result is long. *First*, although there are no universal rules governing international investment, the A-B-C countries are among the non-member signatories of the *OECD Declaration on International Investment and Multinational Enterprises* to provide national treatment for established foreign controlled enterprises, to avoid conflicting requirements on those enterprises, and to work together to improve the investment climate.[28] These instruments have provided an effective framework for international co-operation and have served to underpin the liberalisation achieved in recent decades. On the other hand, Regional and Bilateral Investment Treaties (BITs)[29] amount to a patchwork of normative references and the case for a multilateral framework to secure transparent, stable and predictable conditions for long-term cross-border investment has been acknowledged at the WTO Ministerial conference in Doha. The establishment of multilateral rules on investment respectful of other concerns such as the environment, consumers, and labour conditions is an opportunity to move FDI flows from a purely power-based dynamic into

a rule-based system and to develop, in a credible way, an agenda for a "harnessed globalisation".[30] It is difficult, however, to predict the outcome of the WTO, and to create legal certainty and stability it is necessary to agree international standards on investment as has been done in trade.

Second, FDI is a major vehicle for international trade and policy issues increasingly cannot be adequately addressed in isolation from one another, at the risk of endangering further progress towards liberalisation. The GATS, TRIMs and TRIPs agreements partially cover certain investment issues, but there is growing need for comprehensive rules on investment in all sectors. The A-B-C countries have an interest in streamlining their regulatory regimes – domestically as well as in forums such as Mercosur, the Free Trade Area of the Americas, and bilateral negotiations with Europe – in order to make the trade environment consistent with FDI. Complex rules of origin, in particular, create potential inefficiencies.

Third, virtually all countries, developed and developing ones alike, are making efforts to attract more FDI. Some of the policy ingredients go under the collective name of "enabling environment – such as sanctity of contracts, protection of intellectual property, transparent rules, good governance, and the presence of supporting infrastructure and institutions – may be necessary for economic growth above and beyond the effects that they may have in convincing foreign investors to relocate. As explained in Box 3.6, however, the presumption that FDI flows from "good governance" is not uncontentious. Decisions regarding the locational choice of various activities within a global network have been viewed as key to the firm's global strategy. Policy makers should therefore first understand the decision criteria MNCs use in choosing global production locations. Field research in East Asia highlighted the importance of local availability of engineering and sourcing capabilities, as well as government incentives for technological upgrading (Song, 2001). However, there is a risk that countries enter into a zero-sum (if not negative) game to allure MNCs, offering preferential treatment through, for instance, tax holidays[31] or derogations to the general regulatory regime covering labour (including freedom of association) and environment standards (especially in the mining industry).[32] Indeed, the incentive-based competition for FDI has become a global phenomenon, involving governments at all levels (national and sub-national) in both OECD and non-OECD countries (Oman, 2000).

Box 3.6. **FDI and governance: Which way?**

Hausmann and Fernández-Arias (2000) found that the FDI share is higher in countries where the credit risk (as measured either by countries' credit ratings for sovereign debt or other indicators of country risk) is higher. In their view, the strong increase in FDI to Latin America is rather a reflection of the weaknesses of their financial and capital markets. Recent work on China, the world's second largest recipient of FDI, also challenges the standard accounts portraying FDI dynamics as rooted in a country's economic growth record, market size, and availability of cheap but disciplined labour (Huang, 2002). "Better" policies may not necessarily lead to higher FDI if they enhance domestic entrepreneurship and therefore reduce, in relative terms, foreign investors' competitive advantages. In this framework, the large scale of FDI in China is better accounted for by looking at inefficiencies in the Chinese economy, in particular the detrimental impact of the quality of financial institutions on the competitiveness of domestic firms, which make foreign-controlled companies stronger across the board. Razin *et al.* (2002) also find that corporate transparency in the host countries diminishes the differential value of intangible capital in the source countries and thereby reduces the flow of FDI.

Fourth, in the process of promoting linkages, many countries have recognised that protectionist policies and local content programmes, previously used to force foreign companies to buy local inputs, do not work well in the changing international environment. The formation of partnerships between MNCs and local firms may maximise capital's marginal productivity and stimulate company development. In the presence of market failures (such as lack of information, reluctance to co-operate, and externalities), it may be necessary to introduce tailor-made policies such as the targeting of foreign investors at the level of industries and clusters, or the setting-up of national agencies to market given geographical areas with the aim of matching the locational advantages of countries with the needs of foreign investors. Of course, with intervention the risk remains that government failures may in the end outweigh market ones.

A-B-C governments are pondering policy choices to attract more sophisticated FDI and increase their developmental impact. Chile is considering the elimination of a clause in foreign investment contracts that requires investors to keep their capital in the country for at least one year, and a reduction in the corporate tax rate of 42 per cent, offered as an option for investors interested in a tax stability clause – the current maximum corporate tax rate is 35 per cent. The government is also determined to turn high-technology services exports into a significant engine of growth, and is considering various mechanisms to increase the competitiveness of its

incentive schemes for these types of investments. This rethink was triggered by Microsoft's recent decision to locate a software development centre in Argentina's southern province of Neuquen rather than in Chile. In September 2000 Chile abandoned its orthodox free-market approach, ruling out special regimes for particular companies or industries, and began to offer various incentives for high-tech investment projects in excess of USD 1 million to foreign and domestic companies.

Aggressive incentive schemes to encourage MNCs to upgrade their operations, in conjunction with efforts to improve complementary infrastructures for advanced activities, seem to have generated a positive feedback loop in Asia, first in Singapore but then in neighbouring countries as well. Solving the problems caused by the bureaucratic nature and lack of flexibility of development promotion agencies, however, is only part of the solution. In the Brazilian case, for instance, considerable inefficiencies are provoked by the large incentives that currently exist to locate factories in Manaus, in the heart of the Amazon jungle. This mechanism results in taxes being higher than they would otherwise be on firms in more suitable industrial locations. At the moment there does not seem to be any prospect of a constitutional change to resolve this situation.

References

Alvarez, E.R. and G.T. Crespi (2000), "Exporter Performance and Promotion Instruments: Chilean Empirical Evidence", *Estudios de Economía*, Vol. 27, No. 2, pp. 225-41.

Azpiazu, D. and B. Kosacoff (1985), "Las Empresas Transnacionales en la Argentina", *Documento de trabajo*, No. 16, ECLAC, Buenos Aires.

Bastos, S.Q. de A. (2002), "Juiz de Fora: Análise do Desenvolvimento Industrial e dos Desafios Colocados pela Implantação da Mercedes-Benz", in João Antonio de Paula *et al.* (eds.), *Anais do X Seminário sobre a Economia Mineira*, Cedeplar, Universidade Federal de Minas Gerais, Belo Horizonte.

Borges Lemos, M., C. Campolina Diniz, F. Borges Teixeira Dos Santos, M. Aurélio Crocco and O. Camargo (2000), "O Arranjo Produtivo da Rede Fiat de Fornecedores", Project "Arranjos e Sistemas Produtivos Locais e as Novas Políticas de Desenvolvimento Industrial e Tecnológico", *Nota Técnica*, No. 17, Federal University of Rio de Janeiro, Rio de Janeiro.

Borregaard, N. and A. Dufey (2001), "Environmental Effects of Foreign Investment *versus* Domestic Investment in the Mining Sector in Latin America", *mimeo*, Centro de Investigación y Planificación del Medio Ambiente, Santiago.

Cassiolato, J.E., R. Bernardes, and H. Lastres (2002), "Innovation Systems in the South: A Case Study of Embraer in Brazil", prepared for UNCTAD-DITE: *www.unctad-undp.org/meetings/110402/110402brazil.en.pdf*

Castillo, M. and S. Zignago (2000), "Commerce et IDE dans un cadre de régionalisation: le cas du Mercosur", *Revue économique*, Vol. 51, No. 3.

Chudnovsky, D. and A. Lopez (2001), *La Transnazionalización de la Economía Argentina*, EUDEBA-CENIT, Buenos Aires.

Economic Commission for Latin America and the Caribbean (1999, 2000, 2001), *Foreign investment in Latin America and the Caribbean*, ECLAC, Santiago.

Ethier, W.J. (1994), "Multinational Firms in the Theory of International Trade"**,** in E. Bacha (ed.), *Economics in a Changing World*, Macmillan, London.

Ferraz, J.C. and M. Iootty (2000), "Fusões, Aquisições e Internazionalização Patrimonial no Brasil nos anos 90", in P. da Motta Veiga (ed.), *O Brasil e os Desafios da Globalização*, SOBEET, São Paulo.

Fischer, R. (2001), "Trade Liberalization, Development and Government Policy in Chile", Centro de Economía Aplicada, *Documentos de Trabajo*, No. 102, Universidad de Chile, Santiago.

Goldstein, A. (2002), "From National Champion to Global Player: Explaining the Success of Embraer", *ECLAC Review*, No. 77, pp. 97-115.

Goldstein, A. and B.R. Schneider (2004),"Big Business in Brazil: States and Markets in the Corporate Reorganisation of the 1990s", in E. Amann and H.-J. Chang (eds.), *Brazil and Korea: Economic Crisis and Restructuring*, Institute of Latin American Studies, London.

Hanson, G.H. (2001), "Should Countries Promote Foreign Direct Investment?", *G-24 Discussion Paper Series*, No. 9, UNCTAD, New York and Geneva.

Hausmann, R. and E. Fernandez-Arias (2001), "Foreign Direct Investment: Good Cholesterol?", *Working Paper* No. 417, Research Department, Inter-American Development Bank, Washington DC.

Hoekman, B. and K. Saggi (2002), "Trade *versus* Direct Investment: Modal Neutrality and National Treatment", *Discussion Paper*, No. 3375, CEPR, London.

Huang, Y. (2003), *Selling China: Foreign Direct Investment During the Reform Era*, Cambridge University Press, New York.

Kucera, D. (2001), "The Effects of Core Workers Rights on Labour Costs and Foreign Direct Investment: Evaluating the 'Conventional Wisdom'", *Discussion Paper*, No. 130, Decent Work Research Programme, International Labour Organization, International Institute for Labour Studies, Geneva.

Kulfas, M. (2001), "El Impacto del Proceso de Fusiones y Adquisiciones en la Argentina sobre el Mapa de Grandes Empresas. Factores Determinantes y Transformaciones en el Universo de las Grandes

Empresas de Capital Local", *Estudios y Perspectivas*, No. 2, ECLAC, Buenos Aires.

Lall, S. (2000), "FDI and Development: Policy and Research Issues in the Emerging Context", *Working Paper*, No. 43, Queen Elizabeth Hall.

Laplane, M., F. Sarti, C. Hiratuka, and R. Sabatini (2001), "El Caso Brasileño" in D. Chudnovsky (*ed.*), *El Boom de Inversión Extranjera Directa en el MERCOSUR*, Siglo XXI, Buenos Aires.

Lipsey, R.E. (2000/01), "Foreign Direct Investment and the Operations of Multinational Firms", *NBER Reporter*, Winter.

Markusen, J.R. (1995), "The Boundaries of Multinational Enterprises and the Theory of International Trade", *Journal of Economic Perspective*s, Vol. 9, pp. 169-89.

Mundell, R.A. (1957), "Transport Costs in International Trade Theory," *Canadian Journal of Economics*, Vol. 23, pp. 331-48.

Odenthal, L. (2001), "FDI in Sub-Saharan Africa", *Technical Papers*, No. 173, OECD Development Centre, Paris.

Oliveira Martins, J. and T. Price (2004), "How Market Imperfections and Trade Barriers Shape Specialisation: South America vs. OECD, Chapter 2 in this book.

Pinheiro, A.C. and M. Mesquita Moreira (2000), "O Perfil dos Exportadores Brasileiros de Manufacturados nos Anos 90: Quais As Implicações de Política?", *Textos para Discussão*, No. 80, BNDES, Rio de Janeiro.

PROCHILE (2002), *Análisis de la Exportaciones Chilenas*, Prochile, Santiago.

Razin, A., A. Mody and E. Sadka (2002), "The Role of Information in Driving FDI: Theory and Evidence", *NBER Working Paper*, No. 9255, NBER, Cambridge, MA.

Reardon, T. and J.A. Berdegué (2002), "The Rapid Rise of Supermarkets in Latin America: Challenges and Opportunities for Development", *Development Policy Review*, Vol. 20, No. 4, pp. 317-34.

Rocha, F., M. Iootty, and J.C. Ferraz (2001), "Desempenho das Fusões e Aquisições e Rentabilidade na Indústria Brasileira na década de 90: A Ótica das Empresas Adquiridas", *Revista de Economia Contemporânea*, Vol. 5.

Rodrik, D. (2000), "Development Strategies for the Next Century", prepared for conference on "Developing Economies in the 21st Century", Institute for Developing Economies, Chiba, January 26-27.

Sindipeças (2002), *Informativo*.

Siffert, F.N. and C. Souza e Silva (1999), "Large Companies in the 1990s: Strategic Responses to a Scenario of Change", *Mimeo*, Economics Department, BNDES, Rio de Janeiro.

Song, J. (2001), "Sequential Foreign Investments, Regional Technology Platforms and the Evolution of Japanese Multinationals in East Asia", *Working Paper*, No 22, ADB Institute, Tokyo.

Soto, M. (2000), "Capital Flows and Growth in Developing Countries: Recent Empirical Evidence", *Technical Paper*, No. 160, OECD Development Centre, Paris.

Sourrouille, J.V., B.P. Kosacoff, and J. Lucangeli (1984), *Transnazionalización y Politica Economica en la Argentina*, Centro Editor de América Latina, Buenos Aires.

UNCTAD (various years), *World Investment Report*, UNCTAD, Geneva and New York.

Willmore, L. (1986) "The Comparative Performance of Foreign and Domestic Firms in Brazil", *World Development*, Vol. 14, No. 4, pp 490-501.

Wold Trade Organisation (2001), *Annual Report*, WTO, Geneva.

Wright and Czelista (2002), "Resource-Based Growth Past and Present", Background paper for: *From Natural Resources to the Knowledge Economy*, World Bank Latin American and Caribbean Regional Office.

Notes

1. In the past, FDI flows to individual countries were less volatile than other international capital flows: they changed direction less frequently and the range of fluctuations around their mean was smaller. That characteristic of FDI flows was demonstrated in the Latin American crises of the early 1980s. It was confirmed in the Mexican crisis of 1994, when direct investment inflows quickly regained their previous level, while other forms of capital inflow remained far below their peaks. And the pattern was further confirmed in the Asian crises of 1997, when direct investment inflows into developing Asia as a whole hardly paused in their rapid growth, while portfolio and other forms of investment dried up or turned negative on net balance (Lipsey, 2000/01).

2. And, as a matter of fact, an even larger share of outward FDI flows. This phenomenon is outside the scope of this chapter, although intra-regional flows, which have increased in importance in the last decade, are covered.

3. This hypothesis is grounded on the fact that the business scene in most developing countries is dominated by a handful of diversified conglomerates that interact on many different markets and therefore have more opportunities to collude.

4. In Mexico, the share of foreign capital in manufacturing GDP in the early 1970s was over 20 per cent (ECLAC 1999, p. 95).

5. To be eligible for DL 600 treatment, the announced investment must be at least USD 1 million (with a debt/equity ratio of 3/1). In the case of capital goods and technology, the threshold is much lower at USD 25 000.

6. These concern land transport (mandatory registration to serve international routes and restrictions on local services), local sea transport (cabotage), fisheries (for vessels registered in Chile non-residents cannot own more than 51 per cent), and printed media (employees and at least 85 of the capital investment must be Chilean).

7. The 1996 decree improved earlier patent legislation, but still falls short of the terms included in the WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

8. However, there is no Bilateral Investment Treaty between the United States and Brazil.

9. Of such disputes brought before the ICSID, the longest-pending is Case No. ARB/97/3 (Compañía de Aguas del Aconquija and Vivendi Universal v. Argentine Republic).

10. In the case of Argentina, 1999 is an outlier year marked by the acquisition of YPF by Repsol. On the other hand, the dramatic FDI slowdown of 2001 – not only with respect to 2000, but more significantly relative to the 1995-2000 average – was largely due to the crisis, as shown by the fact that the deceleration in global FDI activity was much less pronounced. Similarly, 1999 was a record year in Chile when Endesa bought Enersis, but in this case the year-on-year variability is lower. Finally, Brazil represented more than 4 per cent of global FDI in 1998, when the Telebrás system was sold off, mainly to foreign interests, but in this case the 2001 deterioration in absolute numbers fully reflects global conditions, as proven by the fact that the country's share in the world total increased, if anything, to 3.1 per cent from 2.2 a year earlier.

11. "Brazil Telecom Uses Problems on Its Turf to Make Gains", *The New York Times*, 23 September 2002.

12. Neither country could match the subsidies and tax breaks offered by Costa Rica. Moreover, at least in the case of Brazil, the government reportedly proved unwelcoming to the management of the company.

13. See "El Sorprendente Boom de los Call Center", *Qué Pasa*, 14 June 2002.

14. Excluding again companies domiciliated in Bermuda, the only non-OECD acquiring company in the period was from Malaysia.

15. "Buy, buy, buy", *The Economist*, 4 December 1997.

16. In the sectors included in the survey, firms included in the panel represented 26.3 per cent of value added, 21.3 per cent of Argentina's fixed capital formation, and 67.8 per cent of total exports.

17. For the purposes of the census, "foreign" includes all firms with at least 10 per cent of foreign equity participation. This gives a total of 11,404 companies with total assets equal to BRL 914 billion (up from BRL 273 billion) and sales of BRL 501 billion (BRL 223 billion in 1995).

18. In the case of 2001 shipments to the EU, the 282 largest exporters (16.6 per cent of all firms) accounted for 96 per cent of the total value exported ("1 420 Pymes Exportaron a la UE", *Estratégia*, 28 June 2002).

19. Using 1980s plant data, Aitken *et al.* (1997) find a positive correlation between the regional and industrial concentration of multinational firms and the export propensity of Mexican manufacturing firms.

20. In Mexico, half a dozen local companies are emerging as multinationals in their own right. Nemak, a division of Monterrey conglomerate Alfa, is building a plant in the Czech Republic to supply aluminum engine heads to customers in Europe. Sanluis has become a leading supplier of suspension systems to Detroit's Big Three carmakers, with its own engineering center in Plymouth, Mich. Revenues have been growing by 20 per cent annually since 1996.

21. See Borges Lemos *et al.* (2000), and "Fiat cruises along Brazil's difficult roads", *Financial Times*, 4 April 2001.

22. See Bastos (2002).

23. The most important partnerships between Mexican and foreign firms include those between Cifra and Wal Mart, Gigante and the French supermarket chain Carrefour (which only lasted four years), and Comercial Mexicana and Auchan, the large French distribution group. This latter alliance was dissolved after one year, owing to a dispute over control of the firm. After this, Comercial Mexicana bought the K-mart stores left over from a failed union with Liverpool, which had also been unable to fulfil the expansion plans envisaged in the alliance.

24. Tough competition, amongst other reasons, forced Ahold and Carrefour to withdraw from Chile in 2003 and 2004, respectively.

25. Private brands generate substantially higher profit margins for chains and are believed to increase customer loyalty. In the case of Chile, while most store brands are produced domestically, others are imported. D&S contracts with private label suppliers in the United States and Mexico. Santa Isabel, which initially lined up private label suppliers in Chile, purchases from foreign suppliers, especially in Peru and Paraguay where it also owns stores.

26. The agreement prohibits selling at below-cost prices, except for defective or out-of-production goods; obliges retailers that fail to pay within 30 days of delivery to issue a negotiable financial instrument to suppliers; and introduces an arbitration mechanism to solve disputes. Similar regulations exist in OECD countries such as France, the Netherlands, and Spain.

27. "Los grandes compradores", *Mercado*, May 2000 and "Carrefour fica fora de convênio de mercados na Argentina", *O Estado de S. Paulo*, 31 July 2000.

28. As a counterpart to their commitments under this instrument, non-member adherents (which also include Estonia, Lithuania, and Slovenia) participate in related OECD work.

29. During the three decades leading up to 1990, only 500 BITs had been signed, whereas by the end of the 1990s this number has almost quadrupled; and in 1999 the vast majority were concluded between developing countries (UNCTAD, 2000).

30. International agreements increasingly constrain the ability of governments to use trade policies, whereas few constraints apply to the use of investment policies. Hoekman and Maggi (2002) analyse whether the foreign firm may be forced to adopt an inefficient mode of supply (exports versus FDI) when the domestic government is constrained in its ability to use trade policy, but is free to set its FDI policy. They find that the foreign firm chooses the efficient mode of supply, even under a discriminatory output tax levied on FDI. This result suggests that the case for multilateral investment rules on efficiency grounds needs careful evaluation.

31. For small open economies, efficient taxation of foreign and domestic capital depends on their relative mobility (Hanson, 2001). If foreign and domestic capital are equally mobile internationally, it will be optimal for countries to subject both types of capital to equal tax treatment. If foreign capital is more mobile internationally, it will be optimal to have lower taxes on capital owned by foreign residents than on capital owned by domestic residents.

32. According to the "conventional wisdom", foreign investors favour countries with lower labour standards. A recent study uses country-level measures of worker rights in regard to freedom of association and collective bargaining, child labour, and gender discrimination and inequality in econometric models of foreign direct investment (FDI) inflows and manufacturing wages in samples of up to 127 countries. Consistent with prior studies, no solid evidence is found in support of the "conventional wisdom," with all evidence of statistical significance pointing in the opposite direction (Kucera, 2001).

Table of Contents

List of Boxes

List of Tables

List of Figures