

**FOREIGN DIRECT INVESTMENT AND SUSTAINABLE DEVELOPMENT.
THE RECENT ARGENTINE EXPERIENCE**

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1 Introduction

During the 1990s Argentina was one of the main destinations for foreign direct investment (FDI) in the developing world. This boom coincided with a period of deep structural reform that comprised trade and capital account liberalization, a large-scale privatization program and ambitious deregulation. During the same decade Argentina undertook significant international commitments concerning its FDI policy regime, which had been considerably liberalized since the late 1970s. Apart from enthusiastically endorsing a Multilateral Investment Agreement (MIA), Argentina made comparatively generous offers in the negotiations leading to the General Agreement on Trade in Services (GATS) and signed a large number of bilateral investment treaties (BITs). The combination of these factors makes Argentina an interesting case study about the relationship between FDI, regulatory regimes and economic development.

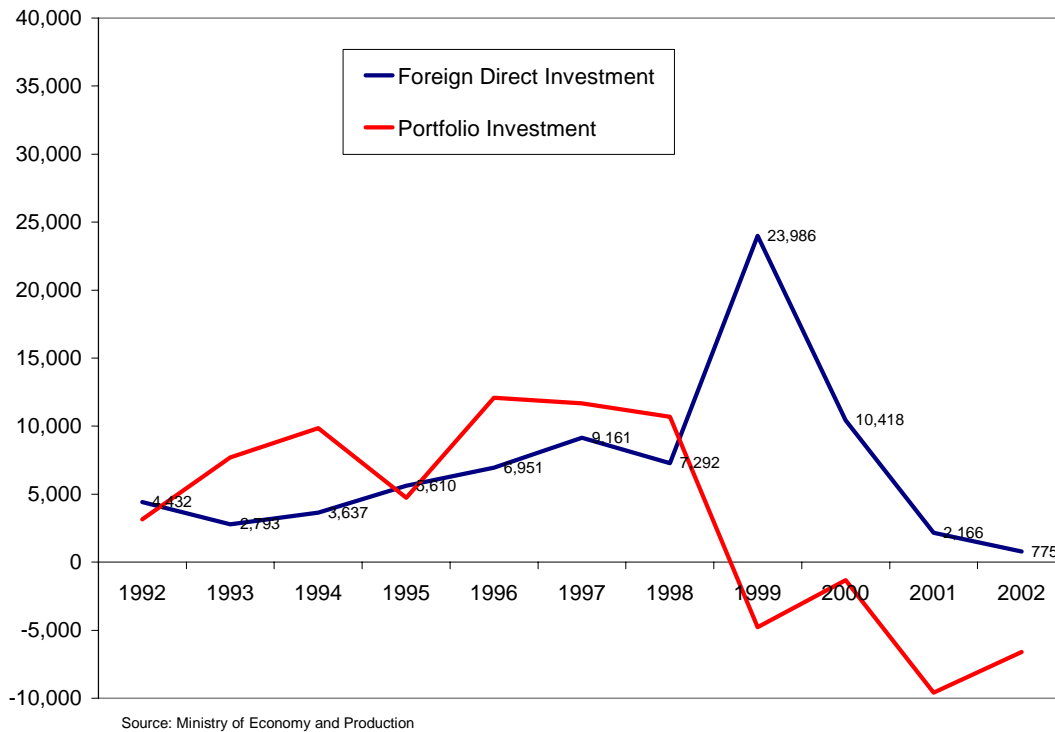
This introduction is followed by six sections. The next section provides a brief summary of the performance of FDI inflows into Argentina during the 1990s. The third section reviews the domestic legal and policy framework that governs FDI. The fourth section analyzes the extension and implications of the international commitments undertaken by Argentina in the field of FDI regulation and treatment. The fifth section briefly reviews Argentina's recent experience with investor-state dispute settlement. The sixth section discusses the linkages between FDI and economic development focusing on the impact of FDI on trade patterns, the balance of payments, environmental management, innovation, R&D and spillovers. The last section draws some conclusions and policy implications for a southern agenda on investment.

2 Performance of FDI inflows

a. *The FDI boom during the 1990s*

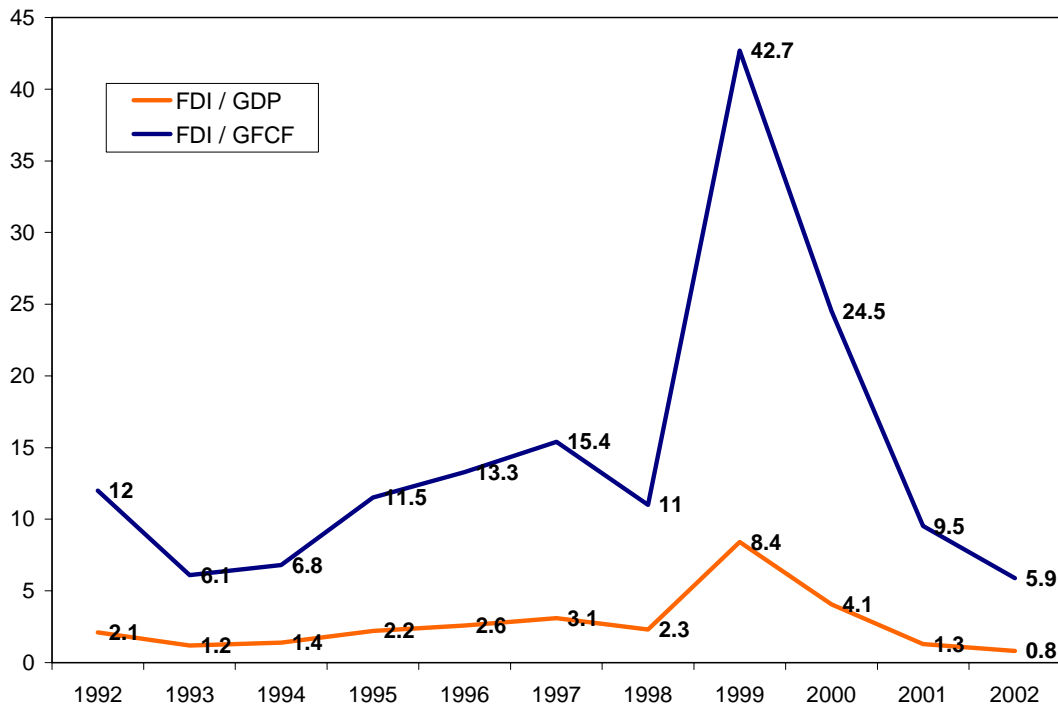
In the 1990s Argentina re-emerged as a significant recipient of FDI inflows, in the company of a relatively few number of other developing countries. From an annual average of about US\$650 million in 1984-89, net inward FDI increased to US\$3.6 billion in 1992-94, US\$8.2 billion in 1997-98 and a record US\$24 billion in 1999. On many occasions during the 1990s annual inward FDI flows were equivalent to more than 2% of GDP and 10% of gross fixed capital formation (see charts 1 & 2). The collapse of the currency board in 2001 and the financial meltdown that followed sharply reduced inward FDI. However, in contrast to portfolio capital flows (that turn to the red in 1998) inward FDI remained slightly positive (see chart 1). The main factors contributing to this FDI boom were trade and capital account liberalization (including regional integration in Mercosur), a large-scale privatization program (that provided significant incentives to foreign investors) and an investor-friendly policy regime.

Graph 1. Foreign Direct and Portfolio Investment, 1992-2002, U\$S million



According to the conventional view, a growing volume of FDI should make a vital contribution to economic development by providing financial resources, upgrading production and trade capabilities and fostering economic modernization. However, the Argentine experience of the 1990s seems to confirm the view that the contribution of inward FDI to host countries' economic development depends not only on volumes but

Graph 2. FDI inflows as a percentage of GDP and gross fixed capital formation in Argentina, 1992-2002



Source: Ministry of Economy and Production

also on “quality” and the broader economic environment in which foreign firms operate. In effect, in order to evaluate the impact of FDI on economic development a multi-faceted approach must be adopted, taking into consideration factors as diverse as the sectors of destination of inward FDI, the role of green-field investments as opposed to take-overs and acquisitions, the impact of foreign firm on trade patterns and the balance of payments, and the technological contribution and spillover effects on domestic firms. Host countries past and present regulatory policies also have a decisive influence on the impact of FDI.

FDI strategies during the 1990s can be fruitfully analyzed adopting the conceptual framework of the “eclectic paradigm” (Dunning, 1988 and 1996). Dunning classifies FDI according to its purpose into four main types: i) resource-seeking investment (that seeks to exploit locational advantages, such as abundance of natural resources or unskilled labor), ii) market-seeking investment (that aims to exploit domestic or regional markets), iii) efficiency-seeking investment (that seeks to rationalize production to exploit economies of scale and scope), and iv) strategic asset-seeking investment (to acquire resources and capabilities that the investor sees as sustaining or advancing its core competencies either in regional or global markets). Whereas resource and market-seeking investments are generally made by stand-alone subsidiaries, efficiency-seeking (or rationalization) FDI enables subsidiaries to participate in the transnational corporation (TNC) system through simple integration strategies (e.g. as supplier of parts and components to parent companies or other subsidiaries). Strategic asset-seeking FDI usually involves more complex integration strategies that seek to locate functional activities (production, research and development, training, etc.) wherever they can be best performed to meet the corporation overall objectives.

Argentina enjoys important locational advantages (it is a country richly endowed with natural resources, with a large skills base and a significant domestic market) that

have been attracting resource and internal market-seeking inward FDI since the beginning of the XX century. Despite a history of macroeconomic and political instability, Argentina received substantial inward FDI, especially during the heydays of import substitution industrialization (ISI) in the two decades up to the late 1970s. In the stagnant and high inflation economic environment of the 1980s, with sharply reduced domestic investments in human and physical capital, inward FDI became less significant and more erratic.

Whereas during ISI inward FDI was mainly market-seeking and made by stand-alone subsidiaries operating in heavily protected markets, some efficiency-seeking investments were made during the trade liberalization experiment of 1978-81 and later in the volatile 1980s. The “eclectic” theory of FDI would predict that structural reforms and the creation of Mercosur (a customs union formed by Argentina, Brazil, Paraguay and Uruguay) in the 1990s would stimulate efficiency -and even strategic asset-seeking- investment, encouraging subsidiaries to participate in regional or global networks. However, efficiency-seeking or strategic asset-seeking investments may not be made necessarily with the purpose to integrate subsidiaries more deeply into the TNC system. In fact, stand-alone subsidiaries may engage in rationalization investment in response to competitive pressures. Similarly, since maintaining or increasing market share can be the major incentive behind strategic asset-seeking investment, subsidiaries may remain stand-alone firms.

In contrast to the abundance of natural resources and the size of the domestic market, neither cheap labor nor loose environmental regulations have been key factors in attracting resource-seeking investment towards Argentina. As a matter of fact, local environmental regulations are quite stringent, although enforcement is rather loose. In effect, Argentina shows pollutions levels higher than what one would expect for a mid-income country. As the World Bank (1995) pointed out, “the most critical constraint for improving the management of pollution in Argentina is the absence of clear institutional responsibility for environmental management and the lack of effective enforcement”. Loose enforcement, however, has not been used as an incentive to attract inward FDI. On the contrary, the available evidence suggests that foreign investors have modestly improved environmental management (see section 5c).

b. FDI by sector of destination and country of origin

Excluding agriculture and forestry², services accounted for more than 40% of total inward FDI flows during 1992-2002 and the petroleum sector received an additional third (see table 1). Consequently, manufacturing was relegated to a distant third place among sectors of destination of inward FDI.

Inward FDI towards the service sector was encouraged by the ambitious privatization program implemented during the 1990s: electricity, natural gas and water received over 10% of total inward FDI (mainly in 1992-94), while transport and communications accounted for an additional 8%. The banking sector was also a major

² Unfortunately no reliable estimates on FDI in Agriculture and Forestry are available

recipient of FDI, accounting for 10% of total inflows. Most inward FDI towards the banking sector took place in the mid-1990s and during the crisis of the turn of the decade. In all these sectors the major drive behind large FDI inflows was market-seeking.

The petroleum industry was the major FDI recipient among tradable sectors and investors targeted both the domestic and world markets. The majority of FDI inflows towards these sectors were concentrated in the early 1990s and at the turn of the decade. During the early 1990s the major factor behind inward FDI was deregulation of the energy market. By contrast, the second major wave of inward FDI was led by take-overs (Repsol-YPF) and acquisitions (Petrobras-Perez Companc). Another natural resource-based sector that received significant FDI inflows (especially in 1995-96 and 2001-02) was mining, encouraged by a special promotion regime offering predictable incentives (see below).

In contrast to the past, manufacturing was not a major recipient of inward FDI during the last decade. Inward FDI in manufacturing as a share of total FDI inflows rose from 30% in 1992-94 to 40% in 1995-96, but it contracted thereafter. Within manufacturing the main destination sector was the chemical industry (including petrochemicals), initially attracted by the privatization program (1995-96) and later on by foreign acquisitions (2001-02). The food processing industry was the second major destination sector within manufacturing, and the bulk of investments were made during the early 1990s. A large share of inward FDI into the food-processing industry was accounted for by the acquisition of long-established local firms by US and European multinationals. The automotive and transport equipment sector also received significant inward FDI until 1988. However, after the devaluation of the Real in 1999 and the protracted recession that preceded the collapse of the currency board, significant outflows took place. The motor vehicles industry also enjoyed a special promotion regime (see below).

In summary, during the 1990s the bulk of inward FDI into Argentina was encouraged either by the size of the domestic market or by a rich natural resource base. Although inward FDI into manufacturing increased as compared to the 1980s, this was no longer the main destination sector (as it had been during ISI). In addition, acquisitions and take-overs have been the predominant mode of entry of foreign investors (see below).

Table 1 shows that Spanish firms (latecomers in the trans-nationalization process) have been the leading foreign investors in Argentina. Initially, Spanish firms targeted privatized public utilities (telecommunications, air transportation, energy and water supply), but as the decade proceeded they made significant investments in banking and petroleum. Chilean firms, also relatively recent foreign investors, turned into a significant source of inward FDI towards Argentina as well (particularly in electricity generation and distribution and retail trade). French firms were the second largest European investors during the 1990s, mainly in privatized public utilities, banking and retail trade. In contrast to Spanish and French firms, traditional foreign investors such as Italian, British, German and Dutch firms played a relatively minor role in the FDI boom. US firms, which in the past had been the main source of inward FDI, witnessed their share decline throughout the decade. Neither Japanese nor East Asian

firms made significant investments in Argentina. Unfortunately, investment by Brazilian firms is not reported separately. However, during the 1990s they were probably the second largest Latin American investors. After the collapse of the currency board Brazilian and Mexican firms led the foreign acquisitions process that followed.

In the case of Argentina there is no visible correlation between the signature of bilateral investment treaties (BITs) and the performance of inward FDI. Except Chile and the Netherlands (which signed their BIT with Argentina in 1994), all major foreign investors listed in Table 1 had their bilateral agreements signed in 1992. However, many other countries that have signed BITs with Argentina have not been significant foreign investors during the 1990s (see table 7 below). Similarly, there is no bilateral investment agreement in force with Brazil, which by now has probably displaced Chile as the major Latin American foreign investor in Argentina.

TABLE 1
ARGENTINA: FDI INFLOWS BY SECTOR OF DESTINATION
AND COUNTRY OF ORIGIN, 1992-2002
(US\$ million and percentages)

| | 1992-94 | 1995-96 | 1997-98 | 1999-00 | 2001-02 | 1992-02 |
|--|---------------|---------------|---------------|---------------|--------------|---------------|
| Total (US\$ million) | 10,859 | 12,557 | 16,451 | 34,406 | 2,951 | 77,226 |
| By main destination sector (in %) | | | | | | |
| Oil | 18.4 | 11.8 | 8.6 | 59.7 | 67.1 | 35.5 |
| Mining | 0.1 | 6.5 | 0.5 | 0.2 | 5.1 | 1.5 |
| Manufacturing industry | 30.3 | 39.5 | 27.1 | 10.0 | 21.9 | 21.7 |
| Food, beverages and tobacco | 16.0 | 9.5 | 3.7 | 4.9 | -1.3 | 6.7 |
| Textile and leather | 0.2 | 0.8 | 0.2 | -0.2 | -1.4 | 0.1 |
| Paper | -0.4 | 3.9 | 2.6 | 0.3 | -5.6 | 1.1 |
| Chemicals, rubber and plastics | 8.2 | 13.8 | 6.1 | 4.2 | 19.4 | 7.3 |
| Cement and ceramics | 1.0 | 0.4 | 2.2 | -0.1 | -2.2 | 0.5 |
| Steel and aluminum | 1.4 | 0.4 | 4.0 | 0.2 | 26.0 | 2.2 |
| Machinery and equipment | -1.2 | 1.4 | 1.3 | 0.9 | -7.2 | 0.5 |
| Automotive and transport equipment | 5.1 | 9.3 | 7.0 | -0.2 | -5.6 | 3.4 |
| Services | 51.1 | 42.2 | 63.8 | 30.1 | 5.9 | 41.3 |
| Electricity, gas and water | 30.9 | 14.3 | 14.9 | 4.1 | 4.8 | 11.8 |
| Commerce | 4.3 | 6.7 | 5.2 | 2.3 | 8.0 | 4.1 |
| Transport and communications | 2.4 | 6.2 | 6.7 | 13.3 | -18.6 | 8.0 |
| Banks | 7.1 | 10.0 | 25.1 | 3.3 | 13.5 | 9.9 |
| Other services | 6.4 | 5.0 | 11.9 | 7.1 | -1.7 | 7.4 |
| By main country of origin (in %) | | | | | | |
| USA | 40.3 | 35.8 | 26.9 | 14.3 | -17.7 | 22.9 |
| Spain | 1.9 | 10.1 | 19.4 | 71.9 | -8.0 | 37.7 |
| Chile | 9.3 | 13.5 | 5.5 | -1.0 | -6.1 | 4.0 |
| France | 10.6 | 5.1 | 9.5 | 6.4 | 55.7 | 9.3 |
| United Kingdom | 5.6 | 2.1 | 2.9 | -0.2 | 6.1 | 1.9 |
| Netherlands | 5.0 | 2.6 | 11.8 | 0.1 | 2.8 | 3.8 |
| Italy | 3.2 | 6.7 | 5.7 | 3.5 | -8.3 | 4.0 |
| Germany | 2.8 | 2.1 | 6.2 | 0.5 | 0.6 | 2.3 |
| Other countries | 21.3 | 22.0 | 12.1 | 4.5 | 75.0 | 14.1 |

Source: Authors' calculations based on data from the Ministry of Economy and Production

c. *Sources of finance*

As mentioned in the previous section, the inward FDI boom of the 1990s was strongly influenced by the process of privatization. In effect, FDI inflows due to privatizations as a share of total FDI reached 31% in 1992-94 and, although there are no official estimates, the share was much higher in 1990-91. These estimates do not take into account neither the new investments made after the privatizations nor the privatization of YPF (classified as portfolio investment, see below). Table 2 shows that the weight of privatization contracted to 7.5% of total inward FDI in 1997-98, but recovered thereafter until the collapse of the currency board. Table 2 shows that take-overs and acquisitions were a major source of inward FDI, accounting for nearly half of total FDI inflows in 1992-2002. During 1999-2000 foreign take-overs and acquisitions accounted for almost 60% of total inward FDI.

TABLE 2
ARGENTINA: SOURCES OF FINANCE OF FDI INFLOWS, 1992-2002
(US\$ million and percentages)

| | 1992-1994 | | 1995-1996 | | 1997-1998 | | 1999-2000 | | 2001-2002 | | 1992-2002 | |
|--------------------------------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|--------------|------------|---------------|------------|
| | US\$ M | % | US\$ M | % | US\$ M | % | US\$ M | % | US\$ M | % | US\$ M | % |
| Total | 10,859 | 100 | 12,557 | 100 | 16,451 | 100 | 34,406 | 100 | 2,951 | 100 | 77,226 | 100 |
| Profits reinvestments | 2,633 | 24.2 | 1,057 | 8.4 | 1,514 | 9.2 | 117 | 0.3 | -4,235 | -144.0 | 1,085 | 1.4 |
| Equity Capital | 2,389 | 22.0 | 3,696 | 29.4 | 5,759 | 35.0 | 6,909 | 20.1 | 6,306 | 214.4 | 25,059 | 32.5 |
| Debt with parent company and profits | 1,009 | 9.3 | 2,225 | 17.7 | 1,961 | 11.9 | 2,715 | 7.9 | -1,490 | -50.7 | 6,421 | 8.3 |
| Take overs and acquisitions | 1,413 | 13.0 | 3,886 | 30.9 | 5,991 | 36.4 | 20,443 | 59.4 | 2,345 | 79.8 | 34,080 | 44.1 |
| Privatizations | 3,415 | 31.4 | 1,693 | 13.5 | 1,226 | 7.5 | 4,222 | 12.3 | 25 | 0.9 | 10,581 | 13.7 |

Source: Authors' calculations based on data from the Ministry of Economy and Production

Using a different methodology, Table 3 shows that cross-border mergers and acquisitions (including privatizations) as a percentage of total inward FDI reached 76% in 1990-2002. The share was very high throughout the decade, but peaked during the currency board crisis when aggregate FDI inflows collapsed. In the case of Argentina cross-border mergers and acquisitions accounted for a much higher share of total FDI than in other developing countries (such as Brazil and Chile) and were not very different from that of developed countries.

As result of the FDI boom through take-overs, acquisitions and privatizations, foreign firms increased their share in sales of the 1,000 largest firms from 39% in 1992 to 67% in 2000. During that period the number of foreign firms among the 1,000 largest also increased from 199 to 472. In contrast to the rising share of take-overs and acquisitions as a source of inward FDI, re-investment of profits has not been a significant source of new investments (they turned even negative during the currency board crisis). Equity capital, in contrast, which had not been a significant source of

inward FDI during the decade, contributed with a high share of total FDI in the crisis years. During this period, however, average annual FDI inflows were less than a fourth of the average for the decade.

**TABLE 3:
CROSS-BORDER M&A SALES
(as a percentaje of total FDI inflows)**

| Country / region | 1990-1995 | 1996-1999 | 2000-2002 | 1990-2002 |
|---------------------------------|-----------|-----------|-----------|-----------|
| World | 53 | 74 | 65 | 68 |
| Developed countries | 69 | 89 | 77 | 83 |
| Developing countries | 18 | 33 | 35 | 30 |
| Latin America and the Caribbean | 35 | 52 | 42 | 47 |
| MERCOSUR | 48 | 68 | 45 | 62 |
| Argentina | 67 | 73 | 158 | 76 |
| Brazil | 24 | 67 | 33 | 56 |
| Uruguay | 12 | 7 | 23 | 12 |
| Chile | 38 | 64 | 109 | 66 |
| México | 22 | 27 | 62 | 35 |

Source: own calculations on the basis of data from the World Investment Report 2003

d. FDI and gross capital formation

As FDI was mainly through mergers and acquisitions, it probably did not contribute to the domestic economy as much as if it had taken the form of green-field investment. As mentioned before, during the 1990s inward FDI was a rising share of gross fixed capital formation (GFCF) (see chart 2). However, the share of GFCF in GDP failed to increase during the decade: it reached 19% in 1993-1994, fell to 17-18% during the crisis years of 1995-96 and recovered to 19% in 1997-1999. In fact, the low investment ratio of the early 1990s suggests that fast output growth during this period was probably due to significant idle capacity at the start-out. These findings are consistent with the argument of Agosin and Mayer (2000) that the relationship between FDI and domestic investment may not always be positive. In fact, these authors found that during 1970-1996 FDI inflows into Latin America had crowding-out effect on domestic investment. Interestingly, the authors found that the effect was the opposite (crowding in) in the case of Asia (inward FDI triggered higher domestic investment).

3 The domestic legal and policy framework³

a. General policy framework

The major shift in Argentina's FDI policy framework occurred in the mid-1970s with the enactment of the Foreign Investment Act (Law 21382). The new legislation eliminated all general restrictions on FDI (a small number of sector restrictions enacted by specific legislation continued to exist), it guaranteed equal rights and obligations to foreign and local investors (national treatment), authorized to compute used capital goods and immaterial assets as equity capital and guaranteed the free remittance of profits and principal. On balance, the 1976 Foreign Investment Act shifted the policy focus from FDI control to FDI promotion.

In 1989 chapter IV of the Economic Emergency Act (Law 23697) introduced additional flexibility to the FDI regime, eliminating the authorization requirement to foreign investment in the information, telecommunications and electronic industries (in force since the mid-1980s). Prior authorization remained necessary for foreign investment in public services, energy, mass media, education, financial and insurance companies (except banks), and national defense and security. Shortly after, the State Reform Act (Law 23696) set the legal framework to carry forward the privatization process, opening the door to a massive entry of foreign capital in the public utilities sector. In September 1993 Executive Order 1853 eliminated all prior authorization requirements, except in a few sectors such as real estate in border areas and others covered by specific legislation. The new regulations also abolished all registration and information requirements, except for statistical purposes. The government also lifted the ban on new exploration and exploitation licenses on mining, petroleum and natural gas production, and deregulated the internal and external trade of crude petroleum and fuels. The property regime, however, remained unchanged.

These reforms consolidated the FDI-friendly environment characteristic of Argentine policies towards FDI for nearly 30 years. Foreign investors were left free to decide on their preferred investment modalities (either wholly owned subsidiaries, majority or minority joint-ventures or licensing agreements) and given national treatment for all incentives enjoyed by nationally-owned firms. Similarly, foreign firms were granted guaranteed free remittance of profits and capital (temporary restrictions could be enforced for balance of payments purposes, such as in December 2001).⁴

The Foreign Investment Act also eliminated the prior authorization requirement for foreign investors mandated by the Technology Transfer Act (Law 22426) of 1981. Instead, the new rules required only that all legal deeds between companies (either between parent firms and their subsidiaries or between independent firms) be registered at the National Institute for Industrial Technology (INTI) for information purposes. As far as the financial system was concerned, in 1994 the authorities abandoned the "reciprocity principle", by which the Central Bank would consider requests for

³ This section is based on Campos (1998), Chudnovsky & López (2001), INTAL (1997), CEPAL (1994) and official sources

⁴ Most of the restrictions on remittances abroad were lifted at the beginning of 2003.

establishing new bank subsidiaries only when the country of origin of the parent company applied reciprocal treatment. Established foreign banks were also granted national treatment.

As mentioned before, although currently no restrictions exist on foreign investment in goods-producing sectors, some exceptions still remain operative in services, such as the 30% limit to the participation of foreign capital in mass media companies. This limit can be waived only on a reciprocal basis and does not apply to established firms.

In 1998 Argentina passed Law 25063 aimed at inhibiting firms from using transfer pricing to minimize their aggregate tax burden. The new legislation introduced changes to the incomes tax and set fiscal and accounting criteria for all type of transactions between parent firms and their subsidiaries (goods and services, royalty payments, etc). The effect of the new legislation (implemented in 1999) on tax collection is still unknown, but international experience suggests that remarkable improvements are hard to make.

In the mid-1990s Argentina reformed its legislation to protect intellectual property rights to put it into line with the TRIPs agreement. The most significant change was the granting of full protection to pharmaceutical products, which were previously not covered (pre-existing legislation protected only the process of production). The legislation to protect intellectual property rights was reformed again in the early 2000s to accommodate US demands. Previously, the US administration had applied trade sanctions against Argentina under special section 301 and had launched consultations procedures in the WTO.

Apart from the unilateral reforms made to the domestic policy regime, during the 1990s the Argentine government was an active participant in international negotiations and fora dealing with FDI issues. One example was the generous commitments undertaken by Argentina in the General Agreement on Trade in Services (GATS) during the Uruguay Round. The Argentine negotiators also displayed a very receptive stance in the TRIMs negotiations and were enthusiastically supportive of a Multilateral Agreement on Investment (MAI), to be later on negotiated in the OECD (Argentina was an observer during the negotiations). Finally, Argentina became one of the most active signatories of bilateral investment treaties (BITs). The Argentine government approach to these four issues during the 1990s, heavily influenced by the prevailing policy approach, will be analyzed further in section 4.

*b. The privatization process*⁵

The 1989 State Reform Act (Law 23696) set the legal framework to carry forward the privatization process. It also encouraged the participation of foreign capital. The State Reform Act presided over the transfer of the vast majority of public sector firms in areas as diverse as telecommunications, ports, energy, airlines, railways, electricity generation

⁵ This section is based on Campos (1998) and Chudnovsky & López (2001)

and distribution, and sanitation to the private sector. The transfer was made either through sale or concession contracts. Encouraged by the requirement that the consortia participating in public auctions included a partner with previous experience in the same field of activity, a high share of public utility firms ended up controlled by foreign investors.

However, although there was no legal impediment to establish wholly foreign-owned subsidiaries, most privatizations involved joint-ventures with domestic firms. Typically, the foreign partner took responsibility for the technical and operational side of the business, while the domestic partner remained in charge its administrative and financial side. Often, foreign banks participated as suppliers of finance, particularly through external debt-to-equity swaps.

The details of this ambitious privatization program were decisively shaped by the prevailing macroeconomic environment. Consequently, the privatization of telecommunications, completed in 1990 in the middle of a deep economic crisis, included modest investment commitments, a loosely defined regulatory framework, a sharp increase in telephone charges (since 1991 fixed in US dollars and indexed to the US inflation rate) and a guaranteed monopoly for a decade. Despite these benefits and the sizable potential of the telecommunications market (there was a large repressed demand for telecommunication services), only three consortia submitted offers.

By contrast, privatizations made in 1992-1993 took place in the context of a fast growing/low-inflation economy that sharply improved expectations. This made possible to improve the design of privatization procedures and regulatory bodies, as it was the case with the privatization of natural gas distribution and electricity generation and distribution. Even then, significant incentives were offered to attract foreign and domestic investors: most companies were transferred without liabilities (including environmental ones), but with valuable physical assets. Moreover, the rate fixing system included highly questionable clauses, such as rates fixed in US dollars (in consonance with the then prevalent currency board) and indexation mechanisms linking local rates to the US inflation rate. Combined with the fact that many activities were natural monopolies or were granted reserved markets for extended periods of time, these high rates led in high profits. (Azpiazu y Schoor, 2001)

YPF, Argentina's largest corporation, with businesses in petroleum and natural gas and upstream and downstream activities in the petroleum industry, was privatized in 1993 through the sale of shares in small blocks in the domestic and international market. Fifty-eight percent of the company's stock was floated in the market, with an indeterminate share of it being purchased by foreign portfolio investors. The national government and several provincial administrations maintained a minority stake and an employee ownership program retained control of 10% of the capital stock. In January 1991, at the height of the Brazilian foreign exchange crisis, the Spanish oil-firm Repsol purchased from the government its 15 % share in YPF. A few months later (April 1999) Repsol made a public offer for the remaining 85% of the capital, most of it in the hands of private domestic and foreign investors.

After privatization price and quality became key issues in public debate. However, other aspects such as the environmental impact of privatizations have

received little, if any, attention. Although the privatization of petroleum, natural gas and electricity generation and distribution included several environmental provisions (see below), there is very little information concerning actual enforcement.

c. Special sector regimes

During the 1990s Argentina implemented three special sector regimes (mining, forestry and motor vehicles) through tailor-made legislation.

*The Mining Regime*⁶

Although Argentina implemented promotional regimes for the mining sector for years, they failed to attract significant resources to explore and exploit areas with mining potential. Following this disappointing experience, a new regime was put in place between 1993 and 1995. The new regime consisted of two new pieces of legislation and a voluntary agreement between the federal government and the provinces. The new regime established incentives such as the possibility to deduct expenditures for determining the projects' feasibility from the incomes tax and accelerated amortization procedures for investments made in equipment, construction and infrastructure. The investors were also authorized to capitalize up to 50% of the value of mining reserves and to exclude it from the determination of their tax liabilities. Mining firms were also exempted from the wealth tax and from paying import levies and other charges on imported machinery, equipment and inputs. Moreover, the regime guaranteed investors with stability in tax, foreign exchange and import tariffs for a period of 30 years (excluding changes in the exchange rate and in export tax rebates).

The federal agreement committed provincial governments to charge investors with royalties of up to 3% of the value at ex-mine. The agreement gave rise to conflictive interpretations since mining firms (endorsed by the federal government) adopted a definition of value ex-mine that deducted from royalties the amortization of fixed assets (machinery, technology, etc.). Most provincial governments did not accept this definition and their position were backed by Congress, which reformed the National Mining Law in 1999.

The new regulatory framework coincided with a remarkable increase in inward FDI, especially in 1992-1996. The bulk of new investments came from Canada, South Africa, Australia, USA and England. In 1996 the inflow of FDI into the mining industry rose to about US\$ 700 million. However, falling world demand after the Asian crisis and lower international prices helped to account for a sharp decline in FDI inflows after 1997. This performance worsened in this decade due to the world economic slowdown and growing uncertainty. In 1997-98 mining production and exports increased sharply due to the entrance into production of three metal mega-projects: Bajo de la Alumbrera, Salar del Hombre Muerto –both in Catamarca- and Cerro Vanguardia in Santa Cruz. In

⁶ This section is based on Campos (1998), Chudnovsky & López (2001), Moori Koenig & Bianco (2003) and official sources

effect, in 1999 mining output was 138% higher than in 1996. After six years of continuous growth, mining production started to contract at the turn of the decade.

Typically, the linkage of mining projects with the local economy is very limited. This offers an opportunity to design policies aimed at developing the value-added chain in order to benefit more fully from the new investments made in the sector. Although little progress has been made in this area, the government is devising a framework for the sustainable development of mining. The objective is to design social, economic, political and environmental indicators to determine the impact of large mining projects on local communities. The expected outcome will be the articulation of policies between different governmental layers (federal, provincial and local), the communities and mining firms in order to establish sustainable development guidelines for mining in each area.

The forestry regime⁷

Historically, the key components of the forestry regulatory framework were the 1948 Forestry Resources Defense Law (aimed at protecting native forests and promoting commercial plantations) and the 1934 National Parks' Law. The National Forestry Institute (IFONA) was established in 1973 as the institution charged of developing forestation plans and undertaking studies in the forestry sector. This regulatory framework was overhauled in 1991, when IFONA was dissolved and its duties split between the Secretariat of Agriculture, Animal Husbandry, Fisheries and Food (SAGPyA) -oriented to commercial forestry promotion- and the Secretariat of Environment (SAyDS), in charge of protecting native forests.

Since the 1960s forestry benefited from various promotional regimes, briefly interrupted during the economic crisis of the early 1990s. In 1992 a new regime -still in force- offered subsidies to promote forestry plantations, accessible through public auctions. Some provincial districts -such as Corrientes, Misiones, Mendoza and Santa Fe- developed their own scheme of incentives. Eventually, in 1997 a new legal framework comparable to that of mining was adopted for forestry, its main ingredient being fiscal stability for a period of 33 years.

This regime was complemented and partially modified in 1999 by the Cultivated Forests Investment Act (Law 25080), aimed at promoting investments in new forestry and forestry-industrial firms and the expansion of existing ones. The new law invited provinces and municipalities to join the promotion regime by exempting investors from local taxes (such as the stamp, real estate and gross income taxes). The new legislation guaranteed investors tax stability for a period of 30 years, a term that can be extended up to a maximum of 50 years depending on the region and life-cycle of the implanted species. As in the case of mining, the guaranteed tax stability is quantitative (total tax burden) and excludes the VAT.

⁷ This section is based on Chudnovsky & López (2001), Chidiak *et al* (2003) and Bercovich (1998)

The law established other tax incentives, such as VAT reimbursements on the purchase of goods, leases or provision of services, accelerated amortization procedures, and wealth-tax exemptions. The new law included a non-refundable aids regime consisting of grants of up to 80% of the implantation costs for small producers or units located in disadvantaged areas and up to 20% for larger plantations (a feature already existing in the promotional regime created in 1992). During ten years (up to 2009) the federal budget will include a designated item to put the regime into effect. The authorities can establish more generous fiscal aids for projects dealing with native or exotic species or species with high commercial value. The regime benefits national as well as foreign investors: all resident physical or legal persons can apply for benefits.

The regime encouraged a remarkable increase in the forestry surface implanted, which reached a total of 350.000 hectares between 1992 and 1999. According to official estimates, between 1995 and 1997 the forestry-industrial sector received investments for about U\$1bn, most of them from foreign firms (sometimes in the form of joint-ventures). The objective of these projects was to develop new forestry with industrial uses, to establish new plants or to expand and modernize existing ones.

No estimate is available on the costs and benefits of the forestry regime. Beyond the eventual misuse of tax relief by some projects, it seems that the regime has encouraged the fragmentation of the production process. As in the mining sector, little progress was made to create forward linkages to develop the value-added chain going from forestry to wood-based products.

*The motor vehicles´ regime*⁸

The auto industry was established in the late 1950s and thrived under special promotional regimes that included high protection in exchange for investment commitments and other performance requirements. The main components of the promotional regime of the 1990s were set in 1991 by Executive Order 2577. The special regime consisted of a combination of import quotas, investment and balanced trade requirements for established manufacturers, minimum content requirements for domestically-manufactured vehicles and preferential import tariffs for domestic producers. The program aimed at promoting specialization and fostering competitiveness among established car manufacturers, taking advantage of the rapid increase in domestic demand that followed stabilization and the currency board. The sharp increase in domestic demand that followed stabilization led to significant trade deficits and a failure to meet balanced trade requirements. This led the authorities to adopt a more restrictive stance to enforce balanced trade requirements in 1994 through Executive Order 683.

The motor vehicles regime was complemented by a bilateral agreement with Brazil which significantly increased foreign trade. The agreement established a duty-free balanced trade program for vehicles produced in the two countries, subject to minimum domestic content requirements. The bilateral agreement was modified in 1994

⁸ This section is based on Campos (1998), Chudnovsky & López (2001), Bastos Tigre *et al* (1999) and ADEFA

and 1995, after Brazil implemented an automotive regime similar to that in force in Argentina (later on expanded to include special incentives for firms locating plants in the north, northeast and center-west regions of Brazil). Eventually, in July 2000 a Mercosur common motor vehicles' regime was adopted. The common policy eliminated import quotas and established a 35% common external tariff for car imports from third countries (for parts and components the CET was set at 14, 16 and 18%). The regime also included preferential import tariff rates for extra-zone imports for established manufacturers and duty-free intra-regional trade subject to balanced trade requirements (to be phased out in 2005). Intra-regional trade will be fully liberalized as of 2005.

As a result of the promotion regime investment increased remarkably in the 1990s, both from established manufacturers as well as from newcomers. Between 1990 and 1995 total investments in the automobile sector reached U\$2bn and, according to official estimates, an additional U\$3.4bn were invested between 1996 and 2000. Investments were also significant in the parts and components sector, where many foreign companies acquired local firms. Following the devaluation of the Real in 1999 and the deep recession that had started in Argentina one year earlier, several parts and components plants were closed and/or moved to Brazil. Similarly, some assembly lines were discontinued.

The sector regime and the bilateral agreement with Brazil encouraged a division of labor between plants at the two sides of the border. In contrast to the specialization that prevailed in the mid-eighties –based on intra-industry trade of parts and components–, the new regime favored assembly firms, particularly those with plants in the two countries. The new regime also encouraged specialization by model type. In effect, while in 1990 Argentina produced 25 models, in 1997 only 12 varieties were produced in that country.

The regime fostered a significant upgrading of technological capabilities and production methods. The increase in the productivity of local plants, due to the exploitation of scale economies and the introduction of modern practices (such as *just in time* inventory management) was remarkable. Total production of automobiles in Argentina increased from less than 100,000 units in 1990 (a level dragged by the economic recession) to about 460,000 in 1998, to contract thereafter dragged again by the recession. Similarly, whereas at the beginning of the nineties finished car exports were practically nil, they reached 240,000 units in 1998⁹ (most of them to Brazil). The performance of imports was essentially similar at both points in time, but they grew initially much faster than exports. Finished car exports from Argentina include a high share of imported parts and components from Brazil and elsewhere.

Considering the initial constraints and the state of the industry worldwide, the motor vehicles' regime was successful in attracting market-seeking foreign investment. It also helped to promote some efficiency-seeking investments by integrating the Argentine automobile industry into the broader Mercosur market. However, the regime has had problems, such as a tendency to create a situation of structural overcapacity. This inhibited reaching the scale economies necessary to compete in world markets (economies of specialization were not enough to compensate for the lack of scale).

⁹ In 1999, exports fell to only 98,000 units, to partially recover thereafter.

Overcapacity has also led to significant heterogeneity across firms: while some are striving to reach output scales in line with international patterns (especially in parts and components), others may close down as the sector regime is discontinued in 2005.

The regime also affected the parts and components sector through a significant reduction in the number of suppliers per plant –following international trends- and a relatively low domestic content of finished cars –especially in new models. The modernization of the sector also encouraged the establishment of new parts and component manufacturers, who are worldwide suppliers of terminals. Although this improved quality, scale, costs and delivery periods considerably in the parts and components sector, it also took a large number of existing domestic firms to bankruptcy. This frustrated the possibility to take advantage of acquired manufacturing capacities and qualified human resources. This pattern is consistent with the absence of initiatives targeted at developing local suppliers, which may have increased positive spillovers upon the local economy. Paradoxically, a market-seeking and efficiency-seeking investment regime like that for the motor vehicles sector shared the same key problems than resource-based investment regimes, such as those for mining and forestry. The common pattern is that key policy issues such as environmental practices; the establishment of research, development and design units; and human resource training were left completely in the hands of firms.

Brazil has been more active than Argentina in these same policy areas. However, at the regional level very little progress was made to transform the existing administered trade regime into a policy that shapes a long-term and sustainable profile for the sector. In addition, the use of fiscal incentives by national and sub-national governments (especially in Brazil) has distorted investment flows in the region at a relatively high cost for taxpayers. The net benefits of the national and regional motor vehicles' regimes enforced by Argentina and Brazil have not been assessed yet, despite the significant amount of fiscal resources channeled to the industry.

d. Environmental laws and policies

Argentine environmental policy comprises both federal laws (which can be adhered voluntarily by provinces) and provincial and municipal norms.¹⁰ This structure finds its explanation in the federal organization of the country and the split of competences between the national and provincial governments set by the National Constitution of 1853. The National Constitution was reformed in 1994 and it explicitly established both the inhabitants' right to live in a healthy and balanced environment and also their duties to preserve it. In addition, the Constitution determined the governmental obligation to protect natural resources (art. 41).

As far as the division of competences between the federal government and the provinces is concerned, the 1994 constitutional reform established that natural resources belong to each province (art. 124) but that the provinces delegate on the Nation the

¹⁰ The description of general environmental provisions is based on Chidiak M. (2003) and Chidiak M. and V. Beláustegui (2002)

capacity to determine “minimum environmental standards” (art. 41), which takes the form of pieces of legislation establishing uniform environmental parameters throughout the nation to secure adequate protection of the environment (Law 25675/02, art. 6). Nevertheless, these norms are applied according to the complementary laws passed by each provincial government.

Since they have been established following developed countries` standards, the environmental protection parameters set by national and provincial governments are very strict. Nevertheless, this legislation must be implemented by technically and financially weak local and provincial authorities which face a dichotomy between the objectives set by nationwide norms and the operative conditions of firms and local public sector agencies. Furthermore, in the context of recession and crisis that prevailed after 1998 enforcement seems to have been looser than in the early 1990s.

In this broad context, the main environmental laws and regulations in force in Argentina are the following:

- **Water management:** the federal legal framework establishes standards for the preservation and rational use of water, i.e. maximum pollution levels according to different uses, water quality parameters and minimum requirements to protect underground rivers¹¹.
- **Liquid effluents:** there are federal emission norms restricting the presence of industrial waste in liquid effluents. Some highly-polluting activities are specifically controlled by federal authorities. Industries must submit annual sworn declarations and they must pay a “special fee for pollution control” if effluents exceed the accepted limits. If these requirements are not met fines can be applied.
- **Hazardous waste:** federal norms regulate hazardous waste generation, handling, transport, treatment and final disposal. Hazardous waste generators and operators must register in federal or provincial registers, obtain an authorization certificate, submit annual sworn declarations and pay a tax that depends both on the quantity and the threat posed by the specific waste generated. The legal framework also sets civil responsibility, economic and penal sanctions in the event that the requirements are not fulfilled, as well as the obligation to undertake environmental impact studies before setting hazardous waste treatment or final disposal facilities¹².
- **PCBs management and disposal:** there are norms regulating PCBs (PolyChlorinated Bifenils) management and disposal. The importation, production and trade of these substances is forbidden. The government encourages the elimination of polluting machines.

¹¹ The main norms ruling water quality are national laws N° 13.577, 20.324 and 24.051/92 and ministerial resolutions and dispositions N° OSN 79179/90, SRNyAH 250/94 and MDSMA 97/01

¹² National legislation regarding hazardous wastes and liquid effluents include national laws N° 24.051/92 and 25.612/02 and ministerial resolutions and dispositions N° SRNyAH 253/94, SDSyPA 599/01 and SayDS 01/01

- **Air quality:** there is almost no legislation ruling air quality, since the only national law was never re-lamented.¹³ Some basic parameters are under control, such as the concentration of chimney-emitted gases.

It is worth mentioning that every private or public investment project that applies for credits, subsidies, transfers or other governmental benefits must undertake environmental impact studies. Moreover, investors must establish environmental restoration funds or take environmental insurance to remedy possible environmental damage¹⁴. The 1994 Constitution also established that “every person can use any kind of legal mean against public authorities and private individuals if the latter restrict or threaten any right or guarantee set by the law (...) Actions can be launched against discrimination and with regards to environmental rights, competencies, users and consumers (...)” (art 43).

Firms dissatisfied with environmental laws and policies and their implementation may launch administrative or judicial procedures. In practice, very few cases have been actually taken forward. In 1994, for instance, an international oil company initiated a judicial procedure on the grounds that it was impossible to comply with hazardous wastes legislation, but decided not to proceed with the case. Probably, this decision was a result of the way in which the law was actually implemented by the authorities. In recent years several administrative complaints were also raised by the industrialists federation (Unión Industrial Argentina) to the government of the province of Buenos Aires regarding PCB and hazardous waste legislation.

Apart from these general rules, there are also specific provisions applicable to selected industries intensive in foreign investment (see Table 4). A brief survey of the main ingredients follows:

Mining

The 1995 Mining Industry Environmental Protection Act (Law 24585) standardized the norms applicable throughout the country. The law required the submission and approval by the authorities of a report on the environmental impact of all mining projects as a condition for beginning a mining project. The report must include a description of the site’s environment, a number of environmental parameters, the projected impact of the endeavor and the measures to be taken in order to mitigate any negative environmental impact. In addition, the new law established the possibility to suspend activities and even to cancel the concession due to damages done to the environment. Unfortunately, no information is available on the effective environmental performance of mining investors.

Argentina has also developed a preventive environmental system aimed at informing investors about the environmental conditions at the start-out of a project that must be maintained until the end of the concession. The Mining Regime also

¹³ Atmospheric Pollution Law (N° 20.284/1973)

¹⁴ The main norms regarding environmental impact studies are national law N° 24.354/94 and SRNyAH resolution N° 501/95

established that firms must constitute a special reserve to mitigate any environmental impact. The figure -deductible from the incomes tax- is equivalent to 5% of the operating costs of the project. This provision is aimed at protecting investors from affording payments that would be higher than the ceiling set for the total tax burden.

Forestry

Rather than setting environmental provisions for investments in forestry, the sector regime promotes investments oriented to forest conservation. The regime consists, basically, on 10-year subsidies and 30-year fiscal stability facilities for plantation projects. Forest plantation, maintenance and irrigation, fire prevention, R&D and other protection measures are included among the promoted activities. Benefits are granted on a national treatment basis to all investors that constitute legal residence in Argentina. Aid beneficiaries are requested to submit a report on the environmental impact of projects whenever the forestry extension is larger than 100 hectares.

Oil

A 1992 Resolution (“Norms for the protection of the environment during the phases of exploration and exploitation of hydrocarbons”) establishes that petroleum operators have to develop prior environmental studies in order to prevent and reduce the environmental impact of exploration and exploitation activities. Future fields -and those in the exploitation phase- have to develop an annual inspection on the works and tasks, with the purpose of protecting the environment, the area and its zone of influence. Firms in charge of the exploration and exploitation areas, based on environmental studies, must submit contingency plans evaluating potential impacts and detailing the preventive measures and actions to be taken in response to possible incidents. In 1997, “Norms for the protection of the environment during the construction, operation, maintenance and abandonment of oil pipelines and complementary installations”, demanded the development of environmental studies, contingency plans and reports on the inspection of polluting incidents.

The Environment Sector, dependent from the Exploration and Exploitation Directorate -Secretariat of Energy- is the agency in charge of analyzing and evaluating environmental studies and contingency plans for the exploration, exploitation, transport and storage of hydrocarbons, updating the environmental databases, interacting with the industry to evaluate the effects of the norms and proposing and updating environmental norms ruling the exploration, exploitation, transport and storage of hydrocarbons.

Natural gas

In 1993, the “Minimum Argentine Security Norms for the Transport and Distribution of Natural Gas and Other Gases by Pipes” established the standards of design, operation and maintenance for transmission and distribution installations of natural gas. As a complement of these norms, the Natural Gas National Regulatory Agency (ENARGAS) issued a Guide of Recommended Practices for the Environmental Protection during the Construction of Gas Pipes and their Operation. Its purpose was to identify the

environmental impact and its mitigation during the design, construction, operation and maintenance of natural gas pipes and complementary installations.

The guide defined the structure of the environmental study to be made prior to the construction of pipelines which, among other things, must consider the geology, physiology, hydrology, vegetation, agriculture and forests of the region. After evaluating the natural characteristics of the region an environmental protection plan must be designed. Finally, auditing will take place during the pipeline construction.

Electricity

Since the mid-1980s the authorities issued several norms concerning environmental protection in the electricity sector. The authority in charge of enacting norms and regulations is the Secretariat of Energy (SE), the enforcement of which is controlled by the National Electricity Regulatory Agency (ENRE). Resolution SE 475/87 demands the undertaking of environmental impact evaluations since the pre-feasibility phase and the establishment of inspection programs during the duration of works. Resolution SE 149/90 set the “Guidelines for Environmental Management of Conventional Thermal Centrals”, which were modified by Resolutions SE 154/93 and 182/95 to make them applicable to private operators. Resolution SE 15/92 standardizes procedures for laying and operating transmission lines of extra-high tension and for the construction of transforming and/or compensating substations.

During the privatization of thermal and hydro-electric generation stations, as well as of transport and distribution systems, operating conditions clauses were adopted in order to guarantee the continuity and strengthening of environmental control norms in the electricity sector. These clauses were included as annexes in public auction sheets for each concession contract. The annex established the obligation to identify the unloading points of liquid effluents -detailing the environmental conditions and evaluating the impact according to the environmental management guidelines in force- and requested the development of a management plan with treatment measures to control any detected problems. Apart from evaluating and approving these tasks, the ENRE is charged with verifying the execution of corrective measures during the lifetime of the plant, including the undertaking of permanent checks on the gaseous pollution and liquid and solid effluents. In the case of hydro-electric generation plants the environmental annex requested a diagnosis of the environmental situation -to become the basis for an environmental management plan-, listed specific actions at the time of the concession, established permanent inspections on water quality and set programs for the handling, treatment and final disposition of residues. At last, in the case of electricity transport and distribution lines the environmental annex set the obligation to develop information systems to facilitate control, to detail environmental conditions and evaluate impacts –based on the respective environmental management guidelines-, to elaborate an action plan with anticipatory measures, and other issues. ENRE is also charged with the duty to inspect the fulfillment of environmental laws in the distribution sector.

**TABLE 4
MAIN ENVIRONMENTAL PROVISIONS IN FDI-INTENSIVE SECTORS**

| | |
|-----------------------|---|
| Mining | <ul style="list-style-type: none"> • The Mining Industry Environmental Protection Act (Law 24585) (1995) establishes: <ul style="list-style-type: none"> ○ the submission and approval by the authorities of a report on the environmental impact of mining projects (sites` environment, projected impact, environmental parameters, mitigation measures); ○ the possibility to suspend activities and even cancel the concession for damage done to the environment; ○ the obligation to constitute a special reserve to mitigate any environmental impact, equivalent to 5% of the operating costs of the project (deductible from the incomes tax determination). • Preventive Environmental System: aimed at informing investors about the environmental conditions at the start-out of a project that must be maintained until the end of the concession. |
| Forestry | <ul style="list-style-type: none"> • Promotional Regime (1992): grants a fixed subsidy per planted hectare, which can be accessed through a bidding process. • Investments in Cultivated Forests Act (Law 25080): <ul style="list-style-type: none"> ○ tax incentives: VAT reimbursements, accelerated amortization procedures, exemptions from local taxes (such as the stamp, real estate, wealth and gross income taxes); ○ fiscal stability for a period of 30 years (can be extended up to 50 years, depending on the region and life-cycle of the implanted species); ○ non-refundable aids: grants of up to 80% of the implantation costs for small production units or units located in disadvantaged areas and up to 20% for larger plantations; ○ submission of reports on environmental impacts of the projects, whenever the forestry extension is larger than 100 hectares. |
| Motor vehicles | <ul style="list-style-type: none"> • Environmental management left completely in hands of private firms |
| Oil | <ul style="list-style-type: none"> • The Resolution “Norms for the protection of the environment during the phases of exploration and exploitation of hydrocarbons” (1992) establishes: <ul style="list-style-type: none"> ○ development of prior environmental studies; ○ annual inspections on works and tasks; ○ presentation of contingency plans evaluating potential impacts and detailing preventive measures and actions to be taken in response to possible incidents. • The Resolution “Norms for the protection of the environment during the construction, operation, maintenance and abandonment of oil pipelines and complementary installations ” (1997) establishes the development of environmental studies, contingency plans and reports on the inspection of polluting incidents. |
| Natural Gas | <ul style="list-style-type: none"> • “Minimum Argentine Security Norms for the Transport and Distribution of Natural Gas and Other Gases by Pipes” (1993): it establishes the standards of design, operation and maintenance for transmission and distribution installations of gas. • “Guide of Recommended Practices for the Environmental Protection during the Construction of gas Pipes and their Operation” (ENARGAS): it establishes: <ul style="list-style-type: none"> ○ the structure of the environmental study prior to the construction of the pipes; ○ the elaboration of plans of environmental protection; ○ the realization of environmental auditing during the construction of the pipes. |
| Electricity | <ul style="list-style-type: none"> • Resolution 475/87 (Secretariat of Energy): it demands: <ul style="list-style-type: none"> ○ the development of environmental impact evaluations from the pre-feasibility phase; ○ the establishment of inspection programs during the duration of the works. • Resolutions SE 149/90, 154/93 and 182/95: “Manual for the Environmental Management in Conventional Thermal Stations”: it establishes basic environmental procedures regarding thermal centrals. • Resolution SE 15/92: it establishes environmental management procedures regarding transmission lines of extra-high tension and transforming and/or compensating substations. • Special annexes contained in public auction sheets of privatizations and concession contracts: they specify environmental control clauses (identify unloading points of liquid effluents, evaluate environmental impacts, develop environmental management plans, design information systems). • National Electricity Regulatory Agency (ENRE): it controls permanently the execution of corrective measures regarding gaseous pollution, liquid and solid effluents, quality of the water and programs of handling and final disposition of residues. |

4 International regimes and FDI

a. *Argentina and the TRIMs Agreement*

For Argentina, the most immediate effect of the TRIMs Agreement was to place a date to phase out the motor vehicles' special regime. The TRIMs Agreement established that certain investment measures -such as domestic content and balanced trade requirements- restricted and distorted international trade and that all WTO members should refrain from imposing trade-related investment measures in violation of GATT Articles III (national treatment) and XI (prohibiting quantitative restrictions). The Agreement required the notification of existing measures as a pre-requisite for a five-years transition period for developing countries.

The Argentine authorities notified the existence of the motor vehicles' sector regime and the list of measures inconsistent with the TRIMs agreement on April 1995. In a second notification made in 1997 Argentina reported more flexible national content requirements and other minor changes in the regime (such as the possibility to compute fixed investment as exports in order to meet balanced trade requirements). Eventually, in December 1999 Argentina requested a seven-year extension of the transition period (until December 31, 2006). The proposal envisaged a gradual elimination of measures (now in a milder version) inconsistent with the TRIMs agreement. Since the original Argentine request was dismissed, the government made a new request for a two-year automatic extension combined with an additional transition period of two years (to end in December 2003). The Argentine request contemplated a progressive elimination of preferential tariff rates (as compared to the Common External Tariff) on auto-parts for domestic producers. Tariff rates were set to converge to the CET by December 2005. After signing a new bilateral agreement with Brazil in September 2002, Argentina speeded up the tariff convergence chronogram and reduced local content requirements.

b. *Investment commitments in GATS*

The General Agreement on Trade in Services (GATS) acknowledges four different modalities under which a service can be provided: cross-border trade, movement of consumers, "commercial presence" and movement of physical persons. Since "commercial presence" (mode of supply 3) is equivalent to FDI in the services sector, the commitments undertaken by Argentina in the GATS have important implications for the treatment of FDI in services activities. The GATS regulates international services "trade" through three channels: a) general commitments on the domestic regulatory framework (as defined in the main body of the agreement); b) annexes concerning selected sectors (such as telecommunications and finance); and c) lists of specific national commitments on market access and national treatment. The most-favored nation clause (MFN) -Art II of GATS- is a general commitment applicable to all sectors and modes of supply. In contrast, commitments on national treatment and market access are sector-specific. Commitments listed for specific sectors can also be subject to explicit limitations. Consequently, as far as national treatment and market access commitments are concerned, the GATS adopted a "positive list" approach. The extent of national commitments for each sector and mode of supply varies from no

commitment (unbound) to no restriction (none). Between these two extremes there is a wide spectrum of limitations that must be explicitly declared, since all exceptions and limitations to commitments explicitly undertaken must be listed on a sector basis (“negative list approach”). Countries can also list horizontal commitments, which are usually of the restrictive type.

Argentina made one exception to MFN treatment (the provision of satellite services is subject to reciprocity) and applied a horizontal restriction to the purchase of real estate in border regions. Sector commitments listed by Argentina show that in most cases the degree of liberalization committed is the maximum possible, with very few exceptions. However, Argentina made no commitments on whole sectors such as Educational Services; Environmental Services; Social and Healthcare Services; Recreational, Cultural and Sporting Services (except audiovisual services); Transportation Services and Other Services.¹⁵

It is interesting to compare the concessions made by Argentina in GATS with those made by other Latin American countries and the developed economies. Table 5 compares market access commitments for all listed sectors and modes of supply, including each services sector and the simple average for all services sectors (the number of commitments undertaken as a share of the total list of services). On average, the share of negotiated commitments is higher in Argentina than in other Mercosur countries and the rest of Latin America, but slightly lower than the average for OECD countries. At a sector level, Argentina made commitments on all sub-sectors of the tourism sector, and in 94.1% of the sub-sectors of financial services. In these two activities Argentina undertook more generous commitments than the average of either other Latin American or OECD countries. In the construction sector Argentina made commitments in 80% of the sub-sectors, a share slightly lower than the average for the OECD countries and Brazil. In trade and distribution Argentine made commitments slightly below the OECD average, but higher than the Latin American average. Sectors in which Argentina made no commitment (except for transportation and recreational services) were also excluded by other Mercosur member states.

¹⁵ Including Services of Membership Organizations, Other Services, Private Households with Employed Persons, and Services Provided by Extraterritorial Organizations and Bodies.

TABLE 5
Market access negotiations in GATS, 1994 (four modes of supply)

| Service sector | Argentina | Brazil | Paraguay | Uruguay | Average OECD | Average Latin America |
|-----------------------------------|--------------|--------------|-------------|-------------|--------------|-----------------------|
| Business | 34.8 | 23.9 | 0.0 | 32.6 | 68.1 | 21.1 |
| Communication | 37.5 | 4.2 | 0.0 | 4.2 | 36.6 | 16.9 |
| Construction | 80.0 | 100.0 | 0.0 | 0.0 | 82.2 | 26.3 |
| Distribution | 60.0 | 60.0 | 0.0 | 0.0 | 65.6 | 10.0 |
| Education | 0.0 | 0.0 | 0.0 | 0.0 | 44.4 | 3.8 |
| Environment | 0.0 | 0.0 | 0.0 | 0.0 | 70.8 | 1.6 |
| Financial services | 94.1 | 76.5 | 35.3 | 17.6 | 88.9 | 44.5 |
| Social and healthcare services | 0.0 | 0.0 | 0.0 | 0.0 | 15.3 | 7.8 |
| Tourism | 100.0 | 25.0 | 75.0 | 75.0 | 72.2 | 67.2 |
| Entertainment, culture and sports | 0.0 | 0.0 | 0.0 | 20.0 | 37.8 | 8.8 |
| Transport | 0.0 | 14.3 | 0.0 | 2.9 | 27.0 | 8.4 |
| Other services | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Average | 33.9 | 25.3 | 9.2 | 12.7 | 50.8 | 18.0 |
| Standard deviation | 40.1 | 34.6 | 23.1 | 22.3 | 28.0 | 19.9 |
| Maximum | 100.0 | 100.0 | 75.0 | 75.0 | 88.9 | 67.2 |
| Minimum | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |

Source: Berlinski (2001)

Table 6 shows the commitments made by Argentina, its Mercosur partners, Chile and Bolivia in the areas of market access and national treatment for all modes of supply. Table 7 provides the same information for mode of supply 3 only (“commercial presence”). The two tables confirm that Argentina has had a more “liberal” policy towards foreign investment in the services sector than its neighbors. As far as commitments on market access for the mode of “commercial presence” is concerned, Argentine negotiated 37.4% of the total possible number of items (155), a share higher than its Southern Cone neighbors. No restriction commitments (“none”) account for nearly 83% of negotiated commitments, a share much higher than those for Brazil and Chile. As a share of total possible commitments, no restriction commitments accounted for 31%, which more than doubles the shares in the cases of Brazil and Chile. Lines 7 (average sector coverage as a share of total possible items) and 8 (average sector coverage as a share of negotiated items) confirm that Argentina made generous offers. In all countries, the commitments made for “commercial presence” were higher than the average for the four modes of supply, probably because governments may have wanted to encourage the provision of services through FDI rather than through any of the other modes of supply.

TABLE 6
Commitments undertaken in GATS + Protocols (four modes of supply)

| Market access | Argentina | Brazil | Paraguay | Uruguay | Bolivia | Chile |
|-------------------------------------|------------------|---------------|-----------------|----------------|----------------|--------------|
| 1. Total number of items | 620 | 620 | 620 | 620 | 620 | 620 |
| 2. Total negotiated commitments | 232 | 224 | 36 | 108 | 112 | 168 |
| 3. Commitments negotiated as "None" | 144 | 50 | 18 | 72 | 27 | 52 |
| 4. (2)/(1)*100 | 37.4 | 36.1 | 5.8 | 17.4 | 18.1 | 27.1 |
| 5. (3)/(2)*100 | 62.1 | 22.3 | 50.0 | 66.7 | 24.1 | 31.0 |
| 6. (3)/(1)*100 | 23.2 | 8.1 | 2.9 | 11.6 | 4.4 | 8.4 |
| 7. Average sector coverage (%) | 29.0 | 16.4 | 3.7 | 14.4 | 8.5 | 13.4 |
| 8. (7)/(4)*100 | 77.4 | 45.4 | 63.9 | 82.4 | 47.2 | 49.4 |
| National treatment | Argentina | Brazil | Paraguay | Uruguay | Bolivia | Chile |
| 1. Total possible items | 620 | 620 | 620 | 620 | 620 | 620 |
| 2. Total negotiated commitments | 232 | 224 | 36 | 108 | 112 | 168 |
| 3. Commitments negotiated as "None" | 154 | 77 | 18 | 81 | 53 | 73 |
| 4. (2)/(1)*100 | 37.4 | 36.1 | 5.8 | 17.4 | 18.1 | 27.1 |
| 5. (3)/(2)*100 | 66.4 | 34.4 | 50.0 | 75.0 | 47.3 | 43.5 |
| 6. (3)/(1)*100 | 24.8 | 12.4 | 2.9 | 13.1 | 8.5 | 11.8 |
| 7. Average sector coverage (%) | 29.8 | 17.7 | 3.6 | 15.2 | 10.4 | 15.3 |
| 8. (7)/(4)*100 | 79.5 | 48.9 | 62.5 | 87.5 | 57.4 | 56.5 |

Source: Berlinski (2001)

As far as national treatment commitments for "commercial presence" are concerned, Argentina remains the leading country measured by the share of negotiated commitments in total possible items. However, the share of no restriction commitments in negotiated commitments was higher in the cases of Uruguay and Chile. In any case, Argentina still records a remarkably high ratio of 93.1%. The more "liberal" stance of Argentina is confirmed by lines 7 and 8. Again, for all countries involved commitments undertaken with regards to mode of supply 3 are more generous than in other modalities.

TABLE 7
Commitments taken under GATS + Protocols: Mode 3 “Commercial Presence”

| Market access | Argentina | Brazil | Paraguay | Uruguay | Bolivia | Chile |
|-------------------------------------|------------------|---------------|-----------------|----------------|----------------|--------------|
| 1. Total number of items | 155 | 155 | 155 | 155 | 155 | 155 |
| 2. Total negotiated commitments | 58 | 56 | 9 | 27 | 28 | 42 |
| 3. Commitments negotiated as “None” | 48 | 26 | 8 | 21 | 8 | 24 |
| 4. (2)/(1)*100 | 37.4 | 36.1 | 5.8 | 17.4 | 18.1 | 27.1 |
| 5. (3)/(2)*100 | 82.8 | 46.4 | 88.9 | 77.8 | 28.6 | 57.1 |
| 6. (3)/(1)*100 | 31.0 | 16.8 | 5.2 | 13.5 | 5.2 | 15.5 |
| 7. Average sector coverage (%) | 33.9 | 28.4 | 5.5 | 15.5 | 11.6 | 21.3 |
| 8. (7)/(4)*100 | 90.5 | 78.6 | 94.4 | 88.9 | 64.3 | 78.6 |
| National treatment | Argentina | Brazil | Paraguay | Uruguay | Bolivia | Chile |
| 1. Total possible items | 155 | 155 | 155 | 155 | 155 | 155 |
| 2. Total negotiated commitments | 58 | 56 | 9 | 27 | 28 | 42 |
| 3. Commitments negotiated as “None” | 54 | 46 | 8 | 27 | 24 | 42 |
| 4. (2)/(1)*100 | 37.4 | 36.1 | 5.8 | 17.4 | 18.1 | 27.1 |
| 5. (3)/(2)*100 | 93.1 | 82.1 | 88.9 | 100.0 | 85.7 | 100.0 |
| 6. (3)/(1)*100 | 34.8 | 29.7 | 5.2 | 17.4 | 15.5 | 27.1 |
| 7. Average sector coverage (%) | 35.8 | 32.6 | 5.2 | 17.4 | 15.8 | 27.1 |
| 8. (7)/(4)*100 | 95.7 | 90.2 | 88.9 | 100.0 | 87.5 | 100.0 |

Source: Berlinski (2001)

c. Regional investment agreements (Mercosur) and current negotiations (FTAA, EU/Mercosur)

Argentina and its Mercosur partners signed several agreements that touch on investment issues. These agreements are the Colonia Protocol on the Reciprocal Promotion and Protection of Investments (1994), the Buenos Aires Protocol on the Promotion and Protection of Investments from Non-Member States (1994), and the Montevideo Protocol on Trade in Services (1997).

The Colonia and Buenos Aires Investment Protocols

In January 1994 Argentina, Brazil, Paraguay and Uruguay signed the Colonia Protocol on the Reciprocal Promotion and Protection of Investments, and in the next August they signed the Buenos Aires Protocol for the Promotion and Protection of Investments from Non-Member States.

The Protocol on the Promotion and Protection of Investments from Non-Member States (Buenos Aires Protocol) established a baseline of general principles of treatment for extra-zone investments. This “minimum baseline approach” was a compromise considering the difficulties posed by the large number and diversity of bilateral investment treaties signed by each Mercosur member state individually. Overall, the Protocol has a structure very similar to a standard BIT. As far as investor-to-state dispute settlement is concerned, the Protocol states that when a dispute cannot be solved amicably, the investor has the right to choose between taking it either to the tribunals of the host country or to international arbitration, the choice being definitive. The final determination will be binding to the parties.

The preamble of the Buenos Aires Protocol states the need to harmonize general principles applied by each member state to extra-zone investors in order to prevent distortions in investment location. However, a clause of the Protocol establishes that “each member state will promote investment from third countries in its own territory and will admit those investments in accordance with its own laws and regulations”. Article III mandates member states to exchange information on future negotiations on new investment promotion agreements and hold consultations in case of substantial changes to the general principles adopted by the Protocol.

The Protocol on the Reciprocal Promotion and Protection of Investments (Colonia Protocol) aimed at establishing treatment standards for investment from member states. The Protocol granted investors from member states most-favored nation and national treatment standards of treatment. Member states also reserved their right to maintain a number of (listed) transitory exceptions to national treatment.¹⁶ The Colonia Protocol determined that member states should not impose performance requirements on investments from member states, but Argentina and Brazil reserved their rights to transitorily maintain such requirements in the case of the motor vehicles industry. The agreement also prohibited expropriations except in cases of public interest and provided it is carried forward in a non-discriminatory way, subject to due legal process and with fair and prompt compensation paid. Investors are also guaranteed the free remittance of profits and principal in convertible currency.

State-to-state controversies on investment issues will be taken to the mechanism for dispute resolution established by the Brasilia Protocol. In the case of investor-to-state disputes, the former may choose to submit the controversy to the local courts, international arbitration (including ICSID or a tribunal formed according to the rules of UNCITRAL) or a regional mechanism that may be eventually developed. The choice will be definitive. When compared to NAFTA’s Chapter XI the Colonia Protocol sets softer requirements concerning the protection of foreign investors. In particular, as far as performance requirements is concerned the Colonia Protocol includes a shorter list of measures forbidden (it does not include, for example, requirements on technology transfers or the exclusive supply of certain regions). In contrast to NAFTA, the Colonia Protocol does not explicitly forbid the requisite that a minimum portion of shares be

¹⁶ Argentina exempted real estate in border regions, air transportation, shipbuilding, nuclear power plants, uranium mining, insurance and fishing.

owned by locals or that senior managers have a certain nationality. The Colonia Protocol also failed to establish disciplines on government incentives.¹⁷

The Montevideo Protocol

The Montevideo Protocol was signed in 1997 and enacted by the Argentine Congress in 2002 (Law 25623). The Protocol consists of five sections. Part I defines the objectives and scope of the agreement. Part II sets general disciplines and obligations. Part III defines the program of liberalization that will be adopted in the services sector. Parts IV and V address institutional issues. Part II grants MFN standard of treatment to all service sectors and suppliers. It also grants national treatment and lists specific market access commitments according to the lists of commitments made by each member state. The Protocol sets a general exception to MFN, national treatment and market access commitments for government procurement. Part III mandates member states to engage in successive negotiating rounds to liberalize services trade in a maximum period of ten years.¹⁸ The Montevideo Protocol adopted the same approach to “trade in services” that the GATS, including the coverage of investment in services as a special mode of supply (mode of supply 3). As far as this mode of supply (“commercial presence”) is concerned, the horizontal and specific commitments made by Argentina in the Montevideo Protocol were practically the same than those made in GATS. However, in some sectors the successive rounds of negotiations introduced additional liberalization commitments, especially in Business services, Construction Services and Financial Services.

The Montevideo, Colonia and Buenos Aires Protocols are void of legal force because they have not been ratified by the required number of member states’ Parliaments yet. In the case of the Colonia and Buenos Aires Protocols this is still the case nearly ten years after signature. Paradoxically, since Argentina has signed and ratified many BITs with third countries, intra-regional investors are treated less favorably than those protected by BITs (there is no BITs in place with Brazil, Paraguay and Uruguay).

The three protocols are also problematic because their subject matter overlaps, opening the door to potential inconsistencies. In effect, both the Montevideo and the Colonia Protocols cover investments in the services sector: whereas the former follows the GATS approach (by extending its coverage to “commercial presence”), the latter provides coverage to all types of investment. Moreover, while the Montevideo Protocol follows the GATS “positive list approach” (member states are committed to grant national treatment and market access only in accordance to their national schedules), the Buenos Aires and Colonia Protocols adopt a “negative list approach” that grants benefits on a universal basis subject to specified exceptions.

¹⁷ Art 7 of the Colonia Protocol states that whenever local legislation or an agreement between an investor and a contracting party provides a more generous treatment than that guaranteed by the Protocol, the former will prevail over the latter.

¹⁸ Since the agreement was signed a total of four rounds were concluded (July 2000; December 2000; December 2001 and December 2003)

d. *Bilateral investment treaties*

In line with the scenario of structural reform and liberalization that dominated the 1990s, between 1992 and 2000 Argentina signed and ratified a total of 51 bilateral investment treaties (BITs). More than half of them (29) were signed with non-OECD countries, with many of which Argentina has very limited investment interests. The larger number of agreements was signed with countries of the Western Hemisphere (15) and the European Union (13). There are also nine agreements signed with Eastern European and Asian countries, respectively, and five more African nations (see Table 8).

TABLE 8
Bilateral investment treaties signed and ratified by Argentina

| Year | | | Law Num |
|------|---------------------------|-----------------------|---------|
| | Non-OECD countries | | |
| | | Africa | |
| 1993 | | Egypt | 24248 |
| 1997 | | Morocco | 24890 |
| 1994 | | Senegal | 24396 |
| 2000 | | South Africa | 25352 |
| 1994 | | Tunez | 24394 |
| | | America | |
| 1995 | | Bolivia | 24458 |
| 1994 | | Chile | 24342 |
| 1999 | | Costa Rica | 25139 |
| 1997 | | Cuba | 24770 |
| 1995 | | Ecuador | 24459 |
| 1998 | | El Salvador | 25023 |
| 2000 | | Guatemala | 25350 |
| 1995 | | Jamaica | 24549 |
| 2000 | | Nicaragua | 25351 |
| 1998 | | Panamá | 24971 |
| 1996 | | Perú | 24680 |
| 1995 | | Venezuela | 24457 |
| | | Asia | |
| 1994 | | Armenia | 24395 |
| 1994 | | China | 24325 |
| 1997 | | Indonesia | 24814 |
| 1997 | | Israel | 24771 |
| 1995 | | Malasya | 24613 |
| 1997 | | Vietnam | 24778 |
| | | Eastern Europe | |
| 1994 | | Bulgaria | 24401 |
| 1995 | | Croatia | 24563 |
| 1998 | | Latvia | 24984 |
| 1995 | | Rumania | 24456 |
| 2000 | | Russia | 25353 |
| 1996 | | Ukraine | 24681 |

| | OECD countries | | | |
|------|----------------|-----------------------|--------------------|-------|
| | | America | | |
| 1992 | | | Canadá | 24125 |
| 1992 | | | United States | 24124 |
| 1998 | | | Mexico | 24972 |
| | | Asia | | |
| 1996 | | | South Korea | 24682 |
| 1994 | | | Turkey | 24340 |
| 1996 | | | Australia | 24728 |
| | | Eastern Europe | | |
| 1994 | | | Hungary | 24335 |
| 1992 | | | Poland | 24101 |
| 1998 | | | Czech Republic | 24983 |
| | | European Union | | |
| 1992 | | | Germany | 24098 |
| 1994 | | | Austria | 24328 |
| 1994 | | | Denmark | 24397 |
| 1992 | | | Spain | 24118 |
| 1995 | | | Finland | 24614 |
| 1992 | | | France | 24100 |
| 1992 | | | Great Britain | 24184 |
| 1992 | | | Italy | 24122 |
| 1994 | | | Netherlands | 24352 |
| 1995 | | | Portugal | 24593 |
| 1992 | | | Sweden | 24117 |
| 1992 | | | Switzerland | 24099 |
| 1992 | | | Belgium-Luxembourg | 24123 |

Source: Authors' elaboration from official sources

All BITs signed by Argentina have a similar structure, but their content differs in the details. A typical BIT defines what constitutes investment, investor, profits and territory; sets “absolute” and “relative” standards of treatment; determines the conditions under which direct and “indirect” expropriations can take place; establishes investors' rights concerning transfers of profits and capital; determines the procedures available for investor-to-state and state-to-state dispute resolution; and states the length of the agreement.

In the case of Argentina, most agreements signed include a broad definition of investment (followed by non-exhaustive list of examples). These investments are typically granted the right to be treated in accordance to certain “absolute” (eg: “fair and equitable”) and “relative” standards (“most-favored nation” and “national treatment”). In particular, the “most-favored nation” standard allows for the “multilateralization” of other BIT clauses covering the definition of investment and rules on transfers and repatriations of capital, expropriation and nationalization, damages and dispute resolution. All BITs signed with OECD countries also include an “umbrella” clause that binds the signatories to fulfill any commitment previously made concerning investments

by the other party.¹⁹ After the agreement signed with Germany (one of the first concluded by Argentina), BITs include no restrictions or safeguard clause concerning the remittance of investment-related funds. Typically, clauses dealing with direct or indirect expropriations (including the unilateral cancellation or the substantial modification of contracts) require that the measure: a) is based on “public utility” or “public interest” considerations and b) is followed by a “prompt, adequate and effective” compensation (or a variation thereof). Finally, the duration of BITs signed by Argentina varies between five and fifteen years, which can be extended either indefinitely or for pre-determined periods.

The major differences in the substantive content of BITs signed by Argentina revolve around four main issues, namely: a) the extent to which agreements confer pre-establishment rights; b) the inclusion of explicit sector exceptions to “relative” standards of treatment; c) the definition of what constitutes an investor; d) the procedures applicable to investor-to-state dispute settlement. As far as pre-establishment rights is concerned there is a difference between the agreements signed with the US and the European countries: whereas the former explicitly covers admission rights, those signed with EU countries apply exclusively to the post-entry phase. This may account for the second difference, namely, that while the BIT signed with the US (and with Mexico) includes explicit sector exceptions and makes MFN and NT principles subject to reciprocity in some areas, BITs signed with EU countries apply across the board to all sectors.²⁰ The BIT signed with the US also states explicitly that it will not impede signatories to enforce measures aimed at regulating investment, provided that they do not go counter the essence of the treaty.²¹ This agreement also prohibited explicitly the enforcement of performance requirements as a condition for the establishment, expansion or maintenance of an investment (subject to specific exceptions, such as the motor vehicles industry in the case of Argentina).

As far as the definition of what constitutes an investor is concerned, most BITs signed by Argentina define as “investor” physical or legal entities having their seat located or being incorporated in one of the parties. When only one of the two criteria is retained, it is generally the seat. The BIT signed with France also covers legal persons “effectively controlled directly or indirectly by nationals or legal persons of one of the contracting parties”.

The fourth difference concerns the procedures that govern investor-to-state dispute settlement. All BITs state that disputes must be first resolved amicably through consultation and negotiation. However, when this stage is concluded unsuccessfully, two alternative approaches are taken. One group of treaties mandates foreign investors to first to submit their complaints to the domestic courts, as a step necessary to have access to international arbitration (this is the case of the BITs signed with Canada,

¹⁹ Variants of the “umbrella” clause are included in the BITs signed with Germany, the US and the UK. See Ymaz Videla (1999).

²⁰ This indiscriminate application may be conflictive with community regulations, such as in the case of air transportation. For a discussion see R. Torrent (1998) and M. Solé (2001).

²¹ The BIT signed with Canada enables the parties to regulate FDI inflows, but such regulations must be applied on a non-discriminatory basis to all foreign investors.

Germany, Italy, Spain, Great Britain and South Korea).²² Another group of agreements, such as those signed with Chile, France, Mexico and the United States, open from the start-out a choice between the local courts and an international arbitration mechanism, the choice being irrevocable.²³

²² See Tawil (2000). Only ten out of fifty-one BITs signed by Argentina make recourse to the local courts a necessary first instance.

²³ The international arbitration mechanisms usually envisaged are either ICSID or an ad-hoc tribunal formed following UNCITRAL rules.

5 Argentina and investor-to-state dispute settlement

As explained in section 4.d), one key ingredient of BITs is the procedures to settle disputes between private investors and host states. These procedures usually refer to international arbitration under the Convention on the Settlement of Investment Disputes between states and nationals of other states (ICSID Convention). Some BITs include alternative forms of arbitration such as UNCITRAL (United Nations Commission on International Trade Law) rules, which may be used at the choice of the investor or when ICSID arbitration is unavailable due to jurisdictional constraints²⁴. Another option is an *ad hoc* arbitration tribunal to be appointed by special agreement and mutual consent of the parties.

The Convention on the Settlement of Investment Disputes Between States and Nationals of other States was opened for signature at Washington, DC on 18 March 1965. Argentina signed the convention on May 1991 and its effects entered into force in November 1994. Argentina's signature of the convention opened the door to the engagement of the International Centre for the Settlement of Disputes in case of conflict with foreign investors. Most of the BITs signed by Argentina make ICSID arbitration available to settle disputes with foreign investors.

All BITs signed by Argentina also require that before taking a dispute either to the local courts or to arbitration the investor and the host state seek to solve the issue amicably through consultations and negotiations. In order to make room for such consultations, a period of time (usually between 6 and 18 months) must elapse before a dispute can be taken to international arbitration. Not all BITs treat equally the recourse to local remedies. One approach increasingly prevalent is to allow the investor to choose between either referring the dispute to local courts or resorting to international arbitration, a choice that "shall be definitive" to prevent forum shopping. Alternatively, international arbitration may be available only after the dispute has been submitted to local courts and a certain period of time has elapsed without a final decision being made. The arbitral tribunal shall decide the dispute in accordance with the provisions of the investment agreement, with reference to the laws of the contracting party involved in the dispute, including its rules on conflict of laws, terms of any specific agreement concluded in relation to such an investment and principles of international law, as may be applicable. The arbitration decision shall be final and/or binding on both parties.

According to Argentine law, when the Government annuls or modifies the terms of an agreement and affects investments in such a way that the firm is actually damaged or its potential to generate profits is impaired, investors have access to two local legal remedies. The first one is to file an *administrative claim* requesting the agency responsible for the decision to reconsider it. If the claim is rejected the investor may file an *administrative appeal (recurso jerárquico)* before a higher hierarchical level. Only when all administrative remedies have been exhausted may the affected party resort to the courts, taking the claim before the Federal Appellate Court in Administrative Contentious Matters and, if the action is dismissed, to the Supreme Court. Investors have a length of time of 30 days to make the administrative claim (*reclamo administrativo*) for any measure that annuls or modifies contract terms, and 15

²⁴ This latter case is that of the investment treaties that Argentina signed with Russia, Cuba and China.

additional days to make an administrative appeal (*recurso jerárquico*) in he fails to succeed in the first instance. If all administrative steps have failed the investor has an addition 90 days to take the issue to the Federal Appellate Court in Administrative Contentious Matters. Theoretically, the judicial process can take approximately two years, but justice is well known in Argentina for its slow motion.

BITs have been recognized to have some utility in informal context –often acting as deterrents- when investors appeal to the treaty, and the threat of arbitration thereof, in the hope of diverting a proposed government measure (Peterson, 2002). However, when they fail in their deterrent role and formal disputes arise, the use of international arbitration raises several problems. Since 2001 Argentina has become a leading case in the use of international arbitration as a result of the disputes triggered by the collapse of the currency board and the policy measures that followed.

Before the collapse of the currency board in December 2001 (which triggered the initiation of a large number of dispute settlement cases) Argentina had been made party to seven arbitration panels at ICSID.²⁵ These panels involved primarily public utility firms alleging a violation of concession contract rights by provincial governments. By the time of writing only one case (“Compañía de Aguas del Aconquija S.A. and Vivendi Universal (previously Compagnie Générale des Eaux) vs the Argentine Republic” –ARB97/03) had reached a final determination (2000), revised and partially annulled in 2002. Other cases were solved by mutual consent (“Lanco International vs the Argentine Republic” -ARB/97/6; “Houston Industries Energy Inc. and others vs. the Argentine Republic” -ARB/98/1; and “Empresa Nacional de Electricidad S.A. (Chile) vs the Argentine Republic” -ARB/99/4). The remainder is still pending.²⁶

After the collapse of the currency board and the policy measures that followed the number of cases launched before ICSID increased markedly. As a result, by January 2004 the Argentine government was a party to at least twenty-five arbitration cases involving claims for a total amount of about US\$4.8bn (see Table A-1). Arbitrators have already been appointed to thirteen of such disputes, but no case is still in its final stages. The only exception is the case “Aguas del Aconquija and Vivendi Universal vs. the Argentine Republic”, originally launched in 1997, in which an *ad-hoc* annulment committee overturned the original award in favor of Argentina. Three additional requests have been recently filed before the Center, but they are still under analysis and

²⁵ The seven cases were: 1) “Compañía de Aguas del Aconquija S.A. and Vivendi Universal (previously Compagnie Générale des Eaux) (France) vs the Argentine Republic (ARB/97/3), concerning the cancellation of a water provision contract in the province of Tucumán; 2) “Lanco International (US) vs the Argentine Republic” (ARB/97/6) concerning a conflict on port terminals in Buenos Aires; 3) “Houston Industries Energy Inc. and others (US) vs. the Argentine Republic” (ARB/98/1) concerning electricity distribution services in the province of Santiago del Estero; 4) Empresa Nacional de Electricidad S.A. (Chile) vs the Argentine Republic” (ARB/99/4) concerning the enforcement of a stamp tax by the province of Neuquén; 5) “CMS Gas Transmission Company (US) vs the Argentine Republic” (ARB/01/8) concerning the suspension of a clause adjusting natural gas transportation charges to the US Producer Price Index; 6) “Azurix Corp. (US) vs the Argentine Republic” (ARB/01/12) concerning the cancellation of a water provision contract in the province of Buenos Aires; and 7) “Enron Corporation and Ponderosa Assets L.P. (US) vs the Argentine Republic” (ARB/01/3) concerning the enforcement of a stamps tax in the provinces of Río Negro and Neuquén.

²⁶ See: Tawil (2003).

have not been registered yet. There are also several UNCITRAL claims against the Argentine government, including three by British investors: “British Gas vs Argentina”, “National Grid vs Argentina” and “AWG Group PLC vs Argentina”.²⁷

Except for a handful of cases²⁸, the vast majority of the arbitrations triggered after 2002 were launched by public utility firms (oil and gas, electricity, water, transportation and telecommunications) claiming a breach of concession contracts. Most of them allege that the mandatory conversion into domestic currency (“*pesificación*”) of public utility rates and the suspension of adjustment clauses indexing domestic public utility rates by the US inflation rate violated existing contracts. Some complainants have also challenged the official ban on foreign exchange remittances abroad (for the most part no longer in force), the mandatory conversion of dollar-denominated bank deposits into Argentine pesos (“*pesificación*”), restrictions on crude oil exports, etc.

However, these issues led not only to international arbitration procedures but also to a myriad of actions launched before the domestic courts by both foreign and domestic investors. An illustrative list of complainants includes the following: a) depositors originally holding dollar-denominated deposits who want to be paid back in the original currency; b) debtors of dollar-denominated loans contracted in “informal” markets (unregulated by the Central Bank) who have not benefited from the mandatory conversion of dollar-denominated liabilities into peso-denominated ones; c) consumers of public utilities trying to stop rises of public utility charges; and d) pension funds challenging the official decision to convert their holdings of dollar-denominated public sector liabilities into peso-denominated ones. Bondholders have also launched judicial complaints in other jurisdictions (such as New York, Italy, etc) in response to the default of public sector debt.

However, not all foreign investors negatively affected by the economic turmoil of 2001-2002 and the policy measures that followed have launched judicial complaints. One major category in this situation is that of foreign-owned commercial banks, who were severely affected by the devaluation, the asymmetric conversion into pesos of dollar-denominated assets and liabilities and the asymmetric indexation of loans.²⁹ Restraint on the part of the commercial banks may be accounted for by the fact that the authorities promised and implemented measures to compensate losses.³⁰ Similarly, many foreign investors that did not had concession contracts signed with the government also refrained from launching arbitration procedures, since any negative consequence of the policy decisions adopted during and after the collapse of the currency board can be assimilated to normal “business risk”. Interestingly, foreign

²⁷ See Peterson (2004)

²⁸ The outliers were: 1) “Siemens AG (Germany) vs the Argentine Republic” (ARB/02/8), concerning the cancellation of a contract to implement a personal identity and immigration centralized databank; 2) “Metalpar (Chile) and Buen Aire (Chile) vs the Argentine Republic” (ARB/03/5) concerning the production and sale of public transportation vehicles; 3) “Continental Casualty Co (US) vs the Argentine Republic” concerning the restraints on transfers; and 4) “Unysis Corp (US) vs. the Argentine Republic” (ARB/03/27) concerning a contract to modernize the information system of the Judiciary.

²⁹ Commercial banks’ dollar-denominated liabilities were converted into pesos at a u\$s1=Ps1.40 exchange rate, while dollar-denominated assets were converted into pesos at a u\$s1=Ps1 rate. Similarly, while some assets were indexed using a wage index, others were indexed using consumer price inflation.

³⁰ Some of the compensatory measures took a long time to be voted by Congress and implemented.

investments continued to arrive to Argentina after the devaluation, the debt default and the collapse of the currency board.³¹

In response to the complaints of the group of foreign investors that started legal actions the Argentine government has followed a complementary approach that includes three main avenues. First, the Office of the General Attorney has raised substantive objections to the way in which investor-to-state dispute settlement procedures operate and its relationship with the domestic legal system.³² Second, the Legal and Technical Secretary (Ministry of Economics) and the Office of the General Attorney are devising legal arguments to defend the Argentine government in each of the demands taken to arbitration before ICSID. Third, the authorities of the Ministry of the Economy and the Ministry of Infrastructure and Public Works are negotiating bilaterally with foreign investors to reach new concession term agreements in exchange for the withdrawal of complaints. However, not all cases before ICSID may be amenable to bilateral negotiations, which suggests that the Argentinean government is likely to face protracted legal procedures in the future.

a Substantive objections

The Argentinean government, through the General Attorney, has raised several substantive objections to the way in which international arbitration works. The general thrust of these objections is to challenge the logic and legality of international arbitration in the context of the Argentine legal system. Although this approach will be of very little use in arbitration proceedings, it may contribute to the broader debate about the role of existing investor-to-state dispute settlement mechanisms. The main objections raised to international arbitration by the Argentine General Attorney are the following:

- i) **Parallel proceedings and lack of jurisprudence:** The proliferation of cases against Argentina after the collapse of the currency board means that the local authorities can be challenged simultaneously by multiple investors on essentially the same policy issues. However, since panels are not strictly bound by the determinations of other (or earlier) panels, the stage may be set for potentially divergent or even conflicting awards on the same issue. The potential for conflict multiplies because some awards have recognized the minority shareholders right to submit disputes with a state to arbitration.³³ This is the case, for example, with the arbitration launched by Camuzzi International (ARB/03/7) and Sempra Energy Internacional and Camuzzi

³¹ The debt default and the fact that Argentina was seen as a pariah in the international system are likely to have “saved” a number of domestic firms from being taken over or purchased by foreign investors. Exceptions were the purchases made by Mexican and Brazilian firms, who took the opportunity to make fresh inroads into the Argentine market (telecommunications in the case of Mexico and food and beverages and petroleum in the case of Brazil).

³² For insights on the Argentinean government views and arguments see Rosatti (2003) and the presentation made by the General Attorney before the Experts Meeting of the OECD Committee on International Investment and Multinational Enterprises (December 2003).

³³ For a discussion see Vinuesa (2002)

International S.A (ARB/02/16 y ARB/03/2), where the two complainants act jointly on the same issues that in the first demand.

- ii) **Transparency:** The Argentine General Attorney is proposing that procedural rules applied by ICSID be revised, exercising more control on the registration of claims and giving adequate publicity to the panels' proceedings and awards, as well as information about the parties' identities and the key details of the dispute. Although ICSID procedures are a little more transparent than others, it still remains true that "...BITs do not meet the basic standards of transparency, legitimacy and accountability and do not require investors to publicly announce their intention to launch a dispute..." (Peterson, 2002).
- iii) **Local courts as a necessary first instance and possibility to appeal awards:** The General Attorney argues that the domestic courts should be the first instance in investor-to-state dispute settlement.³⁴ According to the present official stance, BITs restrict the exercise of domestic jurisdiction on foreign investment matters, thus contravening Argentina's basic constitutional principles (see below). By the same token, if a controversy is submitted to ICSID panel awards it will not be subject to review by domestic courts.³⁵ Since arbitrations will be reviewed exclusively within the ICSID system and will be closed to public scrutiny, the General Attorney proposes the possibility to appeal the awards.
- iv) **The legal hierarchy of BITs and the consent to foreign jurisdiction:** the Argentine General Attorney maintains that BITs belong to the category of treaties referred in Article 75 of the National Constitution, which means that they have a lower hierarchy than the main charter but higher than domestic law. Consequently, according to the General Attorney's view, from a constitutional point of view the content of BITs should be subject to oversight by domestic courts. The key issue here seems to be the congruence between the content of BITs and the Constitution, specifically with Art 27 that mandates the federal government "to strengthen peace and foreign trade relations in conformity with public law principles". The public law principles implicitly referred to are the "principle of legality" (Art. 19), the "principle of equality" (Arts. 15, 16, 75 inc 23 and subsequents) and the "principle of due process" (Art. 18). Moreover, Art. 116 grants the federal

³⁴ This is the case of the BITs signed with Canada, Germany, Italy, Spain, Great Britain and the US. However, the agreement signed with the US states that if six months after the initiation of the controversy the investor has not submitted it to the local courts, he has the right to demand compulsory arbitration.

³⁵ The ICSID Convention determined: i) the presumption *juris tantum* that in the absence of an explicit statement, the parties' consent to abide by international arbitration excludes recourse to any other mechanism; ii) the presumption *juris tantum* that in the absence of an explicit statement, the parties may recourse to international arbitration without previously exhausting domestic administrative or judicial means; iii) that the arbitration panel decides about its own competence either as a "previous matter" or "jointly with the substantive issue"; iv) the findings of the arbitration panel are equivalent to a final determination by a court of the challenged party and must be executed according to the rules in place in the territories in which such findings is to be executed; and v) the findings of the arbitration panel can be clarified, revised or annulled only according to the mechanisms established in the ICSID Convention, which exclude local jurisdiction.

courts competence to settle disputes on issues susceptible to be regulated by international treaties. The Argentine authorities argue that the consent to foreign jurisdiction admitted in other international agreements signed by Argentina (such as Inter-American Convention on Human Rights -known as the Pacto de San José) and in public sector acts of the *juri gestionis* type (in which the state acts within the sphere of patrimonial rights at a same level than physical persons), does not preclude the possibility of *a posteriori* control of constitutionality by a local court. The thrust of the argument is that, traditionally, the consent to foreign jurisdiction implied the possibility to exercise judiciary control by one or more local courts, and that this practice does not go against international law principles. In Rosatti (2003), the General Attorney argues that the combination of BITs and ICSID procedures prevents the exercise of such control. This is argued to be the result of a mixture of elements typically private (investment and the rights thereof) with others characteristically public (BITs among sovereign states).

In sum, the present Argentinean authorities reject the concept that Argentina can anticipatorily (by means of a law approving a BIT) or definitively (by means of a law approving an international arbitration mechanism) waive its right to undertake constitutionality control of certain acts in domestic courts. This line of argument maintains that the BIT-ICSID combination is “hermetic” (cannot be abandoned) and “self-referring” (through self-interpretation), thus making it incompatible with the Argentinean legal system in so far as it prevents an examination of the compatibility between the letter, the interpretation and the enforcement of the treaty on the one hand, and domestic constitutional principles on the other (by definition of a superior legal hierarchy to an international treaty). Indeed, the ICSID convention envisages the intervention of local courts exclusively to enforce the award made by an arbitration panel.

This line of argument is not consensual in Argentina, since most jurists maintain that Argentina has consented to foreign jurisdiction by voluntarily signing BITS and becoming a party to the ICSID convention.³⁶ Moreover, this line of argument will have little effect on the way in which individual dispute settlement cases are addressed by arbitration panels. In effect, whether the commitments undertaken by Argentina are consistent or not with domestic constitutional principles is a domestic matter that does not waive Argentina from the international responsibilities that emerge from the treaties it has signed. Although these criticisms are unlikely to have any effect on individual cases, the issues raised may be of interest in a broader context.

b Economic policy decisions and dispute settlement

As mentioned before, many of the arbitrations to which the Argentine Republic has been made a party were brought before ICSID after a series of policy measures adopted during and after the collapse of the currency board. Apart from its substantive objections to BITs and international arbitration, the Argentine government argues that in order to be actionable under the rules that safeguard investors from direct or indirect

³⁶ See, for example, Tawil (2002)

expropriations these decisions should be proven to have: i) discriminated against aliens, (ii) expropriated investments without due compensation and (iii) impaired foreign investors' access to the local courts. According to the Argentine authorities none of these principles was violated because: i) the challenged measures were across-the-board and no difference was made between domestic and foreign investors; ii) none of the challenged policy measures interfered with ownership rights; and iii) the access of foreign investors to the local courts was not impaired.

The Argentine authorities also maintain that the abandonment of the currency board and the policy measures that followed (such as the freeze in public utility rates and the elimination of indexation to US producer price inflation) were a response to a "state of necessity". They argue that Argentina was undergoing the deepest economic crisis in history and that keeping public utility rates fixed in US dollars and indexed by US producer price inflation would have increased severely the already peaking poverty rates. The authorities also argue that in many cases public utility rates were already the highest in the Western Hemisphere. The official Argentine position maintains that public utilities are a special activity in which the public sector has special prerogatives concerning the execution of contracts and the regulation of tariff rates. Public utility firms are acknowledged to be entitled to apply fair and reasonable charges that cover operating costs and render a reasonable profit, subject to efficiency criteria. Although domestic legislation and contracts already specified a mechanism to adjust charges, the authorities also maintain that such mechanisms must be compatible with a level of tariffs that is reasonable and related to consumers' real incomes. They also argue that public utility firms took investment and financial decisions as part of their regular business operations, the consequences of which cannot be shifted onto the public sector.

The Argentinean authorities argue that majority investors in public utility firms had full access to plenty of information describing the fragilities of the currency board system. According to the official view, despite that fact public utility firms decided to take the risks confirming that the effects of general economic policy measures should be regarded as usual "business risk". The Argentine authorities acknowledge that when the country became a member of ICSID in 1991 an implicit decision was made to accept international arbitration. However, they maintain that the critical situation that shocked Argentina in 2001 and 2002 (its depth and overall reach) made such procedures inapplicable. In order to illustrate their point they argue that firms were not compensated by economic policy decisions taken either in the United States and Great Britain in the 1930s or during the Second World War, when the gold standard was abandoned or currency convertibility was suspended. However, these arguments seem to merge the breach of contract terms (which may be dealt with in the local courts) with a violation of rights conferred by a BIT. This makes unlikely that they can be successfully pursued if arbitration proceedings move forward.³⁷

c Bilateral negotiations

In practice, most of the existing disputes are likely to end up in bilateral negotiations (especially those linked to the provision of public utility services). In effect, as a third

³⁷ See Tawil (2003)

complementary course of action the Argentine authorities have launched negotiations with foreign investors to restructure contracts with the condition that the latter will be agreed upon only after the disputes in ICSID are terminated. For many public utility firms (but not for all foreign investors) it is essential to continue operations. Therefore, an amicable solution may be best suited than a protracted conflict that damages the firm's image with consumers (that will ultimately be affected by higher charges).

After nearly two years of very slow motion, the renegotiation of new contract terms is underway in areas such as water and sanitation, electricity, natural gas and telecommunications. Immediately after the collapse of the currency board, the Argentine authorities pursued a deliberate policy of postponing all tariff rises to prevent further falls in real incomes and reduce the risk of indexation and hyperinflation. This strategy seems to have worked: inflation slowed down markedly after the initial impact of the devaluation (the consumer price index rose by a modest 3% in 2003) and there are no signs of indexation. More recently, the authorities have speeded up the pace of negotiations with foreign investors in public utilities: in February 2004 they announced an increase in natural gas and electricity rates (exclusively for wholesale consumers) as of May 2004. Similarly, they seem to be close to reach transitory agreements with Vivendi Universal on water charges and investment commitments and with basic telecommunication firms. These agreements will be followed by new contract terms with a medium or long-term horizon. The faster rate of economic growth, the real appreciation of the peso and the low inflation rate have all encouraged bilateral negotiations to move forward at a faster and friendlier pace.

6 FDI and economic development: evidence from the Argentine experience

a. *Foreign trade patterns and FDI strategies*

Strategies of local subsidiaries may be grasped by examining their foreign trade performance. These strategies can be classified into four broad categories taking as indicators export propensities and foreign trade flows with other Mercosur partners, among others (Table 9).³⁸ The first category includes foreign firms investing primarily for resource-seeking motives, attracted by Argentina's natural comparative advantages. This group is the smaller as measured by total turnover (in 1997 it accounted for 12% of total sales of foreign firms ranked among the country's 1000 largest companies) and the only one to record foreign trade surpluses. Firms in this category are heavily oriented towards export markets (the average export ratio is higher than 70% and exports typically account for more than 50% of total sales) and import relatively little. Mercosur is a fairly important destination for exports (particularly of petroleum and, to a lesser extent, grains and beef), but resource-seeking foreign investors also export heavily to other markets (the ratio of exports outside the region to total exports is close to 60%). By contrast, Mercosur accounts for a very low share of the total imports made by this group. For this category of firms one plausible hypothesis is that local subsidiaries are only loosely integrated with their parent companies and that inter-subsidiary complementation and/or specialization is infrequent. The nexus of each subsidiary with the rest of the firm consists essentially in the exportation of commodities, which suggests that the predominant mode of operation of this group of companies is stand-alone.

The second category is composed of subsidiaries that have pursued market-seeking strategies and operate in sectors such as trade, telecommunications, transportation and construction. This category of firms is the largest and accounts for 38% of total sales made by subsidiaries ranked among Argentina's 1000 largest companies. Firms in this group export very little and only in a very few sectors they display high import coefficients (imports of final goods in the case of trade, and of equipment and inputs in the case of telecommunication services). Very little of their foreign trade is conducted with other Mercosur countries. Despite the fact that the average import ratio of this group of firms is not high compared to other subsidiaries that operate in Argentina, they record a high trade deficit. Plausibly, firms in this group are unlikely to implement complex inter-subsidiary integration and/or specialization strategies, particularly in good-producing sectors (although such strategies may exist in television, multimedia or telephone services). The prevalent strategy is likely to be that of stand-alone firms as in the previous case.

³⁸ The sample used to compute Table 9 includes the 1,000 largest Argentine firms in 1997 (measured by sales), equivalent to 44% of GDP.

TABLE 9
Foreign firms in Argentina: a sector typology of
their strategies, 1997
(percentage and U\$S million)

| | X ratio ^a | M ratio ^a | X to Mercosur ^b | M from Mercosur ^b | X ratio without Mercosur ^c | Trade balance (mill. dol.) | % sales ^d |
|---|----------------------|----------------------|----------------------------|------------------------------|---------------------------------------|----------------------------|----------------------|
| Total | 15.0 | 18.8 | 50.6 | 19.5 | 9.3 | 802 | 100.0 |
| <i>Resource-seeking strategy</i> | 71.8 | 2.1 | 22.5 | 8.0 | 59.2 | 5,746 | 12.2 |
| Fisheries | 87.8 | 2.9 | 2.1 | 0.0 | 86.1 | 137 | 0.3 |
| Oils and grains | 84.5 | 1.0 | 16.4 | 12.7 | 69.6 | 4,570 | 8.2 |
| Commodities marketing ^e | 81.6 | 2.9 | 7.2 | 2.8 | 75.2 | 180 | 0.5 |
| Leather and manufactures thereof | 76.2 | 8.3 | 5.3 | 22.8 | 73.2 | 194 | 0.4 |
| Petroleum | 45.3 | 1.6 | 54.0 | 1.2 | 26.9 | 522 | 2.3 |
| Meat products | 44.1 | 1.8 | 21.7 | 1.6 | 30.9 | 143 | 0.5 |
| <i>Domestic market-seeking strategies</i> | 0.8 | 16.2 | 12.6 | 11.0 | 0.7 | -2,227 | 38.1 |
| Import trade with technical assistance component ^f | 4.7 | 41.2 | 12.5 | 6.5 | 4.4 | -471 | 1.3 |
| Electricity, gas and water | 0.8 | 5.1 | 12.0 | 10.5 | 0.7 | -134 | 9.1 |
| Construction and engineering | 0.1 | 2.9 | 8.1 | 6.5 | 0.1 | -9 | 0.3 |
| Telephony services | 0.1 | 24.2 | n.c. | 2.5 | 0.1 | -774 | 9.7 |
| Wholesale and retail trade | 0.1 | 32.1 | n.c. | 20.8 | 0.1 | -675 | 11.0 |
| Transport and storage | 0.0 | 3.0 | n.c. | 2.0 | 0.0 | -71 | 2.8 |
| Television and multimedia | 0.0 | 7.4 | n.c. | 0.1 | 0.0 | -67 | 1.1 |
| Other services | 0.0 | 1.6 | n.c. | 11.0 | 0.0 | -26 | 2.8 |
| <i>Moderate-export market-seeking strategy</i> | 15.9 | 29.0 | 59.8 | 27.7 | 6.1 | -1,682 | 25.8 |
| Cars and car parts | 24.8 | 31.7 | 69.3 | 40.7 | 4.3 | -334 | 12.8 |
| Textiles and wearing apparel | 17.5 | 32.1 | 91.3 | 56.3 | 1.5 | -6 | 0.2 |
| Cellulose and paper | 15.1 | 17.2 | 60.6 | 24.9 | 9.5 | -14 | 1.5 |
| Chemical and petrochemical industry | 14.6 | 27.2 | 53.9 | 22.5 | 7.9 | -757 | 8.2 |
| Plastic and rubber products industry | 11.2 | 31.1 | 63.2 | 30.6 | 3.1 | -170 | 1.0 |
| Engineering and machinery | 10.3 | 30.1 | 57.0 | 20.2 | 4.8 | -194 | 1.1 |
| Home electrical/consumer electronics | 10.0 | 38.3 | 80.2 | 17.8 | 1.8 | -207 | 1.0 |
| <i>Low-export market-seeking strategy</i> | 6.7 | 16.6 | 62.0 | 19.9 | 2.3 | -1,052 | 23.4 |
| Glass and non-metallic minerals | 9.1 | 10.2 | 51.2 | 21.0 | 3.8 | -11 | 1.0 |
| Electrical and electronic equipment and machinery | 7.5 | 34.6 | 53.2 | 16.8 | 2.8 | -383 | 2.2 |
| Food, beverages and tobacco | 7.3 | 9.5 | 61.0 | 27.3 | 2.2 | -18 | 10.1 |
| Pharmaceutical industry | 6.0 | 3.5 | 68.3 | 6.8 | 1.7 | -518 | 2.2 |
| Fuels and petroleum derivatives | 4.8 | 7.4 | 72.0 | 16.8 | 2.0 | -87 | 7.5 |
| Publishing/graphics industry | 2.9 | 19.7 | 97.3 | 17.0 | 0.1 | -35 | 0.4 |

Source: Chudnovsky & López (2001)

^a All ratios calculated as an average of individual company ratios. X = exports, M = imports.

^b Exports (imports) to (from) Mercosur as a percentage of total exports (imports)

^c Exports to non-Mercosur destinations as a percentage of total sales

^d Sales of each sector as a percentage of total sales by multinationals.

^f This category covers companies that distribute imported goods (essentially goods connected with information technology and telecommunications and inputs for the agricultural sector) and that, in addition to marketing, provide technical assistance services to purchasers. This category was introduced to distinguish operations of this type from others where the activity is exclusively commercial (retail trade, household goods stores, etc.)

The other two categories (low export market-seeking sectors and moderate-export market-seeking sectors) include firms that account (each group) for 25% of total sales made by foreign firms ranked among the country's 1000 largest companies. Firms in these groups are predominantly oriented towards the domestic market. The two categories were construed using Argentina's average export ratio (9% in 1997) as the dividing line. Firms showing an export-ratio higher than the average were classified in the moderate export market-seeking group, while firms recording an export-ratio equal or lower than the Argentine average were classed as low export market-seeking. Many low-export sectors produce consumer goods (pharmaceuticals; food, beverages and tobacco; electric and electronic equipment; fuels and petroleum derivatives) and rely on competitive strategies strongly based on product differentiation (branding, technical differentiation, advertising and others). Subsidiaries operating in these sectors show an average export-ratio of 6.7% and a much higher average import-ratio (16.6%), a combination leading to large foreign trade deficits. In the case of electrical and electronic equipment and machinery the import-ratio is about five times higher than the export-ratio. In the case of publishing and printing it is more than six times. For this group of firms Mercosur is a major export destination, accounting for 62% of total sales abroad. In contrast, non-Mercosur exports account for a bare 2.3% of total sales. The percentage of imports sourced from Mercosur is much lower (20%).

At last, the moderate export market-seeking sector includes firms following more active foreign trade strategies and seeking stronger ties with Mercosur, particularly on the export side. These companies have an average export-ratio (16%) lower than the import-ratio (29%), a fact that also leads to large trade deficits (particularly in chemicals and petrochemicals). In this category, non-Mercosur exports account for just 6% of total sales, except in chemical/petrochemical and cellulose/paper. In sectors such as household electrical appliances/consumer electronics and textiles, exports are almost exclusively oriented towards Mercosur. This suggests that firms may be pursuing regional market-seeking strategies in the context of very limited integration (on the export side) with the rest of the world.

In summary, Argentine subsidiaries tend to export very little and generally have negative trade balances. In addition, foreign trade (particularly on the export side) is predominantly made with other Mercosur countries. This pattern contrasts with that of locally-owned companies. In effect, in 1997 Argentina recorded an aggregate trade deficit of US\$2.1bn (imports and exports at FOB values). However, while subsidiaries (included among the 1000 largest companies ranked by sales) recorded a trade surplus of US\$803 million, local firms (in the same group) recorded a US\$5bn positive trade balance. Excluding firms exporting commodities or low value-added products (such as oils, grains, leather, meat products, fish, petroleum, wool, fruit, etc.), subsidiaries ran a trade deficit of US\$ 4.9bn (1997), i.e. higher than the trade deficit for the whole economy. Locally-owned companies, by contrast, still recorded a positive, albeit smaller, US\$ 991 million trade surplus.

Part of the explanation for the tendency of subsidiaries (excluding those that export commodities or low value-added products) to run trade deficits may lay in differences in sector distribution as compared to local firms. But this difference does not seem to tell the whole story. In effect, there are sectors where foreign capital is predominant (such as motor vehicles or telecommunications) that display large trade

deficits. However, in other sectors (such as chemicals/petrochemicals, electrical and electronic equipment and machinery, pharmaceutical products, and foods, beverages and tobacco) while subsidiaries also run trade deficits, locally-owned firms record trade surpluses or much smaller trade deficits. Similarly, excluding commodity and low value-added goods producing sectors, subsidiaries display higher import than export-ratios across all sectors. In summary, although the “sector variable” may contribute to explain some of the differences in the balance of trade between the two categories of firms, the “origin of capital” variable is also significant. This suggests that subsidiaries may be more inclined to generate negative trade balances irrespective of the business in which they are engaged than local firms.

b. FDI and the balance of payments

For a foreign capital recipient country like Argentina, inward FDI flows can make a positive contribution to the balance of payments. However, in order to have an adequate picture of the net contribution of FDI to the balance of payments one must also take into account the impact of FDI upon the services account. In the case of Argentina the ratio of profit remittances to total earnings, that reached 44% between 1992 and 1994, increased to 80% between 1995 and 2000 and reached a peak of 529% in 2001 (before the collapse of the currency board).

Table 10 presents an estimate of the aggregate effect of FDI on the Argentine balance of payments for years 1997 and 1998. As discussed in the previous section, while on aggregate subsidiaries record trade deficits³⁹, local firms tend to record trade surpluses (this result can be deducted from the fact that in 1997 and 1998 subsidiaries recorded a trade deficit higher than the Argentine aggregate trade deficit). According to the estimates of Chudnovsky and López (2001), subsidiaries also recorded deficits in the *Real Services*⁴⁰, *Interests*⁴¹ and *Profits and Dividends* accounts. This results in an estimated current account deficit on the part of subsidiaries as high as U\$S 8.5bn in 1997 and U\$S 8.7bn in 1998. If net outflows recorded in the two accounts to which foreign subsidiaries do not contribute (*Tourism and Travel* and *Interests paid by the Public Sector and the Central Bank*) are added up to the previous figures, the resulting total imbalance is higher than the aggregate current account deficit.

Table 10 also shows that in 1997 inward FDI was U\$S700m higher than the estimated current account deficit of subsidiaries. In 1998, however, inward FDI was lower by more than U\$S 1.9bn. Although it is true that subsidiaries also contributed to

³⁹ In order to estimate subsidiaries’ total exports and imports their share among firms placed between position 901 and 1000 (among the 1000 largest firms) was calculated. It was then assumed that this same share was maintained in the case of smaller firms (not included in the original sample).

⁴⁰ The contribution of subsidiaries to the *Transportation* account was estimated on the basis of their share in total foreign trade. The contribution of subsidiaries to the remainder of the *Real Services* account was estimated based on their share in the 1,000 largest firms.

⁴¹ The estimate of the contribution of subsidiaries to the *Interests* account was based, in the case of the non-financial private sector, on their participation in the structure of foreign assets and liabilities (based on the survey of the 500 largest firms conducted by INDEC -1999). In the case of the financial sector the share of foreign banks’ affiliates in total deposits was used as a *proxy*.

finance the balance of payments by increasing their external liabilities, the data available suggests that, except in years of remarkably high inward FDI –such as 1999-, the aggregate contribution of subsidiaries to the balance of payments was probably nil. Moreover, this contribution may be even negative depending on the size of net inflows recorded each year.

TABLE 10
Argentina: FDI and Current Account Deficits, 1997-1998
U\$S million

| Items | 1997 | | 1998 | |
|--|---------------|----------------|---------------|----------------|
| | TNCs | Total | TNCs | Total |
| Goods | | | | |
| Exports FOB | 12 420 | 26 431 | 13 760 | 26 441 |
| Imports FOB | -16 300 | -28 554 | -17 350 | -29 558 |
| Trade Balance | -3 880 | -2 123 | -3 590 | -3 117 |
| Real Services (Net Balance) | -1 460 | -4 326 | -1 570 | -4 398 |
| Tourism and travel | | -1 827 | | -1 935 |
| Net Interest Paid | -750 | -4 215 | -1 140 | -5 062 |
| Net Interest Paid (Central Bank and Public Sector) | | -3 747 | | -4 163 |
| Profits and dividends | -2 369 | -1 998 | -2 414 | -2 316 |
| Transferences | | 338 | | 297 |
| Balance | -8 460 | -12 328 | -8 715 | -14 603 |
| Memo: FDI inflows | | 9 156 | | 6 849 |

Source: Chudnovsky & López (2001)

c. Environmental management and FDI

Subsidiaries are supposed to be in a better position than local firms to meet environmental demands, since they have access to technologies and management methods used by parent companies. Using 1996 data, Chudnovsky, López and Freylejer (2000) conducted a survey of 32 large firms (17 of which foreign-owned) operating in sectors such as chemicals, petrochemicals, motor vehicles, machinery, steel, oil, textiles. More than 90% of the firms surveyed had an environment department, had set their own environmental policies and had established environmental performance targets. In addition, all surveyed firms had staff working exclusively on environmental management issues (often not on a full-time basis) and had established primary and secondary treatment facilities -or similar end-of-pipe facilities. Ninety-two percent of surveyed firms carried out environmental training activities (even though the time and staff allocated to these activities was not very significant yet) and nearly 13% had achieved at least one environmental certificate (ISO 14000). An additional 40% had at least one certificate in progress.

Surveyed firms had also adopted pollution prevention (PP) practices as part of their environmental management activities (EM). Expectedly, the kind of measures adopted were the "easiest" ones: energy, water and input savings; good housekeeping,

maintenance and operating practices; and staff training. More "complex" activities (such as changes in the process of production, adoption of cleaner technologies, raw materials substitution and product redesign) were less frequent. EM was more frequent in export-oriented firms than in those geared towards the domestic market. As expected, there was also a difference in EM between foreign and domestic firms (with active EM being more frequent in the former than in the latter). Nevertheless, as shown by Table 11, subsidiaries also displayed a slightly higher percentage of firms with weak EM.

TABLE 11
Environmental management according to the origin of the firm, percentages

| | Weak EM | Medium EM | Active EM | Total |
|---------------------|----------------|------------------|------------------|--------------|
| Domestic (15 firms) | 14 | 57 | 29 | 100 |
| Foreign (17 firms) | 18 | 35 | 47 | 100 |

Source: Chudnovsky, López & Freylejer (2000)

There is no evidence that subsidiaries with poor EM behaved as "environmental run-away plants". Often, these subsidiaries were acquired recently from their previous owners and their environmental practices are very much those inherited from earlier proprietors. Most foreign firms with an active EM were enforcing global policies as set in their headquarters -although in some cases subsidiaries were autonomous enough to adapt to local circumstances. On average, subsidiaries adopted more PP measures than domestic firms (Table 12). In-house activities have been the main technology source for PP measures, even among subsidiaries -which anyway depend on technology flows from their headquarters.

TABLE 12
Adoption of PP practices according to the origin of the firm, percentages

| | Weak PP management | Medium PP management | Active PP management | Total |
|---------------------|---------------------------|-----------------------------|-----------------------------|--------------|
| Domestic (15 firms) | 29 | 50 | 21 | 100 |
| Foreign (17 firms) | 23.5 | 17.5 | 59 | 100 |

Source: Chudnovsky, López & Freylejer (2000)

For the most recent period there is very little information available on EM. The Second National Survey on innovation activities in the manufacturing industry in 1998-2001 (INDEC, 2003) reported that half of the 1,688 surveyed firms enforced at least one EM measure (mostly related with end-of-pipe facilities, improvements in the use of water and energy and internal or external recycling). Interestingly, while this was the case for 79% of the 403 foreign-owned firms surveyed, only 41% of the 1,285 locally-owned enterprises included in the survey reported at least one EM measure. The main

reasons for the adoption of active EM by foreign-owned firms were local regulations, corporate image and intra-firm standards.

d. FDI, innovation and R&D activities

The first national survey on innovation by manufacturing firms carried out in 1997 (INDEC, 1998) revealed that the private sector responded to the structural reforms of the 1990s by modestly increasing innovation expenditure. In effect, between 1992 and 1996 innovation spending as a share of total sales by firms included in the survey increased from 3 to 3.7% (computing not only R&D activities but also the acquisition of embodied and disembodied technologies, as well as expenditures in training, engineering, design and consultancy). In 1996 the ratio of innovation and R&D expenditures to total sales was slightly higher in the case of domestic firms than of subsidiaries.

The ratio of innovation spending to total sales has been comparatively low, considering that Argentina is a country rich in skills and with a GDP per capita that reached US\$8.000 in the 1990s (before the collapse of the currency board). This was a consequence of the fact that during the expansionary period modern technologies were basically embodied in imports of capital goods and inward FDI. Overall, during the late 1990s total spending in science and technology reached only 0.5% of GDP.

The second national survey (INDEC, 2003) reported that 96% of foreign firms developed innovation activities in 1998-2001⁴². In the case of locally-owned firms this share was only 73%⁴³. A similar picture emerged as regards R&D: while 52% of foreign firms undertook such kind of activities, this was the case for only 38% of locally-owned firms. According to the second survey, between 1998 and 2001 the ratio of R&D expenditures to total sales increased from 0.10% to 0.22% among foreign-owned firms, but contracted from 0.23% to 0.20% among locally-owned companies.

Domestic firms still spend relatively more on innovation activities than foreign-owned firms. However, between 1998 and 2001 the ratio of innovation expenditures to total sales contracted in both groups: from 2.05 to 1.58 in the case of foreign firms and from 2.28 to 1.91 in the case of domestic firms. Subsidiaries rely primarily on parent companies to upgrade their technologies, limiting local efforts to the adaptation of products and production processes to domestic conditions, reduce production costs and mitigate pollution. Overall, the extent of innovation activities is very limited and public policies have made very little to turn innovation and research into a key component of a national competitiveness strategy. In particular, in the case of the motor vehicles industry, the absence of policies targeted at fostering innovation by subsidiaries and suppliers missed the opportunity to increase the benefits of generous government subsidies.

⁴² They include acquisition of capital goods, software and hardware, technology transfer agreements, engineering and industrial design, training, consultancies and management for innovation purposes.

⁴³ The number of subsidiaries undertaking innovation activities in the Second Innovation Survey is higher than in the first because of take-overs.

e. *Spillovers from FDI*⁴⁴

Often, subsidiaries enjoy ownership advantages that enable them to compete successfully in host markets. Nonetheless, they are not always able to reap all the benefits stemming from these advantages, generating spillovers (positive and negative) for domestic firms. Examples of spillovers include the following:

a) A larger human capital stock in host countries due to the growing availability of workers, technicians and engineers trained by subsidiaries. This spillover will only materialize if the demand for skilled labor grows and the labor force trained by subsidiaries is effectively employed by local firms or open their own businesses.

b) Subsidiaries often have higher productivity than local competitors. Horizontal or intra-industry spillovers may arise when domestic firms are induced to increase productivity or improve product quality by increasing innovative efforts and/or acquiring machinery, equipment and disembodied technologies. Although subsidiaries have an incentive to prevent these spillovers from occurring, knowledge leakages (in areas such as work-process organization, product design, marketing, etc.) can help domestic firms to increase productivity.

c) As opposed to b), foreign subsidiaries may have an incentive to promote vertical or inter-industry spillovers. The diffusion of knowledge across sectors may not necessarily reduce subsidiaries' profits and may contribute to raise them if it helps customers and/or suppliers to become more competitive and efficient. For example, subsidiaries may offer suppliers technical and marketing assistance as well as information, training, etc, thus contributing to create positive spillovers. However, domestic firms may be affected negatively if they are displaced from the market because subsidiaries have a bias in favor of foreign suppliers.

d) Subsidiaries may also lead to negative horizontal spillovers when, for example, domestic firms are forced to cut back production –lowering productivity when they operate with high fixed costs- or even leave the market as a result of the increasing presence of foreign firms (Aitken and Harrison, 1999).

A lot of studies to assess the importance of spillovers were carried out in recent years. The older generation of studies, based on cross-section data, generally found evidence of positive spillover effects. However, this approach was poorly suited to make a dynamic assessment of the impact of FDI. Moreover, these studies failed to take into account the composition of FDI by sector of destination. Consequently, these studies usually found a positive correlation between the presence of subsidiaries and domestic productivity levels even in the absence of positive spillovers, simply because foreign investors were concentrated in high productivity sectors.

⁴⁴ This section is based on Chudnovsky, López & Rossi (2004)

By contrast, the most recent studies are based on panel data techniques and lead to more heterogeneous conclusions. In effect, while many of them have found negative spillover effects, others show that positive spillovers are possible but contingent on several factors, many of them related to technology and innovation variables. These new findings have left the academic debate on the size and direction of FDI spillovers open. Blomström and Kokko (1996) conclude that “the evidence on spillovers from FDI in host countries suggests that such effects exist and that [they] may be substantial both within and between industries, but there is no strong evidence about their exact nature and magnitude”. Similarly, Rodrik (1999) argues that the empirical evidence does not corroborate the “extravagant claims about positive spillovers from FDI” (p.37).

Chudnovsky, López and Rossi (2004) examined the extent to which the growing presence of subsidiaries in Argentina helped or hindered the restructuring process undertaken by domestic firms in response to trade liberalization and stiffer competition in the local market. Using a detailed database for 722 manufacturing firms for years 1992, 1996, 1998 and 2001⁴⁵, the study aimed at measuring the existence of horizontal and vertical (backward) spillovers due to the presence of subsidiaries in the manufacturing sector. The main findings of the study were the following:

- a) as it was expected, subsidiaries show higher productivity levels than domestic firms;
- b) using standard econometric techniques the study found that the rising presence of subsidiaries tends to generate neither positive nor negative spillovers for domestic firms;
- c) however, domestic firms with high absorption capabilities enjoyed positive spillovers from the presence of subsidiaries, while firms with low absorption capabilities suffered negative spillovers. These findings are not only valid for horizontal or intra-sector spillovers (as concluded by most received literature), but also for vertical (or backward) spillovers.
- d) higher levels of innovation activity by subsidiaries generated negative rather than positive spillovers for domestic firms. However, by combining indicators of domestic firms’ absorption capabilities and the innovative behavior of subsidiaries it was possible to show that the former was a key determinant of the sign of spillovers. In other words, when domestic firms had high absorption capabilities they were able to reap positive spillovers, irrespective of the innovative behavior of subsidiaries.

The main policy lesson that emerges from these findings is that developing countries that attract significant inward FDI flows should not take for granted that domestic firms will automatically benefit from the presence of subsidiaries. This will only be the case when absorption capabilities on the part of domestic firms make possible to benefit from both horizontal and vertical spillovers. Hence, public policies aimed at fostering such capabilities (i.e., the promotion of the use of skilled labor and modern EM in SMEs, the undertaking of in-house innovative activities, the networking

⁴⁵ These firms accounted for 29% of sales, 27% of employment and 24% of exports of the manufacturing sector in 1992-1996.

of agents and institutions of the National Innovation System, the development of value-added chains, etc.) ought to be at the top of a development-focused policy agenda.

In the Argentine case some of these policies were implemented several years after the main structural reforms were launched, they were backed with very limited financial and human resources and were enforced in an adverse macroeconomic environment. In the present situation, in which economic activity is recovering and a significant number of firms have increased their absorption capabilities, firm, innovation, environmental and investment policies should be re-assessed and upgraded to foster higher domestic investments in fixed and intangible assets and make sure that the substantial stock of FDI that Argentina received during the boom of the 1990s generates positive spillovers for the rest of the economy.

7 Overview and policy implications

During the 1990s Argentina became one of the major destinations of FDI in the developing world. This boom coincided with a period of far-reaching structural reform that included trade and capital account liberalization, a large-scale privatization program and ambitious market deregulation. As far as the FDI policy regime was concerned, Argentina also undertook significant international commitments: it was an enthusiastic supporter of a Multilateral Investment Agreement (MIA), it undertook comparatively generous commitments in the GATS and it signed a large number of bilateral investment treaties (BITs). This combination makes Argentina an interesting case study of the relationship between FDI flows, FDI regulatory regimes and development.

According to the conventional view, a growing volume of FDI should make a vital contribution to economic development through the provision of financial resources, the upgrading of production and trade capabilities and modernization. However, the Argentine experience suggests that the contribution of FDI to the host country's economic development depends not only on volume, but also on "quality" and the conditions under which foreign firms operate. In effect, the experience of Argentina suggests that the kind of investments made, the impact of foreign firms on trade patterns and the balance of payments, the technological contributions and spillovers on domestic firms, as well as present and past policies, have a decisive influence on the developmental impact of FDI.

In Argentina the main FDI recipient sectors were services (geared to the domestic market) and the exploitation of natural resources (largely for the world market). Although the manufacturing industry also received significant FDI inflows as compared to the preceding period, industry was no longer a major sector of destination as it had been the case during the import-substitution phase. Inward FDI in the 1990s was also strongly associated with privatizations, mainly of public utilities. One remarkable feature in the case of Argentina is the weight of take-overs and acquisitions as FDI vehicles. In effect, in the 1990-2002 period sales of cross-border mergers and acquisitions (including privatizations) accounted for 76% of total FDI inflows. As result of the FDI boom via take-overs, acquisitions and privatization, foreign firms increased their share in the sales of the 1,000 largest firms from 39% in 1992 to 67 % in 2000.

Since the enactment of the Foreign Investment Act (Law 21382) in the mid-1970s Argentina implemented FDI-friendly policies. Inward FDI flows have faced no sector restrictions (except for a few exceptions such as mass media and real estate in border areas), foreign firms were left free to decide over their preferred type of involvement (wholly-owned subsidiaries, majority or minority joint-ventures, licensing agreements), and they also enjoyed non-discriminatory access to investment, tax and other incentives. Foreign firms have also faced no restrictions to make profit and capital remittances abroad, except for temporary restrictions enforced during periods of balance of payments crisis (such as in 2001-2002, most of them already removed).

Privatizations in the 1990s strongly encouraged the participation of foreign firms, since bid terms required that would-be operators had previous experience in the area. This encouraged the participation of foreign public utility firms, frequently in association with local investors. Paradoxically, in areas such as telecommunications, water and sanitation, air transportation and electricity generation and distribution foreign operators included state-owned firms. The privatization program was very much influenced by the overall economic environment in which it was carried forward. The privatization of telecommunications, for example, was undertaken in 1990 in the middle of a deep economic crisis and in an environment characterized by poor credibility and negative expectations. As a result, the contract included modest investment commitments, a loosely defined regulatory framework, a sharp increase in telephone charges (since 1991 fixed in US dollars and indexed to the US inflation) and a guaranteed monopoly position for more than a decade. The privatization of the national flag airline, Aerolíneas Argentinas, also ended in bankruptcy. The privatizations undertaken later in the decade (such as natural gas and electricity generation and distribution) were better designed. However, they all included peculiar features such as rates fixed in foreign currency and adjustment clauses indexed to the US producer price index. These features would create *havoc* at the turn of the decade, when the currency board regime collapsed.

During the 1990s Argentina enforced a small number of special sector regimes that offered incentives to both domestic and foreign investors. Two of these regimes were focused on natural resource-intensive sectors (mining and forestry), while the third targeted the motor vehicles industry. The mining and forestry regimes were based on tax and foreign trade incentives as well as on tax, foreign exchange and import tariffs stability. In the case of mining, the new regulatory framework presided over a remarkable increase in FDI inflows, especially between 1992 and 1996. However, apart from the incentives granted to mining companies the regime made no effort to develop the value-added chain. The result was that the comparatively large investments channeled into the mining industry remained isolated from the rest of the economy. The forestry regime also encouraged a remarkable increase in the area implanted and in total investments in the sector. Nonetheless, apart from allegations of misuse of tax relief in some projects, the regime seems to have encouraged additional fragmentation of the productive process. As in the mining sector, little progress was made towards creating forward linkages by developing the value-added chain from forestry to wood-based products.

The auto industry, in turn, benefited from a special regime that consisted of a combination of import quotas, investment and balanced trade requirements for established manufacturers, minimum content requirements for domestically-manufactured vehicles and preferential import tariffs for established producers. The program aimed at promoting specialization and fostering competitiveness among auto manufacturers, taking advantage of the rapid increase in domestic demand that followed economic stabilization. The motor vehicles regime was complemented with bilateral administered trade agreement with Brazil, which significantly increased bilateral trade. The agreement established a duty-free balanced trade program for locally produced vehicles subject to minimum domestic content requirements. Later in the decade, the bilateral agreement evolved into a common Mercosur regime for the motor vehicles industry.

Considering the initial constraints and the situation of the auto industry worldwide, the motor vehicles regime was quite successful in attracting market-seeking and promoting some efficiency-seeking investment. This encouraged a regional division of labor and the integration of the Argentine automobile industry into the wider framework of Mercosur. However, the regime also presented problems. On the one hand, it encouraged structural overcapacity and inhibited reaching the scale economies necessary to compete in world markets (economies of specialization were not enough to compensate for small scale). On the other, the absence of initiatives to develop local suppliers increased the import content of vehicles made in Argentina and reduced the scope for positive spillovers in the local economy. As a result, a market-seeking and efficiency-seeking investment regime such as that for the automobile industry shared the same problems of resource-based promotion regimes such as those implemented in the mining and forestry industries. Moreover, subsidy-competition among districts was a major issue in the motor vehicles sector, with Brazilian sub-federal governments aggressively using tax incentives to attract foreign investors.

Environmental protection levels as set by national and provincial legislation are very demanding and comparable to international standards. There are well-defined environmental laws regarding water quality, liquid effluents, hazardous wastes and PCBs, as well as some specific environmental provisions in the mining and forestry regimes and in the oil, gas and electricity sectors. Nevertheless, enforcement is loose and the institutional responsibility for environmental management is poorly organized. As a result, Argentina's pollution levels are higher than what one would expect for a middle-income country. Loose environmental enforcement, however, has not been used as an explicit policy geared to attract FDI.

Apart from the reforms made in the domestic FDI policy regime, the Argentine government was an active participant in FDI-related international negotiations and fora. As discussed in the paper, Argentina made generous commitments in the General Agreement on Trade in Services (GATS) (mode of supply 3) and generally followed a pro-foreign investor stance in TRIMs' negotiations. Similarly, Argentina participated as an observer in the Multilateral Agreement on Investment (MAI) negotiations at the OECD, being one of the few developing countries that made explicit its intention of join as soon as an agreement was reached. Argentina was also one of the leading signatories of bilateral investment treaties (BITs) in the developing world. One key ingredient of BITs is

the agreement of procedures to settle disputes between private investors and host states through international arbitration. With a total of fifty-one agreements signed and ratified, Argentina has become a leading case in the use of international arbitration procedures to settle disputes with foreign investors. In effect, following the collapse of the currency board the authorities took a number of decisions (such as the mandatory “*pesificación*” and freeze of public utility rates and the annulment of public utility rates’ adjustment clauses based on US producer prices) that triggered a succession of claims, of which Argentina currently faces no less than twenty-five.

The Argentine government has faced these claims by following three simultaneous roads. First, it has put forward substantive and procedural objections to the way in which investor-to-state dispute settlement works and its relation with the domestic legal system. The general thrust of these criticisms has been to challenge the logic and domestic “legality” of international arbitration. However, although it may help to politicize the issue and thus contribute to the broader debate over the role of investor-to-state dispute settlement mechanisms, this approach is likely to be of little use if the cases move forward.

The second road consists in formally answering the demands made by investors to arbitration panels. In this case the line that seems to have been taken by the Argentine authorities is that the challenged economic policy measures were enforced on an across-the-board basis without making differences between domestic and foreign investors, with no interference with ownership rights and without restricting foreign investors’ right to have access to the local courts. The Argentine authorities also maintain that the collapse of the currency board and the policy measures that followed were a response to a “state of necessity” and to the “public good”. Moreover, the government argues that public utilities are activities in which the state has special prerogatives to execute contracts and regulate tariff rates. The government also maintains that concessionaries made decisions as part of their regular business endeavors and that the responsibility for their consequences cannot be transferred to the public sector. Despite the fact that many of the issues raised by the authorities challenge the idea that foreign investors should be able to rely on contractual commitments that were imbalanced and unreasonable from the very beginning, it is unlikely that this approach will succeed in arbitration panels. Similarly, it is unlikely that arbitration panels will be the adequate fora where to examine under which conditions such contractual commitments could be abrogated. Indeed, as the Argentine authorities themselves acknowledge, when the country became a member of ICSID in 1991 a decision was made to accept an arbitration mechanism whenever the rights conferred by a BIT were violated. In any case, the Argentine dilemma underlines the fact that investment controversies usually go beyond legal principles.

This links to the third road taken by the authorities, which consists in negotiating bilaterally with the complainants in order to agree on new terms for public utility concessions in exchange for withdrawal of complaints. Through bilateral negotiations the Argentine authorities hope to reach new contract terms and end most of the disputes currently before ICSID. Presumably, foreign investors, particularly public utility firms which originally had long-term contracts, are also willing to reach a satisfactory solution and continue to exploit their concessions. Not all complaints before ICSID will

be amenable to negotiation, though, which suggests that the Argentine government will remain busy in arbitration panels for some years to come.

The contribution of FDI to Argentine economic development can be evaluated based on its impacts on foreign trade, the balance of payments, environmental management, innovation activities and spillovers⁴⁶. On aggregate, subsidiaries tend to export very little and to post negative trade balances. This pattern contrasts with that of locally-owned companies, that usually record aggregate trade surpluses. Part of the explanation for the tendency of subsidiaries (excluding those that export commodities or low value-added products) to run trade deficits as opposed to locally-owned firms may lay in differences in the sector distribution of each group. However, this does not seem to tell the whole story. In effect, those sectors in which foreign subsidiaries are predominant (such as motor vehicles or telecommunications) display large trade deficits. However, in other sectors such as chemicals/petrochemicals, electrical and electronic equipment and machinery, pharmaceutical products, and foods, beverages and tobacco foreign affiliates run deficits but locally-owned firms tend to run surpluses or much smaller trade deficits. Similarly, excluding commodity and low value-added goods' producing sectors, subsidiaries display higher import than export ratios in all activities. In summary, although the "sector variable" may contribute to explain differences between trade balances of the two categories of firms, the "origin of capital" variable is also significant. This suggests that subsidiaries may be more prone to generate negative trade balances irrespective of the business sector in which they are engaged.

For a foreign capital recipient country like Argentina, FDI inflows can make a positive contribution to the balance of payments. However, the overall picture changes when the deficit in the services balance is also taken into account. In effect, the ratio of profit remittances to total earnings was remarkably high even before the collapse of the currency board. Although foreign investors may also contribute to finance the balance of payments through external debt, the data available suggest that, except in years of remarkably high inward FDI flows -as it was the case in 1999-, the global contribution of subsidiaries to the balance of payments was probably nil and, what is more important, may have been even negative depending on the size of new inflows.

Since they have access to the modern technologies and management methods employed by parent companies, subsidiaries are arguably in a better position than local firms to cope with environmental demands. A survey conducted in Argentina showed that firms adopted pollution prevention (PP) initiatives as part of their environmental management practices (EM). Expectedly, the measures adopted were the "easiest" ones: energy, water and input savings; good housekeeping, maintenance and operating practices; and staff training. More "complex" actions (such as process changes, adoption of cleaner technologies, raw material substitution and product reformulation) were less frequent. EM was more frequent in export-oriented firms than in those oriented towards the domestic market. The survey showed that a higher share of foreign firms

⁴⁶ Although the reduction in FDI inflows since 1999 coincided with the sharp increase in poverty levels in Argentina to reach record figures in 2001 and 2002, it is not possible to assume any negative relationship between these two variables. The several factors accounting for the increase in poverty levels that started in the mid 1990s have been analyzed in various studies but to our knowledge FDI inflows as such have not been considered as a major factor.

implemented EM practices as compared to domestic firms, but also that a higher percentage of foreign firms displayed “weak” EM. However, it is unlikely that subsidiaries with poor EM practices were “environmental run-away plants”. Instead, many of them had been recently acquired from local owners and their environmental practices were very much inherited from the past. Most foreign firms with an active EM were enforcing global policies set at their headquarters -although in some cases subsidiaries had the autonomy to adapt to local circumstances. On average, PP measures were adopted more frequently by subsidiaries than by domestic firms. In-house activities were the main source of PP technologies, even among subsidiaries.

Paradoxically, in the 1990s domestic manufacturing firms spent relatively more in innovation activities than their foreign-owned counterparts. In Argentina the ratio of innovation spending to total sales has been too low, especially for a country rich in skills and with a GDP per capita that during the 1990s reached U\$8.000. This was a consequence of the fact that during the period of rapid economic growth technological upgrading was basically embodied in capital goods imports and inward FDI flows. On aggregate, during the late 1990s total spending in science and technology amounted to only 0.5% of GDP. Between 1998 and 2001 the ratio of innovation expenditures to total sales contracted in domestic firms as well as in subsidiaries.

Subsidiaries rely primarily on parent companies to upgrade their technology and constrain their local efforts to adapt products and production processes to domestic conditions, reduce production costs and mitigate pollution. However, the evidence shows that these efforts were very limited and that public policies have made very little to turn innovation and research into key components of a national strategy to foster competitiveness. In particular, in the case of the motor vehicles industry the absence of policies targeted at fostering innovation by subsidiaries and suppliers has missed the opportunity to increase the benefits of generous government subsidies

Subsidiaries usually have ownership advantages that allow them to successfully compete in host markets. Nonetheless, since they are not always able to reap the full benefits that stem from those advantages, they may generate positive spillovers for domestic firms. However, the activity of foreign affiliates can also create negative spillovers for domestic firms. In this respect the evidence is inconclusive. In fact, some studies using panel data techniques found negative spillover effects, while others found positive spillovers contingent on factors related to technological and innovation variables. Chudnovsky, López and Rossi (2004) found that it is by no means granted that domestic firms will automatically benefit from the presence of foreign subsidiaries. This will be the case only when absorption capabilities on the part of domestic firms make possible to take advantage of horizontal and vertical spillovers. Hence, public policies aimed at fostering such capabilities (such as promoting the use of skilled labor and EM in SMEs, undertaking in-house innovative activities, networking between agents and institutions of the national innovation system, development of value-added chains, etc.) should be at the top of the policy agenda.

Summing up, as far as its consequences are concerned, the boom of inward FDI experienced by Argentina in the 1990s shows a mixed picture. On the one hand, relatively large flows of inward FDI contributed modestly to finance the balance of payments deficit, foreign firms have on balance introduced modern environmental

management practices and domestic firms with high absorption capabilities have benefited from positive spillovers. On the other, subsidiaries have exported very little (except in the case of natural resource-seeking investments) and have recorded negative trade balances not only in services but also in manufactures. This negative trade balance and a high profits remittance ratio have substantially reduced the positive contribution of inward FDI to balance of payments financing.

FDI public policies were effective in making Argentina attractive for foreign investors and drawing in a significant volume of FDI. However, part of this process took place in a context and under conditions that were unsustainable. To a large extent, FDI policies implemented in Argentina during the 1990s were inspired in a *naïve* view according to which foreign capital inflows would *per se* improve economic performance and Argentina's insertion into the world economy. The investor-friendly policy regime that had been in place since the mid-1970s was complemented in the 1990s by an enthusiastic support of a MIA, a generous offer in the GATS and a myriad of BITs geared to grant investors favorable standards of treatment and international arbitration rights. Policies of domestic reform, such as an aggressive privatization program, also targeted foreign investors by making their participation in bidding consortia mandatory. In order to encourage the participation of the private sector (both foreign and domestic) many privatizations offered concessionaries very favorable terms and made them subject to a feeble regulatory regime. When conditions changed at the turn of the century the explosive consequences of this policy approach became self-evident: a limited but significant group of foreign investors tried to make their rights valid through international arbitration.

In contrast to their efficacy to attract large inward FDI flows during the 1990s, FDI policies (and the structural reforms carried out in the 1990s) were less effective to transform FDI into an instrument of sustainable development. This conclusion applies even to areas in which the authorities implemented targeted incentives to attract foreign investment, such as the sector policies for the mining, forestry and motor vehicles industries. In effect, in all these sectors foreign and total investments increased remarkably. They also experienced significant modernization and technological upgrading. However, their ability to generate positive spillovers for the rest of the economy and to develop the value-added chain remained very limited. To a large extent, these shortcomings must be attributed to the absence of targeted public policies for both resource-seeking and efficiency seeking investments.

In the future, inward FDI flows to Argentina will be lower than in the 1990s. However, Argentina still has a significant stock of FDI that could make a more significant contribution to economic development than it was the case in the recent past. In order to make it happen a different set of policies are required, including initiatives to deal with enterprise, innovation, environment and investment issues. These policies are not yet in the public agenda. Implementing them successfully will demand not only an adequate design, but also much better institutions in the public and private sector in order to implement them adequately.

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**ANNEX
TABLE A-1
ARGENTINA: DISPUTE SETTLEMENT CASES**

| Case Num | Firm and Nationality | Registration date of the demand | Date of constitution of the panel | Investment object of the controversy | Issues |
|-----------------|---|--|--|---|--|
| ARB/97/03 | Aguas de Aconquija S.A. (France) and Vivendi Universal (France) | 23/10/03 | | Public concession agreement to provide water and sanitation services in the province of Tucumán | This case was opened in 19/2/97, to be followed by an annulment request (23/2/01), an annulment award (23/8/02) and a resubmission of the case (23/10/03). Damages caused by the cancellation of the concession. |
| ARB/01/3 | Enron Corporation (US) and Ponderosa Assets L.P. (US) | 11/4/01 | 1/11/01 | Public concession agreements to transport natural gas in the provinces of Rio Negro and Neuquén | Enforcement of a local stamps tax. |
| ARB/01/8 | CMS Gas Transmission Company (US) | 24/8/01 | 11/1/02 | Public concession agreement to transport natural gas | Suspension of the clause that indexed fees according to the US producer price index (PPI) |
| ARB/01/12 | Azurix Corporation (US) | 23/10/01 | 8/4/02 | Public concession agreement to distribute water and provide sanitation services in the province of Buenos Aires | Violation of the terms of the concession, particularly those concerning the calculation of rates. |

| | | | | | |
|-------------------------|---|----------------------|--------------------|--|---|
| ARB/02/1 | LG&E Energy Corp (US), LG&E Capital Corp. (US) and LG&E International Inc (US). | 31/1/02 | 13/11/02 | Public concession agreement to transport natural gas | Violation of the terms of the agreement due to the suspension of the clauses that indexed fees according to the US PPI. |
| ARB/02/8 | Siemens AG (Germany) | 17/7/02 | 19/12/02 | Public concession agreement to produce national identity cards and run a data bank | Violation of contract terms. |
| ARB/02/16 y ARB/03/2 | Sempre Energy Internacional (US) and Camuzzi International S.A (Luxembourg) | 6/12/02 y 27/2/03 | 5/5/03 y 5/5/03 | Public concession agreement to distribute natural gas. The two cases are treated jointly because the parties decided to submit them to the same panel because they involve the same investment, the same measures and both firms are represented by the same law firm. | Sempre Energy Internacional is owner of 43.09% of Sodigas Sur S.A. and Sodigas Pampeana S.A., which in turn are owners of Camuzzi Gas del Sur (90%) and Camuzzi Gas Pampeana (86.09%). Camuzzi Internarional S.A. is owner of 56.91% of Sodigas Sur S.A. and Sodigas Pampeana S.A.. Violation of the terms of the agreement due to the suspension of the clauses that indexed fees according to the US PPI , fixed rates in US dollars and impossibility to make transfers abroad. |
| ARB/01/17 | AES Corporation (US) | 19/12/02 | 3/6/03 | Public concession agreement for electricity generation and distribution. | Violation of the terms of the agreement due to the suspension of the clauses that indexed fees according to the US PPI , fixed rates in US dollars and impossibility to make transfers abroad. |

| | | | | | |
|-----------|--|---------|----------|---|--|
| ARB/03/5 | Metalpar S.A. (Chile) and Buen Aire S.A. (Chile) | 7/4/03 | 26/9/03 | Manufacturing and sale of public transportation equipment. | Not available. |
| ARB/03/7 | Camuzzi Internacional S.A. (Luxembourg) | 23/4/03 | 7/10/03 | Public concession agreement for electricity generation. | Violation of the terms of the agreement due to the suspension of the clauses that indexed fees according to the US PPI , fixed rates in US dollars and impossibility to make transfers abroad. |
| ARB/03/9 | Continental Casualty Company (US) | 22/5/03 | 6/10/03 | Owner of a domestic insurance company (CNA) | Claims loss of investments and impossibility to make transfers abroad. |
| ARB/03/10 | Gas Natural SDG S.A. (Spain) | 29/5/03 | 10/11/03 | Public concession agreement to distribute natural gas. | Violation of the terms of the agreement due to the suspension of the clauses that indexed fees according to the US PPI , fixed rates in US dollars and impossibility to make transfers abroad. |
| ARB/03/12 | Pioneer Natural Resources Company (US), Pioneer Natural Resources Argentina (US) y Pioneer Natural Resources Tierra del Fuego (US) | 5/6/03 | Pending | Public concession agreement to explore and exploit hydrocarbons and electricity in the province of Tierra del Fuego | Claim of losses due to the mandatory conversion of dollar-denominated deposits into peso-denominated deposits, foreign exchange controls, impossibility to make transfers abroad, enforcement of restrictions on crude oil exports, implementation of a stamps tax by the provinces of Rio Negro and Tierra del Fuego and impossibility to deduct taxes. |

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| ARB/03/13 | Pan American Energy LLC (US) y BP Argentina Exploration Company (UK) | 6/6/03 | Pending | Public concession agreements to explore and exploit hydrocarbons and electricity in the provinces of Tierra del Fuego, Santa Cruz, Chubut, Neuquén, Salta, La Pampa and the South Atlantic. | Losses due to the mandatory conversion of dollar-denominated into peso-denominated deposits, foreign exchange controls, impossibility to make transfers abroad, enforcement of restrictions on crude oil exports, inappropriate implementation of a local tax by several districts and impossibility to deduct taxes. |
| ARB/03/15 | El Paso Energy International Corporation (US) | 12/6/03 | Pending | Public concession agreements to explore and exploit hydrocarbons and electricity in several districts. | Losses due to the mandatory conversion of dollar-denominated into peso-denominated deposits, foreign exchange controls, impossibility to make transfers abroad, enforcement of restrictions on crude oil exports, inappropriate implementation of a local tax by several districts and impossibility to deduct taxes. |
| ARB/03/17 | Aguas Provinciales de Santa Fe S.A. (France), Suez (France), Sociedad General de Aguas de Barcelona S. A. (Spain) and Interagua Servicios Integrales de Agua S.A. (Spain) | 17/7/03 | Pending | Public concession agreement to provide water services in the province of Santa Fe. | Losses due to the change in conditions agreed at the time of the concession, caused by measures adopted under Law 25561. |

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| ARB/03/18 | Aguas Cordobesas S.A.(France), Suez (Francia), y Sociedad General de Aguas de Barcelona S.A. (Spain) | 17/7/03 | Pending | Public concession agreement to provide water services in the province of Córdoba. | Claim of losses due to the change in conditions agreed at the time of the concession, caused by measures adopted under Law 25561. |
| ARB/03/19 | Aguas Argentina S.A. (France), Suez (Francia), Sociedad General de Aguas de Barcelona S.A. (Spain) and Vivendi Universal S.A. (France) | 17/7/03 | Pending | Public concession agreement to provide water services. | Claim of losses due to the change in conditions agreed at the time of the concession, caused by measures adopted under Law 25561. |
| ARB/03/20 | Telefónica S.A. (Spain) | 21/7/03 | Pending | Public concession agreement to provide local and international telephone and data transmission services | Claim of losses for the impossibility to apply the agreed mechanism to calculate rates, the mandatory conversion of rates into pesos and the suspension of indexation clauses. |
| ARB/03/21 | Enerjis S.A. (Chile) | 22/7/03 | Pending | Public concession agreement to generate and distribute electricity | Violation of the terms of the agreement due to the suspension of the clauses that indexed fees according to the US PPI , fixed rates in US dollars and impossibility to make transfers abroad. |
| ARB/03/22 | EDF Internacional S.A. (France) and Electricidad Argentina S.A. (France) | 12/8/03 | Pending | Public concession agreement to distribute electricity | Violation of the terms of the agreement due to the suspension of the clauses that indexed fees according to the US PPI , fixed rates in US dollars and impossibility to make transfers abroad. |

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| ARB/03/23 | EDF Internacional (France), SAUR Internacional S.A. (France) and Leon Participaciones S.A. (Francia) | 12/8/03 | Pending | Public concession agreement to distribute electricity | Violation of the terms of the agreement due to the suspension of the clauses that indexed fees according to the US PPI , fixed rates in US dollars and impossibility to make transfers abroad. |
| ARB/03/27 | Unisys Corporation (US) | 15/10/03 | Pending | Contract to supply informatic services to modernize the Judiciary | Not available |
| ARB/04/01 | Total S.A (France) | 22/01/04 | Pending | Public concession agreement to generate electricity and transport natural gas. | Negative impact on local business of the devaluation, the tariff freeze and the mandatory conversion of contracts into peso-denominated ones. |

Sources: prepared by the authors based on official sources