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"TRADE POLICY ISSUES IN BRAZIL IN THE 1990s"

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resumo

O trabalho discute os determinantes do desempenho do comércio exterior brasileiro nos anos 80 com ênfase nos efeitos da instabilidade macroecnômica, nas políticas relativas às importações, e na dinâmica das exportações e do investimento direto estrangeiro. Diante desse quadro o trabalho procura aprofundar a discussão de temas relacionados à reforma da política comercial nos anos 90.

abstract

The paper discusses the determinats of Brazilian trade performance in the 1980s with an emphasis on the effects of macroeconomic instability, on imports policies and on the dinanmics of exports and foriegn direct investment. In light of this, the paper discusses themes related to the reform of commercial policies to be advanced in the 1990s.

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Trade policy issues in Brazil in the 1990s

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Glossary of acronyms

BEFIEX	Comissão para a Concessão de Benefícios Fiscais e Programas Especiais de Exportação (Special Program of Fiscal Incentives for Exportes)
BNDES	Banco Nacional de Desenvolvimento Econômico a Social (National Economic and Social Development Bank)
CACEX	Carteira de Comércio Exterior (Foreign Trade Department, Bank of Brazil)
CDI	Conselho de Desenvolvimento Industrial (Industrial Development Council)
CIP	Conselho Interministerial de Preços (Interministry Council of Prices)
CPA	Comissão de Política Aduaneira (Tariff Policy Commision)
FINAME	Agência Especial de Financiamento Industrial (Special Agency for Industrial Financing)
FINEX	Fundo de Financiamento a Exportação (Export Financing Fund)
GDP	Gross Domestic Product
INPI	Instituto Nacional de Propriedade Industrial (National Industrial Property Institute)
IOF	Imposto sobre Operações Financeiras (Tax on Financial Operations)
ISI	Import substitution industrialization
MNC	Multinational Corporation
PDTI	Programas de Desenvolvimento Tecnológico Industrial (Industrial Technology Development Programs)
PSE	Public Sector Enterprise
PSI	Programas Setoriais Integrados (Integrated Sectoral Programs)
SEI	Secretaria Especial de Informática (Special Secretariy of Informatics)
SUDAM	Superitendência Desenvolvimento da Amazônia (Superintendency for the Development of the Amazon Region)
SUDENE	Superitendência de Desenvolvimento do Nordeste (Superintendency for the Northeast Region)

ZFM	Zona Franca de Manaus (Manaus Free Zone)

Trade policy issues in Brazil in the 1990s

Winston Fritsch & Gustavo H. B. Franco

Introduction

The aim of this study is to discuss the causes of observed structural changes in Brazilian trade in manufactures experienced during the past decade, and address the emerging issues in the ongoing debate on the reform of the trade policy and trade-related industrial policy instruments in Brazil. The study is divided into two parts, besides this introduction.

Part one, dealing with past events, is basically descriptive and analitically positive. The first two sections provide factual backgroung information. Section 1.1 very briefly describes the record of trade performance in the eighties whose outstanding features were the reinforcement of past trends towards import compression and fast export growth and diversification. Section 1.2 shows how the unstable macroeconomic environment influenced the design of measures shaping the trade regime over the past decade. Next the main determinants of the behavior of imports and exports are sequentially discussed. First we describe the evolution of the vast array of trade and industrial policy instruments which made up Brazil's restrictive structure of import protection in the eighties (section 1.3). Second, we review the evidence stemming from the debate on the sources of Brazil's increasing competitiveness in manufactures (section 1.4), and the related debate on the role of foreign direct investment (FDI) in this process (section 1.5).

Part two, on the other hand, is essentially forward looking and analitically normative. Therefore, it begins in section 2.1 by squarelly addressing the issues emerging in the ongoing debate on the reform of trade and industrial policies. As the reader will notice the main focus of criticism was not placed on the static allocative inefficiencies generated by the established policy regime, a point at which most of orthodox attack on import substitution (IS) policies was levelled[1]. Instead, following the logic of the design of the Brazilian trade and industrial policy reforms, the main

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[1] By an entensive list of authors starting by Bergsman (1970) in the Brazilian case study in the pioneering 1970 OECD project on trade policies in developing countries.

focus of discontent had to do with the handicaps the policy regime imposes to the attainment of dynamic efficiency gains by stiffling the competitive environment facing domestic producers. It then goes on to describe (section 2.2) the ongoing trade and industrial policy reforms launched by the Collor government. Section 2.3 addresses issues related to the design of the reforms given the peculiarities of the Brazilian trade regime, the macroeconomic constraints and implications of the reforms as far as industrial targeting is concerned. In section 2.4 the prospects of FDI and the debate on the reform of the regulatory framework affecting FDI are discussed.

Part one: The determinants of trade performance in the 1980s

1.1) The record of trade performance: an overview

Brazilian total exports, defined in quantum terms, grew 5.5% annually between 1980 and 1989 with manufactured and semi-manufactured exports growing somewhat faster - 9.5% and 7.5% per year respectively. This rather sound performance, whose determinants will be discussed in great detail in section 1.4, compares favourably to that of Latin America, and even with world trade growth, although it was markedly inferior to Brazilian past performance - 17.9% accomplished in 1966-80 - and also to that of many Asian NICs in the eighties. Imports, on the other hand, declined significantly over the 1980s. Total imports fell by 2.3% annually, with the non-fuel groups contributing to the decline more heavily in the early part of the decade. In the later part, with the weakening of oil prices and the advance of domestic oil production, non-fuel imports recovered though without increasing overall imports. As a result of these influences Brazil underwent an impressive trade balance adjustment, from a small surplus of US$780 million and a current account deficit of US$ 16.3 billion in 1982 to a trade surplus of US$ 13.1 billion and a slightly positive current account surplus of US$44 million in 1984.

However, there were important changes both in the importance of international trade for Brazil's manufacturing sector as well as in the composition of manufactured exports which reinforced trends already perceived since the seventies[1]. On the one hand, the long term compression of imports as a proportion of total domestic consumption of manufactures, which accompanied Brazil's post-war industrialization and was only temporarily reversed between the mid-sixties and the first oil shock, proceeded to reach impressively low levels. As can be seen in Table 1, import penetration ratios fell to levels near self sufficiency.

[1] For a detailed analysis of Brazil's trade performance in th 1970-1985 period, see Fritsch & Franco (1989a).

Table 1
Import penetration and export propensity ratios in manufacturing, 1980-1989

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
dollars										
(1) Output	176.6	184.7	199.8	138.7	149.6	171.5	194.6	208.8	230.2	296.8
(2) Exports	17.1	19.8	17.0	19.0	23.9	22.1	19.6	23.1	30.1	35.6
(3) Imports	12.4	10.3	8.8	6.8	6.2	6.8	9.8	9.9	10.2	15.8
Export propensities = (2) / (1) (%)										
	9.69	10.7	8.51	13.7	16.0	12.9	10.1	11.1	13.1	12.0
Import penetration = (3)/[(1)-(2)+(3)] (%)										
	7.20	5.91	4.59	5.37	4.73	4.34	4.39	4.89	4.84	5.72.

Source: CACEX and IBGE. We thank Leda Hanh for her kind help in processing the raw data.

On the other hand, manufactured exports grew as a proportion of total demand of domestic manufacturing, and diversified towards higher value added products. The increased "tradeability" of Brazilian manufacturing can be clearly seen by the rising export propensities shown in Table 1, though the shrinkage of manufactured imports conveys the opposite impression, thus reinforcing the ambiguities usually found as regards the proper characterization of outward orientation[1]. Nevertheless, it is generally agreed that Brazil at the end of the eighties is, according to a recent World Bank report, "relatively underinvolved in the international division of labour"[2], an impression shared by a recent and widely distributed document of the influential The Federation of Industries of the State of São Paulo - FIESP[3].

The changes in the composition of manufactured exports can be seen in Table 2, where exports are classified according to the presumed source of competitiveness following a methodology developed in OECD (1987). The classification into the five groups in the table is somewhat arbitrary, but certainly informative. Table 2 shows the changing composition of exports towards manufactured products and, and within it, away from resource based industries and towards scale intensive (heavy industry) and the high-tech groups. The most significant gain was in the heavy industry groups

[1] For an extended discussion of such ambiguities see Helleiner (1991).
[2] The World Bank (1989, p. 6).
[3] FIESP (1990, pp. 50-56).

where chemicals, paper and pulp, plastics, steel and transport material (excluding aerospace) have all experienced very significant increases in their shares of manufactured exports. The continuation of the export upgrade initiated in the late sixties is clearly perceived, though it is interesting to note that the profile of Brazilian manufactured exports is rather similar to the one of "non-core" OECD countries - the OECD* group in the table - i. e. the Scandinavian countries plus Australia, Belgium and The Netherlands.

Table 2
Composition of Brazilian Exports, 1970-1988.
(% shares)

	1970[1]	1977-78	1984-85			1987-88
			Brazil	OCDE	OCDE*	
• natural resource based	75.4	43.4	36.1	13.5	38.3	28.8
• labor intensive	9.1	15.7	14.6	9.8	8.3	13.6
• scale intensive (heavy industry)	9.8	24.8	33.0	33.8	41.2	39.8
• differentiated products	5.6	12.4	10.5	27.3	7.9	11.5
• science based	...	3.9	5.5	15.5	4.4	6.4
Memo: manufacturing as % of total	38.0	46.0	57.0	-	-	70.0

[1] shares for 1970 are not strictly comparable. In the "natural resource based" group only the food industry (ISIC 31) is considered. Within "labor intensive" only ISIC groups 32 and 33 (textiles, aparel, wood and furniture). In "heavy industry" groups ISIC 34-37 are assembled, and the share for diferentiated products" encompasses all ISIC 38 industries. For later periods the classification is slightly different, including more branches in resource based industries (taken from the scale intensive group) and in labor intensive. ISIC group 38 is divided into diferentiated and science based groups. For 1984-85 fourth and fifth columns show shares of OCDE and "non-core OCDE, marked as OCDE *, a group composed by Australia, Belgium, Finland, The Netherlands, Norway and Sweden.
Sources: Fritsch & Franco (1989a, p. 44) and CNI (1989).

The forces underlying these changes are manifold. On the whole, however, they result from a combination of two broad set of causes. The first are the stimuli given to producers of tradable goods by macroeconomic policies aimed at external adjustment from the beginning of the balance of payments difficulties which culminated into the debt crisis. Sharp devaluations and cyclical contractions of domestic demand are among macroconomic influences in trade performance discussed at length in section 1.4.1. Besides, a fundamental determinant of the behavior of imports was the further tightening of already highly repressive import policies regulated by

a vast array of trade and industrial policy instruments following the second oil shock. Likewise, as far as export behavior is concerned, an important factor was certainly the maintenance of a battery of export incentives built from the second half of the the sixties, while explain fluctuations around the growth trend. Section 1.3 reviews the changes undergone in the trade regime through the 1980s.

The second set of causes - especially important in explaining long term trends in the growth and composition of exports - is the host of structural factors underlying the patterns of competitiveness in Brazilian manufacturing since the late sixties. These factors range from dynamic economies generated during the process of industrial maturation to exogenous influences shaping the integration of the most dynamic industrial firms with global industry, a process to which local affiliates of MNCs have played an important role. This is the object of sections 1.4.2 and 1.5. It is now apt to give the reader a bird-eye's view of the evolution of the unstable macroeconomic environment in which these transformations took place.

1.2) The unstable macroeconomic environment

Macroeconomic instability has been an outstanding feature of 1980s not only in Brazil but in Latin America more generally. Growth performance has been dismal in Latin America- annual rates of 1.1% for 1980-89 and per capita income falling by 0.7% yearly. Brazil has done much better, maintaining income per capita more or less constant through the eighties, but her performance contrasts quite unfavourably with that of past decades - 9.6% per year in 1966-80. High inflation was also a distinguished feature of the 1980s in Latin America, and Brazil is among the five cases of hyperinflation registered in the late 1980s[1], there being, therefore, as many such cases in Latin America as in Central Europe in the troubled 1920s.

[1] That also include Bolivia, Peru, Argentina, and Nicaragua. In fact, considering the monthly average rate of the last six months of the thirteen known hyperinflation cases, Brazil's early nineties' rates classifies as the 7th worst hyperinflation in history. Cf. Franco (1990a).

The origins of macroeconomic instability in Latin America, and certainly in Brazil, are connected, like Central Europe in the 1920s, to a perverse combination of outstanding economic challenges posed by external shocks and increased indebtedness with the governments' loss of decision capacity on economic issues. It is interesting to note, regarding the Brazilian experience, that while the external transfer - i. e. , the generation of trade surpluses in the magnitude needed to accomodate debt payments - was mostly accomplished in the early eighties thanks to real devaluations and recessions, the same cannot be said with respect to the internal transfer - i. e. , the fiscal burden of debt transfers, which was substantially increased through the 1980s as governments assumed the responsibility for debt servicing - which implied a marked deterioration of fiscal accounts. The lack of resolution of the internal transfer within the realm of the public budget, that is, the incapacity to find a domestic distribution of the burdens through the tax system, is key to the fiscal crisis that Brazil experienced during the Sarney presidency (1985-1990).

Brazilian macroeconomic performance in the 1980s had indeed two distinct moments: up to the second semester of 1984, macroeconomic, as well as trade and industrial policies, were heavily influenced by the process of **external** adjustment to cummulative impact of the second oil shock, the explosive increase in dollar interest rates and the collapse of commodity prices whose costs were exacerbated by the sudden drying up of financial flows from foreign banks from 1982. Afterwards, with the end of the military cycle, locally developed fiscal imbalances emerged with a growing severity during the Sarney administration, in connection with the domestic macroeconomic disequilibria stemming from difficulties in solving the **domestic** transfer problem, and slowly became the key macroeconomic issue as the 1980s wore out.

The economy's impressive external adjustment record after 1982 - which comprised the rapid transformation of a deficit in trade in goods and non-factor services of nerly 8 % of GDP in 1982 into a small surplus in 1984 - involved a combination of measures such as devaluations with expenditure reducing measures, as well as very aggressive export promotion policies and restrictions to imports, as shown in detail in the next section. As the export led recovery set forth in the second semester of 1984, seemed not to endanger the trade surplus, attention shifted to domestic constraints to

growth. On the one hand, the expenditure switching measures had the effect of sharply raising inflation, and on the other, it was clear then that as long as net foreign capital inflows remained depressed in relation to pre-crisis levels the recovery of domestic investment would have to be financed through an increase in national savings, whose share in output had fallen continuously since the beginning of the decade, a fact that could be almost entirely attributed to a sharp fall in government savings.

Yet, during the Sarney's years, there was a continuous deterioration of the fiscal accounts. The first impact came from the erosion of government revenues which fell from 24.7% of GDP in 1980-1983 to 19.9% in 1988, mostly by virtue of tax expenditures and faulty indexation of tax revenues (the Oliveira-Tanzi effect). Since the costs of both domestic and external debt had their importance reduced through the Sarney years[1], and public investment has suffered a slight decline, the generation of a fiscal deficit (operational concept) estimated at about 9.1% of GDP at the beginning of the Collor administration seems to derive from increases in current expenditure.

These developments stem from the undeveloped state of fiscal and monetary institutions in Brazil, which are not designed to enhance discipline especially in a regime of open political competition for public money, a weakness magnified during Sarney's term by virtue of his fragile political basis and authority. Yet, parallel to the uncontrolled multiplication of current and tax expenditures during these years, one observes a marked deterioration of the government's regulatory capabilities in trade and industrial policies, reflecting the granting of public benefits - fiscal and regulatory - much beyond the public sector's financial and administrative capacity. Fiscal disarray, and its most dramatic expression - hyperinflation - precluded the recuperation of the level of gross fixed capital formation from the depressed levels of the early 1980s deteriorating long run growth prospects of the Brazilian economy

The hyperinflation of 1989-90 represents indeed an important discontinuity in Brazilian economic life, a major economic dislocation causing profund changes in economic modes of behavior and institutions. Brazil is

[1] Mostly by the underindexing of the domestic debt, whose service claimed only 0.3% of GDP in 1987. In 1989 it may have reached 1% given the special circumstances of that year. Interest payments on the public external debt were reduced from 3.4% of GDP in 1984 to 1.6% in 1989.

entering the 1990s with a full agenda of reforms, which include a thorough redefinition of the public sector's role in the economy, including the design of institutions capable of enforcing fiscal and monetary discipline, a sweeping deregulation of trade and industrial policies and the privatization of public enterprises and services. These reforms should be seen as essential preconditions for inflation stabilization, without which growth ressumption on the basis of a recovery of private investment is not likely to obtain.

However, even if Brazil happens to overcome the difficulties in the design and implementation of stabilization policies, and confidence and investment are restored, there remains the equally dramatic problem of sustaining long term growth. This process should involve the reversal of the recent erosion in public sector savings, which along with an adequate international economic environment, an adequate handling of debt rescheduling process and outward looking policies to avoid foreign exchange shortages, are the essential pre-conditions for restoring Brazil's high historical growth rates in the future. The situation is further complicated, however, by the fact that, although the "Brazilian Model" delivered an extraordinarily high economic performance, standards of living and social indicators are still appallingly low, a fact which is vividly perceived now by a large spectrum of politically represented opinion as disfunctional for the process of democratic institutional building the country is engaged since the end of the military regime in 1985. Changing the present extreme rates of inequality will require long-term distributive policies and an increase in the supply of basic social services which, if not properly backed by a recovery of savings, may prove incompatible with the imperative of restoring the investment ratio to trend levels. The political feasibility of a sustained recovery will, therefore, depend on political decisions regarding the classical trade-off between growth and distribution.

1.3. The evolution of the regulatory framework: an overview

This section describes the evolution of Brazilian trade and industrial policy framework over the past decade. It is argued that parallel to the increased stringency of the trade regime, its decentralization, increasingly

discretionary character and its emphasis on exceptions have produced a symbiosis between trade and industrial policy that results in turning trade reform much more of a far reaching change with respect to past practices than one could *a priori* expect.

1.3.1) The trade regime

Since the reforms of the mid-sixties, which corrected the most glaring distortions of the incentive structure of the heyday of the IS period, the Brazilian trade regime displayed three basic features. First, despite tariff cuts implemented in the late 60s a still very restrictive import regime based on discretionary import licensing, which was used as a partial but crucial element of industrial policies; second, very active export incentive schemes including subsidies and import duty exemptions; last, but not least, a fairly well managed crawling peg which avoided, except for very brief episodes, the damaging exchange rate appreciations typical of the early post-war years.

When looked at in a long run perspective, the genesis of these distinguishing features of the Brazilian post-war trade regime can be said to have been largely conditioned by constraints and opportunities opened by developments in the world economy. Indeed, the basic characteristics of the import regime can be traced to the early post-war external shocks affecting the balance of payments position when, as in many other developing countries, policy makers revealed a preference for quantitative restrictions (QRs) and multiple exchange rates over tariffs and real devaluations. During the sixties, however, the increasing awareness of the importance of exploring the possibilities open by a fast expanding volume of world trade in manufactures made for a move towards a more balanced structure of incentives. This change was mostly based on the introduction of export promotion schemes, exchange rate unification and the adoption of a crawling peg and, to a lesser extent, to import liberalization comprising the relaxing of QRs and further tariff cuts.

The move towards greater import liberalization, cautiously begun in the mid-sixties, was cut short by the first oil shock, which restored the traditional balance of payments rationale for the maintenance of generalized QRs. In addition to tariff surcharges raising the minimum tariff to over 100%,

measures of restriction included an interest-free, 180-day advance deposits (at a time in which inflation was running at 30% annually) for importers, the creation of a list of banned imports and the registration of importers with CACEX (the import licensing authority) and an increasing use of local content provisions enforced by CACEX and by a host of other government agencies such as development banks, state enterprises, and regulatory bodies.

This time, however, contrary to the early post-war years, the concern with manufactured export performance was reinforced by the threat of a binding foreign exchange constraint. In fact, although the initial response to the 1974 shock was naturally defensive, leading to the tightening of administered import restraints, the sustained recovery of world trade in manufactures and the need to increase foreign exchance earnings gave a renewed impetus to more outward oriented policies, almost exclusively based on enhanced export incentives.

The second oil shock came when, by virtue of external and internal political pressures, export subsidies and the advance deposit on imports were about to be phased out, and these movements were reversed. In addition, in 1979 a *maxi* devaluation marked the first significant departure from the crawling peg regime since its inception in 1968. In the next year two new instruments were created: the IOF (*Imposto sobre Operações Financeiras*, a tax on financial operations) with a rate of 15% was applied to imports and the Central Bank established a mininum maturity requirement for external financing for imports without foreign exchange cover[1]. In 1981, thanks to previous efforts of importers' registration, CACEX started to require the submission of an annual import program on the part of all registered importers. Thus, after the second oil shock, the multiplicity of instruments of administrative control over the import process given to CACEX considerably increased its discretionary powers: it actually had powers to suspend discretionarily the issuance of imports licenses for all imports[2].

Another important change in the nature of instruments of Brazilian import policy during the 1970s and early 1980s was the marked

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[1] Excluding those effected as part of foreign investments into Brazil.

[2] Except those under "special regimes" such as draw-back arragements and LAIA agreements, imports for the Manaus Free Zone and government purchases, for exemple. A more detailed discussion of "special" import regimes is made below.

diversification and decentralization of administrative obstacles to imports. The several instruments mentioned above, in addition to many sector specific restrictions, were superimposed on these administered by CACEX and managed often on an uncoordinated fashion by different government agencies following sometimes conflicting criteria. Foreign exchange rationing, evidently, pervased the actions of all, but industrial policy conceptions governing the use of this wide array of discretionary instruments very often conflicted, as it will be discussed below.

The stringency with which CACEX exercised its import control powers varied markedly with the balance of payments position, being very difficult to capture it quantitatively, particularly in view of the difficulties to evaluate the extent of bureaucratic harassment. However, it is reasonably accurate to say that, although some relaxation could be observed on import restrictions over the past few years, until 1990, when the current liberalization experiment to be described in Part Two began, the coverage of QRs, as already mentioned, remained at 100%. The stringency was certainly increased in 1982 when negative lists and financing requirements were considerably tightened, but in 1984, when the balance of payments position exhibited a marked improvement, these same restrictions were relaxed. In addition, import programs required by CACEX were deemed only "indicative" and tariff surcharges in effect since 1976 - in the range of 30% to 100% - were replaced by increased tariff rates, with additions in the range of 10% to 30%.

An important consequence of the operation of these administrative import controls was to make the relatively high Brazilian tariffs a secondary line of defense within the Brazilian protectionist system. Consumer goods were compressed by the low priority conferred to them in the issue of import licenses, or faced outright prohibition, while intermediate and capital goods had to jump the tough additional barrier of the so-called "law of similars". According to this unwritten law any imported product should be subject to an exam to assess the extent to which one could find "similar" national products. If this can be proven in "similarity exams" carried out by a CACEX expert chosen in conjuction with the business associations involved,

then the import is forbidenl. The "law of similare" is a crucial by-product of the discretionary powers granted to CACEX, and one that turned out to become a crucial domestic market sharing device. The threat to use to procedure was often used to enforce schemes of import ceiling (*contingenciamento*) with domestic producers and, when large scale projects were under consideration, CACEX managed to negociate with importers and business associations the so called "participation agreements", through which a "local content" level was agreed for the whole project. Very clearly, this is an important instance of symbiosis between trade and industrial policy.

By generating an import structure basically formed by non-competitive goods, this system created an important distributive distortion: importing firms invariably applied for tariff exemptions or reductions under "special import regimes" for priority imports, which were granted by specific legislations, or on an *ad-hoc* basis by the Tariff Commission (CPA) as a fiscal incentive without facing opposition from domestic suppliers. As a result, nearly 67% of Brazilian imports entered the country in 1985 with tariff reductions or exemptions, as shown in Table 3.

The nature of the "special regimes" is quite varied. It comprised 42 different types in 1989, the table showing only the most important ones. Quite clearly the two most important regimes, to judge from the value of imports involved, are related to export promotion schemes (group II) and supply smoothing foodstuffs import (group IV) which together respond for nearly 41% of all imports in 1985. Among the former, besides the traditional draw-back schemes, we find the BEFIEX program, an important scheme within which firms accept export commitments in exchange for gaining access to imported intermediate inputs and capital goods at international prices, as described in more detail in section 1.4.1 below. The importance of this program can be gauged by the fact that nearly 50% of manufactured exports were made under the program by the late 1980s, as shown in Table 6 in section 1.4.1 below.

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[1] Sometimes, when a similar product is not manufactured, the authorities may "invite" national firms to present a prototype of the product under consideration. If the prototype is deemed acceptable the import is forbiden. In the specific case of the informatics law, to be comented in detail below, often not even a prototype was necessary besides the intention of national firms to manufacture the potential import.

Table 3
Imports under special tax regimes, 1985
(US$ millions)[1]

Special Regime	1985 Value	Share
I. International Agreements	547.3	7.4
LAIA	309.9	4.2
GATT	189.8	2.6
Brazil-Uruguay	47.6	0.6
II. Export Activities	1,810.7	24.5
Drawback	1,225.8	16.6
BEFIEX	568.0	7.7
Export Incentives	16.9	0.2
III. Investment Programs	308.4	4.2
CDI	111.9	1.5
SUDENE and SUDAM	29.3	0.4
Shipbuilding industry	65.2	0.9
Goods of "Economic Interest"	75.6	1.0
Other	26.4	0.4
IV. Foodstuffs (Tariff Commission)	1,203.4	16.3
V. Government and State Enterprises	270.0	3.7
VI. Air Transportation	324.0	4.4
VII. Broadcast & Movie Industry	25.6	0.3
VIII. Manaos Free Zone (ZFM)	437.1	5.9
Total	4,926.5	66.7

[1] Share in total imports excluding oil. Source: Kume (1988, Table 3.3).

Among the other types of "special regimes", which encompass nearly a quarter of all non-oil imports, we may find a number of import regimes administered by sectoral (groups VI and VII, and the shipbuilding industry imports in group III) or regional agencies (SUDAM, SUDENE, and the Manaos Free Zone), government bodies (group V) and councils administering other industrial policy instruments (CDI and "others" in group III). In each special regime the exemptions of restrictive provisions on importing is varied. In the BEFIEX case, the crucial exemption, besides tariff reductions, is from the "law of similars", although decisions are still informally subject to approval by the relevant business associations. In draw-back operations and in purshases from LAIA countries, import programs, external financing requirements and negative lists were also waived. For the Manaos Free Zone imports the same exemptions apply, except for the external financing

requirement and the annual foreign exchange quota for the region. In most cases, the import authorization is used as a crucial mechanism for project approval and negotiation of capacity increases, import content and other regulatory features of specific industrial activities.

Another interesting consequence of the proliferation of "special regimes" for imports in force in the 1980s in Brazil was the large difference between legal tariffs and the ones effectively practiced, i. e., the "true" levels, meaning the revenues of import taxes as percentage of the value of imports, shown in Table 4. Note that the comparison is even more striking regarding effective rates of protection if we consider that the latter is undestimated given the overwhelming presence of QRs. If effective rates of protection were computied on the basis of "equivalent" tariffs, instead of using legal tariffs, its numbers would be much larger.

Table 4
Brazil: Legal and "true" rates of protection, 1984

	Nominal		Effective	
Sector	Legal	True	Legal	True
All manufacturing	90.0	19.1	165.6	34.5
Light manufacturing	130.5	10.1	246.1	35.2
Food	84.2	16.9	212.3	43.4
Textiles	176.9	3.3	268.4	1.1
Heavy Industry	71.9	23.9	114.4	32.4
Paper	82.2	39.4	212.9	110.9
Chemicals	34.2	11.5	95.2	24.6
Non-metallic minerals	98.7	29.5	182.1	41.5
Metallurgy	72.8	12.7	91.1	24.0
High tech	98.5	8.5	137.1	14.1
Machinery	81.2	14.9	121.3	19.1
Transport equipment	115.9	2.9	217.7	- 9.6
Agriculture	57.3	22.6	63.3	26.7

Source: Fritsch & Franco (1989a) using raw data from Braga et al (1988, pp. 674-77). Wheigted using shares in total value added.

One implication of this fact was to motivate a tariff reform in 1988 with the purpose of approximating legal and true tariffs, along with the elimination of a number of "special regimes", with a view to reducing the amount of tax expenditures implicitly involved in this policy regime. Thus, tariffs were generally reduced accross the board but enforced to a larger extent. It should be noted, however, that the aim of the 1988 reform was to increase fiscal revenue, besides removing some "water" from tariffs, and,

given the existence of generalized administrative controls and import prohibitions, its impact on the level of protection was rather mild.

The peculiarity of this system is that import rationing is largely made by measures that do not seem to raise very significantly the cost of imports that happen to cross the barrage of administrative controls. Yet, it is not *a priori* clear whether importers transfer into prices the "scarcity premium" involved in the cost of importing. In the case of consumer goods importers may surely appropriate the rents created by the QR system pricing the import much higher than it would normally do. In the case of intermediate and capital goods this may probably not happen because the effective import cost is reduced by *ad-hoc* exemptions of duties ("true" tariffs are small) and the scarcity premium on imports is irrelevant for cost accounting of firms. In this case, the social cost of the QR system does not represent any disbursement to importing firms[1] and for this reason the domestic prices of imported goods, especially in the case of intermediate and capital goods, are much smaller than they would be in a system of tariff equivalents of the QRs in force. This fact would have a very important bearing on the debate around the reform of the Brazilian structure of protection in the 1990s, as it will be seen in detail in Part Two.

However, perhaps, the most impressive by-product of this import policy of "exceptions as a rule" and administrative decentralization is the one of the Brazilian informatics policy. The control over imports of loosely defined "informatics goods" by the Special Secretariat of Informatics (SEI) has given such a leverage to the latter that, in addition to usual practices such as, for example, requirements for a very high local content, it has introduced specific procedures to the regulation of the computer industry such as restrictions on technology transfer contracts and, most importantly, to foreign ownership in some segments of the industry. This has represented a major departure from Brazil's traditionally liberal stance towards FDI, and has raised a huge amount of controversy. In the late 1980s the "informatics policy" has been increasingly under attack and its on-going reform has become one of the crucial issues for the 1990s, to be discussed in Part Two.

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[1] Except in the remote case of direct "acquisition" of import licenses through corruption, in which case the scarcity rent is appropriated by the bureaucracy.

An interesting feature of the Brazilian trade regime, to be discussed in more detail in the next section, is that import restrictions create a generalized anti-export bias, that is offset in specific industries by export incentives that place such industries in a more or less neutral regime. This situation - high protection as a rule and export subsidies as a glorified exception for exporters - is in itself a distortion on the classic static sense calling, according to the canonical formulae, for a devaluation *cum* removal (or reduction) of export subsidies and tariffs. The obstacle to this simplification of the trade regime is a traditional one: the inflationary consequences of real devaluations, a concern that the experience of the early 1980s could only reinforce. The sharp exchange rate devaluations in 1979 and 1983 have caused marked increases in inflation, and have increased resistences, or at least awareness, on the part of domestic agents as to changes in relative prices[1].

This may be one of the causes of the disillusionment with the crawling peg system in the second half of the 1980s. With the acceleration of inflation towards hyperinflation levels exchange rate management has become increasingly difficult, as the thin edge between generating appreciation and producing inflationary repercussions was a difficult one to keep up. More frequent episodes of appreciation could be observed after 1986 and an increased variance of the real exchange rate is very clearly observed in the 1980s: the coefficient of variation of the real exchange rate rose from numbers between 2.4% and 3% in the period 1973-78, to numbers between 6.7% and 8.2% in 1979-1987, and further to 13.2% in 1988-90[2]. New developments in exchange rate policy among the reforms of 1990, such as the new (dirty) floating exchange rate regime, could be directly traced to such concerns.

1.3.2) The industrial promotion schemes

[1] A discussion of the quantitative impact of devaluation and tariff hikes is conducted in Part Two.

[2] Computed on the basis of monthly observations. Cf. Souza (1990, p. 197).

Up to the second half of the fifties the fundamental influence on the sectoral pattern of resource allocation in industry came form the largely unintended impact of import protection undertaken on balance of payments grounds. By that time, however, the growing dependence on imported industrial inputs led to the introduction of several new instruments of industrial promotion aimed at building domestic capacity in large scale, capital intensive intermediate goods. State intervention in industrial investment was conducted at two levels. In a few sectors, most notably in petrochemicals and steel, outright - partial or full - public ownership was pursed. In others, the government still played a crucial role through the administration of powerful instruments added to import protection - basically fiscal incentives and subsidised long term credit.

During this period, the classical interaction between inward looking policies and small market size relative to best-practice optimum scales led to high levels of concentration in almost all the new sectors from the outset[1]. The creation of a relatively stable oligopolistic structure was reinforced by the combination of (i) a high level of multinational penetration in response to restrictive import barriers coupled with relatively little interference in the FDI process; (ii) the creation of "national champions" by the special protection-*cum*-domestic subsidies treatment given to domestic firms in some import substitution projects and stimulated by the concern with the creation of industrial "enclaves" that could be formed by vertically integrated MNCs afilliates; (iii) state ownership in sectors requiring large initial investment outlays, which created in fact monopolistic public enterprises[2].

The basic features of the framework of incentives and regulations were refined and consolidated during the very active policies followed from the late 1960s and, especially, in the 1970s, as a response to the perceived structural balance of payments problems created by the oil price rise, giving an impressive boost to investment in heavy intermediate and capital goods industries, and in the 1980s as a response to challenge of adjustment to the debt crisis. Among these features it is apt to emphasize: (i) the pervasiveness of fiscal incentives granted in credits by the state development bank BNDES

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[1] For a discussion of the dynamics of such a process, see Morhav (1971).
[2] For a more detailed discussion see Fristch & Franco (1989b).

and directly by some government bodies; (ii) regulation enhancing non-contestability of markets, particularly the direct investment licensing limitations imposed by sectoral or regional bodies or by the mechanism of "sectoral agreements" coordinated by the price control authority (CIP-Interministry Council of Prices)[1]; and (iii) most importantly, the imposition of local content requirements (*índices de nacionalização*) by BNDES - defined as the ratio between local cost components and total cost of a given product[2] - as a requirement for the accesss to its FINAME line of subsidized credits for acquisition of capital goods, and by other government bodies (CDI) and state enterprises especially in the context of public procurement concracts. A 1988 decree would actually turn local content requirements enforceable in the production of all goods receiving any form of subsidy, purshased by any public body or receiving any sort of financing from official institutions[3]

Table 5 provides a rough picture of the incidence of these dispositions.

[1] On price control as a device to enforce entry barriers see Fritsch & Franco (1989b).
[2] In some cases imports are considered at CIF values sometimes not, and the ratios sometimes are computed in terms of weight, depending on the demanding agency.
[3] Art. 16, Decree 2433, May 19, 1988.

Table 5
Regulation and promotion schemes in Brazilian Manufacturing, 1989

sector/ subsector	nature of regulation	local content requir.	price controls	nature of incentives
Metal products	H	...	L	H (fiscal and credit)
(steel, rolled flats)	H (cap. licensing)	...	H	H
Machinery	H (access to Finame)	H (Finame, PSE)	L	H (fiscal and credit)
(made to order)	H (access to Finame and PSE)	H (Finame and particip. agreem.)	L	H (fiscal, credit and procurement)
Electric equipment	M	H-M	M-L	H (fiscal and credit)
(telecomm. equip)	H (access to PSE)	H (PSE)	L	H (fiscal, credit and procurement)
(informatics products)	M (cap. licensing)	H (SEI)	L	M
(consumer electronics)	M (cap. licensing)	L (SUFRAMA)	M	M (fiscal)
Transport equip.				
(shipbuilding)	H (cap. licensing and access to PSE)	H-M (PSE)	L	H (fiscal, credit and procurement)
(aircraft)	M (access to PSE)	L	L	H (fiscal and procurement)
(cars, trucks, buses)	M (conditionality on incentives)	H (CDI)	H	H (fiscal)
(railway material)	M (access to PSE)	...	L	H (fiscal, credit and procurement)
Chemicals	M (conditionality on incentives)	H (CDI)	H	M (fiscal and credit)
(petrochemicals)	H (cap. licensing and conditionality on incentives)	H (CDI)	H	M (fiscal, credit and import prices)
(Camaçari petrochemical complex)	H (ibid.)	H (CDI)	H	M (ibid. plus income tax exemption)
Pharmaceuticals	M (access to govt. market)	M	H	H (fiscal and procurement)
Non-metallic min.	L	...	H-M	L
(cement)	H (conditionality on incentives)	L	H	H (fiscal)
Paper products	M (conditionality on incentives)	M (CDI)	M	M (fiscal and credit)
Traditional[1]	L	L	M-H	L

The qualifications H high, M medium and L low, applies to the extent of government regulation (including barriers to entry, capacity limitations, conditionality on the access to incentives and others); to the magnitude of requirements of local content (indication is provided on the source of the requirement); to the extent of price controls; and to the magnitude of incentive available (with an indication of the nature of the incentive).

[1] Comprises wood & furniture, rubber, leather and plastic products, perfumes and soaps, textiles and clothing, food and beverages, tobacco, printing and publishing and miscelaneous. There are exceptions to qualifications relative to regulation (wheat milling) and incentives (wheat milling, textiles and paper & printing)

Source: Based on The World Bank (1990, pp. 24-25).

Note that regulation is generally light in traditional industries, except for price controls in sensitive products and on specific segments. Wheat milling, for example, is subject to capacity regulation enforced through the rationing of imported wheat. Intermediaries are largely subject to price controls, given their weight in wholesale price indexes, there resulting high entry barriers and constant complaints as regard anti-competitive practices, as in the archetypal case of the cement industry.

In many industries the key source of regulation as regards productive capacity expansion and "adequate" levels of minimum domestic content was the project evaluation activity carried out by CDI, which was created in 1969 and extinct in 1988. The Council also played an important role in coordination the action of other key bodies such as the BNDES, some large industrial public enterprises and CPA, which decided about the concession of trade-related tax exemptions on imported inputs. Although the amount of resources discretionarily granted as benefits under industrial promotion schemes was substantial - amounting to between 0.5% to 0.8% of GDP in the early 1980s[1] - the bulk of these investment incentives were concentrated in a few targeted capital intensive intermediaries: chemicals and pharmaceuticals represented 43.1% of investments made under CDI, and non-metallic goods including paper and cement, responded for 34.2%[2]. In consequence these sectors were subject, as shown in the table, to stringent local content requirements. In segments such as heavy (made-to-order) capital goods, electrical equipment and transport equipment procurement rules on the part of public enterprises are the key source of local content requirements.

For capital goods more generally, the acess to FINAME credits - available to buyers of such goods at BNDES - depends on having the product registered in a FINAME listing with a pre-determined local content requirement ranging between 70% and 85%. On the informatics industry local content requirements are imposed by SEI at very high levels - over 90%. Interestingly, local content requirements are enforced on the consumer electronics industry located at the Manaos Free Zone at substantially lower

[1] The World Bank (1990).

[2] Though together these two groups represented only 37% of the projects approved by CDI. Cf. The World Bank (1990, p. 41).

ratios - around 30% - which was accepted by the industry as a *quid-pro-quo* for the permission not to export more than 10% of their output. The importance of local content requirement as import restriction device for capital goods and parts cannot, therefore, be underestimated: the share in manufactured value added of industries in the table subject to some degree of local content requirement is slightly over 50%, an astonishing figure (the more so as one notes that it corresponds to modern industries) that have crucial implications as regards the conduct of trade policy and more particularly as regards the process of liberalization to be implemented in the 1990s, as discussed at length in Part Two.

Furthermore the non-contestability of the industrial market structure, especially in the modern segments, emerges very clearly from the table as a result of extensive regulation with a clear pro-incumbent bias, reinforcing natural entry barriers, preventing exit by distressed firms and crystallizing market positions[1]. This very large degree of trade and industrial regulation and government interference with the competitive process maintened for so long in Brazil seems to have had a fundamental negative impact on entrepreneurial behaviour and industry efficiency, as it rewarded rent seeking and inhibited managerial awareness of the strategic importance of the acquisition of technological capability. This is particulary dramatic at a time when there are very rapid changes in the post-war technological paradigm upon which Brazilian industrial capability was built, and when continued manufactured export dynamism rests fundamentally on technological upgrading. For this reason the reforms to be undertaken in trade and industrial policies in the 1990s seem to place industrial deregulation and competition policy in a privileged place.

These issues were not considered in the 1988 decrees known as "The New Industrial Policy", that attempted to create a system of joint planning for vertically integrated sectors (industrial complexes) managed by "sectoral chambers" uniting business associations and bureaucrats with powers to establish investment plans (PSI - *Programas Setoriais Integrados*) that would be liable to a number of fiscal and regulatory incentives. These proposed reforms can be thought as an attempt to advance the symbiosis between

[1] As forcefully argued in The World Bank (1990) *passim*. Non-contestability is used here in the usual sense, namely, as an attribute of markets in which incumbents are not threatened by entry of potential competitors.

bureaucracy and regulated firms[1] which would actually magnify distortions deriving from spurious regulation discussed above. Interestingly, the coordination difficulties existing within sectoral chambers precluded the constitution of any but one sectoral PSI (in the textile industry) up to 1990. Fortunately, the 1988 reform was a failure bringing no significant changes in prior arrangements.

1.4) The sources of export growth in manufacturing

A crucial feature of the evolution of competitiveness indices computed for Brazil for the period 1970-85[2], and reafirmed more recently[3] is that the improvement is uniformly observed throughout the period, the recession and devaluations of the early 1980s having, therefore, only reinforced these long term trends, marking no clear descontinuity with respect to the past. Even so there have been concerns on whether export growth in the 1980s has been due to "reversible" influences stemming from short term macroeconomic management (recession and exchange rate undervaluation) or from excessively generous export promotion programs, generating what has been called "spurious" competitiveness[4].

It was also observed that the improvement in competitiveness is more or less uniform across sectors. In this connection, one may surely find Heckscher-Ohlin inspired explanations for the successful export performance in labour and natural resource intensive industries, but one may also observe the development of (*ex-post*) comparative advantage in products one should not expect a labour and natural resource abundant country to be able to. When considering Brazilian successful performance in technologically more intensive industries one is led to explanations emphasizing factors like scale economies, product differentiation and learning-by-doing, along the lines of the so called "new trade theories", as well as explanations related to the significant presence of MNCs in Brazilian trade and processes as the ones

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[1] This assessment emerged from a meeting of experts in 1988, see Matesco (1988, p. 14).
[2] Fritsch & Franco (1989a).
[3] See Nonnemberg (1990)
[4] By Fajnzylber (1983).

described in the next section. In this respect, there has been work assessing the exact nature of the relation between market structure features, productivity growth and trade performance, and more precisely the extent to which export performance is created by "exogenous" factors related to foreign ownership or to "endogenous" factors connected to productivity growth and the "maturation" of once "infant" national firms.

This section treats in two separate sub-sections macro and microeconomic determinants of Brazilian competitiveness in manufacturing, the operation of which is not mutually exclusive. The first subsection treats macroeconomic influences on trade performance, devoting special attention to export incentives and mechanism to by-pass the very heavy structure of protection in force. The next sub-section considers determinants of competitiveness associated with market structure as well as with policies and environmental conditions favouring learning and technological innovation.

1.4.1) Macroeconomic and policy factors in competitiveness

A 1983 survey[1] of the extensive econometric work linking the behavior of aggregate manufactured exports to macroeconomic variables covering the 1960s and 1970s would reveal that, despite the richness of methodological details, the essential elements of these exercises were very similar: a *quantum* index for manufactured exports, or their value at constant dollars, was regressed against variables such as real exchange rates (adjusting for subsidies and tax incentives so as to interpret it as exporters' returns), world demand, and cyclical influences usually defined as deviations from a productive capacity variable (often potencial output). The results for price and world income elasticities have displayed a great amount of consistency: an unitary elasticity is considered "reasonable" for the former and a value between 2.0 and 3.0 are commonly found for the latter (p. 723). Domestic demand was found to be an important negative influence on Brazilian exports (a minus one elasticity), asserting a clear "vent-for-surplus"

[1] Braga & Markwald (1983).

logic in Brazilian exports, a result to be expected for a country with a large domestic market and in which exports represent a marginal activity for most exporting firms[1]. More recent work employing supply and demand specifications and a disequilibrium methodology mostly confirmed these results[2].

The interpretation of these exercises' involve some important issues. The influence of capacity variables is not often made explicit as equations generally consider deviations from potencial output, or, at most, trend variables, so that structural factors affecting export performance become hidden in unexplained productive capacity increases in exporting industries. A superficial reading of this literature would tend, therefore, to overemphasize demand factors, and more especifically to convey the impression of a contradiction between the export led and domestic market led growth. According to this reading an export surge may be generated by a domestic recession, creating a typical instance of "spurious", or reversible, competitiveness.

On the price side it is important to distinguish between the effects of exchange rate policies and of export subsidies, and most arguments emphasizing "artificial" competitiveness underline the weight of the latter. In this connection it was shown that the value of export incentives in effect in Brazil from the late 1970s on was very substantial. A recent study reports that, for 1984, the aggregate value of all export incentives reached 48.7% of the FOB value of exports, 35.5% refering to rebates and exemptions of indirect taxes, 9.1% refering to benefits associated with draw-back operations and the rest (4.1%) produced by subsidized credit and income tax reductions[3]. Even considering that 2/3 of the indirect tax incentives are common in foreign trade operations (the exemption applies to avoid double taxation of the same value added), and that these estimates were based on the unrealistic assumption that in the absence of the incentives the same amount of exports and imports would have happened that is, that foreign trade has no sensitivity to the presence of incentives, these values are high and raised a number of concerns.

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[1] This latter feature would be less clear in the later part of the 1980s.
[2] See Rios (1987) and Zini Jr. (1989).
[3] Neves & Moreira (1987, p. 484).

The first and more obvious is that the fiscal cost of export promotion was too high, but it was also commonly asserted that its benefits were distributed on a regressive fashion[1], and that the weight of incentives demonstrated the "artificial" nature of Brazilian exports. Interestingly, it was observed that "the official justification for the concession of such benefits has been based on the argument of the necessity to offset the cost pressures derived from the tariff structure"[2]. Indeed, for a country in which the rate of effective protection is very high[3], the anti export bias would be generally very high if not offset by export promotion schemes attempting to place exporters on a more or less neutral regime. Indeed, on average, one may observe a small positive anti-export bias for the Brazilian economy for as late as 1980-1981, with, however, a large dispersion, i. e. with sectors highly inward oriented and others on a more or less neutral stance[4]. Interestingly, in this connection, it has been found a positive and significant (rank) correlation between effective rates of protection and rates of export promotion - 0.626 for 1973 and 0.723 for 1977[5] - suggesting therefore that export incentives are designed to neutralize the anti-export bias created by the current structure of protection.

An important instrument conceived to by-pass the structure of protection was the BEFIEX program. It consisted basically in allowing tax exemptions on imports and the full clearance of "similarity" examinations for inputs and capital goods in exchange for export commitments assumed by importers never below the double of the value of allowed imports. The commitments are drawn in multi-year contracts that, initially, were mostly signed by MNCs afilliates. Over the years the program has turned into a "mechanism through which national firms seek to reduce import taxes on capital goods imports and to circumvent "similarity" examinations"[6], i. e. a scheme through which exporting firms could get accesss to imports without which competitiveness would not obtain and that would be otherwise

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[1] Braga (1981)

[2] Neves (1985, p. 66).

[3] For 1985 ERP would be 53.3% considering "implicit" protection, i. e. computing "true" tariffs through direct price comparisons, and 167.4% considering legal tariffs. Braga et al. (1988, p. 47).

[4] Tyler (1983, p. 564).

[5] Neves (1985, p. 67).

[6] Mateosco (1988a, pp. 15-16).

unreacheable. The program's effectiveness can be assessed by the fact that, as seen Table 2, exports under the program increased more than tenfold from 1974 to 1981, and fourfold during 1982-89. This resulted in a fourfold increase in the trade balance under the program from 1978 to 1980, and another sevenfold increase from 1982 to 1989. The share of MNCs in the program's exports fell significantly after the mid 1970s, and the program's share in manufactured exports increased from16% in 1975-79, to 23% in 1980-84 (aproximately 3% of imports), reaching slightly over 50% in 1987, where it remained since[1]. The experience clearly suggests that a binding element in export oriented projects is the very restrictive structure of protection in operation.

Table 2
Exports and trade balance under Befiex and of foreign firms, 1972-85

	Befiex program						
year	program exports*	% of for. firms	trade balance*	contracts total	contracts MNCs	manf. exports	% BEFIEX
1972	2	100	-10	2	2	898	0.0
1973	70	100	-100	3	3	1,434	4.9
1974	212	100	-72	3	2	2,263	9.4
1975	335	100	63	4	3	2,584	12.9
1976	456	98.5	174	11	4	2,776	16.4
1977	655	90.2	348	5	3	3,840	17.0
1978	865	88.4	222	10	5	5,083	17.0
1979	1,119	82.2	646	16	3	6,645	16.8
1980	1,793	74.3	1,068	35	12	9,928	17.9
1981	2,581	77.5	1,188	35	4	11,884	21.7
1982	2,343	70.6	1,031	79	25	10,253	22.4
1983	2,935	60.6	2,110	25	7	11,276	24.8
1984	3,872	58.0	2,865	44	11	15,102	26.1
1985	4,851	54.2	3,603	44	15	14,062	35.5
1986	5,128	n.a.	4,405	n.a.	n.a.	12,386	41.4
1987	7,629	n.a.	6,912	n.a.	n.a.	14,831	51.4
1988	9,573	n.a.	8,714	n.a.	n.a.	19,902	48.1
1989	8,979	n.a.	8,119	n.a.	n.a.	19,594	48.3

Sources: Neves & Moreira (1987, tables 5,7 , and 8) and Gazeta Mercantil, May 25th, 1990. ' the sample includes all exporting firms with foreign control. * Millions of dollars.

[1] Neves & Moreira (1987, p. 7) and Gazeta Mercantil, 25/5/90.

1.4.2) Structural influences

In addition to macroeconomic influences and export promotion schemes, several other "structural" elements are important to explain the evolution of competitiveness over time. Among these, the debate has developed mostly over the relative importance of "endogeonous" mechanisms related to learning-by-doing and scale economies to explain productivity growth that accompanies the process of "maturation" of predominantly national firms in manufacturing and "exogenous" influences mostly affecting trade propensities of established MNCs affiliates through processes of globalization and racionalization of activities within MNCs described in detail in the next section. The importance usually attached to "endogenous" elements has been reinforced by the recent proeminence of the so called "new trade theories" which devote great emphasis to the role of industrial organization features in creating competitiveness. More specifically, most models along these lines associate, though in a deterministic fashion, increases in size, or in rents connected to industrial concentration, or even to protection and "market reserves", to greater efficiency either through scale economies, learning-by-doing or R & D investment[1].

It is important to have in mind, however, that the empirical evidence supporting this neo-Shumpeterian connection between size and innovation (efficiency), on which these models mostly rely, is rather inconclusive[2]. The same holds, however, for the more orthodox association between productivity growth and the trade regime[3], indicating the complexity of the issue. Innovative activity is commonly related to perceived market opportunities[4], which are often associated to market size and growth - and,

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[1] Examples are Krugman (1984) and Rodrik (forthcoming).

[2] For a recent survey see Scherer (1984).

[3] "There is no clear cut confirmation of the hypothesis that countries with an external orientation benefit from greater growth in technical efficiency in the component sectors of manufacturing: combined with the relatively small static costs of protection, this finding leaves those with a predilection towards a neutral regime in a quandary", cf. Pack (forthcoming, p. 38). Indeed, the fact that the empirical arguments for defending export promotion *vis-à-vis* import substitution on the grounds of technical efficiency are simply not there, was even admitted by Bhagwati (1988, pp. 39-40). For a more recent discussion reafirming these results see Tybout (1990).

[4] See Pavitt (1988).

especially in developing countries, to firm ownership - and far less clearly to other elements of the competitive environment, such as for example intra-firm rivalry and ease of entry and exit, as noted by Ergas (1984) in the context of contrasts in innovative activity in the OECD area, by Teitel (1984), Katz (1984) and Dahlman et al. (1987) in the context of a discussion of infant industries and technology acquisition in the Third World and by Braga & Willmore (1989) in the Brazilian context.

The empirical literature addressing the relation between export performance and industrial organization features for the Brazilian case has devoted great attention to the connection between export performance, firm size (or concentration), and foreign ownership. In either case, however, the methods used in controlling for other influences, or to purge multicolinearity problems from cross-section regressions, are crucial to assert the existence of any meaningful connection. The first entries in this literature uses a 1978 income tax database including 15,122 reporting firms from which Braga (1981) sought to investigate the distribution of export incentives according to firm size, ownership and regional location. It was found indeed that incentives were appropriated mostly by larger firms, MNCs afilliates (whose share of incentives was found to be larger than that of exports) and richer regions, but the multicolinearity problems involved were by no means controlled.

This same data were used by CEPAL (1983) to assert the lack of difference in export propensities between national and foreign firms, both directly and through a comparison using the matched pairs methodology. The procedure was heavily criticized for it did not control for firm size[1], a problem that was not present in Braga & Guimarães (1986), who used an enlarged version of the same data set, to run regressions of export propensities on variables like industrial concentration, scale economies, capacity utilization, foreign ownership, tradeability (proxied by geographical dispersion of production within the country), capital intensity, export incentives and R & D intensity. The study reafirmed the relation found in earlier studies of macroeconomic nature mentioned in the last sub-section between export performance and incentives and domestic demand. The study also confirmed the expected positive relation between export

[1] Willmore (1985, p. 620).

performance and firm size variables - concentration, scale economies and R & D intensity - but failed to identify a significant influence of foreign ownership on export performance. However, a serious shortcoming in the identification of foreign firms in the 1978 data set resulted in a very significant underestimation of their presence in Brazilian industry[1] turning, evidently, the conclusions of the studies mentioned above, especially when involving foreign ownership, quite questionable.

A more recent study - Willmore (1985) - using the same 1978 data set, but properly identifying foreign firms, conducted an extensive comparison of national and foreign firms using the methodology of matched pairs with results substantially different from the ones of early studies. Among several important differences between national and foreign firms it was found that the latter exported a much larger proportion of their output than national firms of the same size even though they do not receive a larger share of export incentives.

Another study by the same author[2] focusing on the influence of industrial organization features on export performance used a sample of 17,053 firms in manufacturing for 1980[3], 652 of which foreign. The main conclusions of the study were that protection and vertical integration have a strong negative influence on export (and import) performance, and that advertising intensity (an indication of product differentiation) and size have a strong positive effect. Interestingly, however, the influence of size depends on the values of other independent variables, the most plausible situation being one in which no correlation could be found between export-output ratios (and import-output ratios) and total output, except for exceptionally large (a positive correlation) or exceptionally small firms (a negative correlation).

In addition, foreign ownership was found to have a strong and independent influence on export performance and import propensities, the latter being stronger. Indeed, for this 1980 sample the export-import ratio for foreign firms was 1.13, much smaller than the ratio for domestic firms (exporters) namely 2.04, a situation that was reversed in the mid 1980s,

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[1] Firms controlled by holdings established in Brazil but controlled by foreign residents were considered national firms. See Willmore (1985, pp. 624-625).

[2] Willmore (1987b).

[3] Whose combined exports represented 74% of Brazilian manufactured exports.

when the export-import ratio for foreign firms rose to values around 3.0 (for 1984-85) while the one for national firms rose to 1.71. This amazing improvement in the trade performance of foreign firms can be largely credited to the fact that large international firms possessing inherent competitive advantages in international markets (e. g. marketing channels) and superior managerial flexibility are generally believed to react strongly, presumably more than national firms of otherwise similar characteristics, to changes in the trade policy environment, as discussed at length in the next section. Moreover, there is circumstantial evidence that, following the first oil shock, the usual export requirements associated with access to subsidies were complemented by informal but effective import limitation targets imposed with special zeal on international firms by the import licensing authorities.

In sum, the evidence seems to indicate that both size and foreign ownership exhert a positive influence on export performance. The channels through which "exogenous" influences operate through foreign firms will be extensively explored in the next section. As regards the precise nature of the relation between size, and other firm characteristic or market structure features, and technological strategies, and how the latter evolve into export performance, or more generally into productivity growth, the mechanisms are much less clear. Between the rather general and exceedingly deterministic nature of models of the "New Trade Theory" type and the rather specific nature of firm case studies of successful technological acquisition[1] there is vast unexplored territory for meaningful explanations.

1.5) The role of foreign direct investment[2]

The contribution of MNCs to Brazilian manufactured exports, especially in more technology intensive sectors, provides a plausible explanation for the apparently puzzling fact that Brazil exhibits comparative advantage in sectors one should not expect a labor and natural resource abundant country

[1] See Katz (1984) for a review.
[2] This section draws from Fritsch & Franco (forthcoming-a).

to have. The growing importance of MNCs in Brazilian trade should be seen as related to the trading opportunities opened by the processes of global vertical integration and worldwide sourcing, in which MNCs have been playing the leading role, and for which strategic planning by globally minded MNCs operating in global oligopolistic structures is crucial. This section seeks to explore the nexus between FDI and outwardness in more general terms and then to assess MNCs influence on Brazilian trade and industrialization patterns.

1.5.1) MNCs, outward orientation and industrialization in NICs

Current orthodoxy in the normative analysis of industrialization and trade patterns, by placing exclusive emphasis on the determining influence of domestic policies, has lost sight of the importance of exogenous developments affecting the behavior of international corporations in shaping observed manufactured export performance in developing countries. For most Latin American economies, and for the larger ones in particular, the presence of foreign capital has reached such a dimension that many structural features of these economies, including trade orientation, are crucially affected by FDI. Yet, although host country's trade policies and structural factors should in principle act on established affiliates in the same way as on domestic firms of equal attributes, the "outward orientation" of MNCs affiliates may differ from domestic firms' insofar as globally minded MNCs respond to a much broader environment than the one shaping the decisions of domestic firms. It is interesting, in this connection that, several studies searching for differences in trade orientation between MNCs affiliates and domestic firms in Latin American countries in the sixties and early seventies have found export propensity, i. e. exports as percentage of output, of MNCs affiliates to be very low and lower, or at most statistically no different ,than the ones for domestic firms[1]. In recent years this situation has apparently changed, as the evidence seems to suggest that foreign onwership exhert a strong effect on both export performance and import propensities of individual firms, as seen in detail for the Brazilian case in the last section.

[1] See for example Ratke & Newfarmer (1985)

Evidence has been solid on the growing outward orientation of MNCs affiliates in the leading Latin American economies: export propensities of majority onwed US MNCs affiliates in Latin America have increased from 6.2% in 1966 to 20.1% in 1986, while for Brazil the increase was from 3.0% to 17.4% and for Mexico from3.2% to 34.8%. The average export propensities of affiliates located in all regions the increase was from 18.6% to 38.3%, this meaning that Latin America, and Brazil certainly, is still below the average[1]. This time pattern of export propensities appears to suggest that MNCs' export orientation reinforced overall inward orientation in the earlier stages of industrialization in Latin America and its growing "outwardness" in recent years.

The differences in export propensities of MNCs in the 1960s and in the 1980s could be explained by the fact that they refer to different "vintages" of foreign investment. Indeed, the first major wave of international direct investment in the 1950s and 1960s, dominated by US and European firms ("the American Challenge" and the "European Response"), has had its determinants neatly described along Hymer-Kindleberger lines, or along the lines of John Dunning's "eclectic theory"[2]. This "Hymerian" wave of US FDI was predominantly geared to domestic markets, as the very low export propensities of foreign subsidiaries in Latin America up to the 1970s seems to illustrate.

Meanwhile, the extraordinary worldwide extension of subsidiaries networks have induced a change in outlook for MNCs, which seemingly ceased to be "federations of autonomous subsidiaries"[3] and engaged into efforts of rationalization on a global scale with ample consequences as regards trade orientation of individual affiliates[4]. It is natural to expect, in this connection, intra-firm trade to grow significantly, which is indeed observed in the sixties and seventies. Moreover, the growing

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[1] Blomstrom (1987, p. 20 and 1988, tables A1, B1 and C1).

[2] Firms in possession of an "unique asset", unexploitable by means of exporting from the parent country (thus the need to jump trade barriers in Latin America and in Europe), or by means of licensing (such markets were too thin), choose to establish affiliates in locations in which some attractiveness is provided by market size and growth prospects, labour costs, government incentives, and other possible locational advantages. Cf. Dunning (1979)

[3] Porter (1986, p. 45).

[4] See Vernon (1979) on a recasting of the product cycle model pointing to this same direction.

internationalization of MNCs is at the root of the intensification of the long run process of worldwide industrial redeployment, as an important part of the transfer of industrial capacity to the South corresponds to the relocation of industrial (exporting) capacity within MNCs[1]. These transfers have implied important changes in patterns of trade and industrialization in NICs, among which the increasing share of MNCs in manufactured exports from some NICs, especially in Latin America. One may conclude, therefore, that the specific trade orientation embodied in the different waves of incoming foreign investment would influence very significantly the outward orientation of the industrialization drive in host developing countries[2].

1.5.2) FDI and patterns of industrialization and trade in Brazil

Two distinct phases, distinguished by the implied outward orientation, can be identified in the Brazilian postwar industrialization experience: the first, was mostly a response to incentives to domestic production created by foreign exchange shortages from the late forties, and corresponds to the classic IS pattern. During this period FDI sought protected sectors with a view at exploring a large and rapidly growing domestic market otherwise unreacheable through exports from the home country basis, and made a decisive contribution to import substitution and growth, especially in modern segments of consumer durables, mechanical and electrical equipment and a number of basic inputs and capital goods industries[3].

This first wave of FDI in Brazil in the post-war period was characteristically Hymerian: an authoritative 1962 survey among US firms

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[1] See for example Lipsey & Kravis (1987).

[2] The fact that the the larger Latin American economies experienced an important industrialization drive during the "Hymerian" phase, while the Asian NICs, for instance, had their "take-offs" in terms of production of relatively sophisticated goods a little later, at a time when foreign investment was already more "outward oriented", may help to explain the differences in industrial sectors' tradeability - and, especially that of their internationalized segments - between the two areas. For a more detailed discussion see Fritsch & Franco (forthcoming-a).

[3] See Morley & Smith (1971) and Fritsch & Franco (forthcoming-b, chapter 2) for an extended discussion.

established in Brazil[1] besides underlining the importance of "a large and potentially rapidly growing market" notes further that "in general, preservation of an established trading position appears to be a more powerful motive for investment in foreign manufacturing establishments than careful calculations of short run prospects of profitability" (p. 147) and also that "the major single motive for undertaking manufacturing activities abroad is the desire to secure or maintain a foothold in a generally attractive market where government policies leave no means of accomplishing this objective other than by direct investment" (p. 148).

These patterns seem to fit very much the classic Hymer-Kindleberger description of the determinants of FDI which emphasizes a sequence of decisions by firms in possession of "unique assets" unexploitable by means of licensing. They would rather serve foreign markets from home based exports, but if this possibility is blocked by trade restrictions, the alternative left is the establishment of a subsidiary[2]. In fact one can easily argue that the "theory" was actually no more than an *ex-post* rationalization of the massive multinationalization of US firms towards Latin America and Europe after 1947. This "inward oriented" internalization of oligopolistic structures geared to domestic markets of host countries was therefore typical the heyday of import substituting industrialization in Brazil in the fifties.

During the later investment spurts following the recession in the early 1960s foreign firms advanced in all non-traditional sectors, and, during the seventies, the presence of US firms was substantially reduced relative to firms of European and Japanese origin whose trade propensities were significantly higher than the ones of the former. Its is common, among proponents of the "Japanese model" of foreign investment[3], which was initially conceived as a strategy for relocating exports made uncompetitive by real wage increases and natural resource shortages in Japan, to describe the "US Model" of FDI geared at domestic markets, that is, the Hymerian pattern, as "anti trade oriented". The contrast as regards trade propensities Japanese and US FDI is evident as Japanese FDI was a strategy of adjustment to rising factor prices carried out essentially by marginal firms in relatively

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[1] Gordon & Grommers (1962). The study is based on extensive interviews made with 36 US firms during 1960 and 1961.

[2] See Dunning (1979) for a description.

[3] Most notably Kojima (1973 and 1975).

technologically unsophisticated and non-concentrated sectors that relocated abroad to serve both home and third country markets, thus the crucial difference in trade propensities[1].

After a long period of contracting imports as proportion of GDP and export stagnation, manufactured imports and exports began to grow by the late sixties and, after the oil shocks, one observes an uncommon combination of a further deepening of import substitution accompanied by a sound export performance in the same sectors in which import substitution was taking place[2]. It is also significant that there were important improvements in competitiveness and outward orientation in several established sectors not benefitting from government incentives. Many elements other than those acting through MNCs, acted to produce this notable change in the competitiveness of Brazilian exports, as discussed at length in the next section. Nevertheless, its is apt to emphasize anyhow that, as far as foreign firms are concerned, what seems to have ocurred in Brazil is that, after the the formative years of Brazilian industrialization, a stable ownership structure was established in which foreign firms were leaders in several technologically sophisticated domestic oligopolies, and Brazil's comparative advantage in these sectors changed with the changing "outward orientation" of the Brazilian parties of these firms. Thus, the roots of the growing comparative advantage which accompanied the "maturation" of these now dynamic foreign owned exporters in Brazil may lie in the global developments affecting the trade orientation of MNCs as a worldwide phenomenon, outlined above. Indeed the extent of intra-firm trade in this technologically intensive sectors is disproportionally high as compared to that of traditional sectors[3]. When specific characteristics of the process of FDI penetration in Brazilian industry are taken into account, there are grounds for believing that the influence of these general trends upon the export propensities of foreign firms might have been strongly reinforced by the usual processes of learning and dynamic efficiency gains operating in already established subsidiaries.

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[1] For a survey of Japanese FDI in Brazil see Osawa et al. (1976).
[2] See Franco (1988).
[3] See Helleiner & Laverne (1979).

Part Two: The emerging issues in trade and industrial policies

The end of the eighties witnessed a growing concern with the existing trade regime, and as a response to this a sweeping reform was launched in March 1990 by the newly elected Collor government. Many new issues were raised in the debate which preceded the reforms, and some other are still to be addressed in the near future. Section 2.1 below reviews the key elements of the new environment within which the 1990 reform, discussed in section 2.2, has been enforced. Section 2.3 discusses conceptual and practical problems in the design and implementation of the trade policy reform. It is divided into three sub-sections. The first describes and evaluates the "style" of the reform, addressing issues like whether to liberalize in one shot or gradually (and, in this case, in what span of time), the inherent sectoral biases in the elimination of QRs and their replacement by tariffs and the nature of tariff reforms to be implemented. The second subsection deals with the crucial issue of coordination between trade liberalization and macroeconomic stabilization. The last describes and evaluates the extent of selectivity, or sectoral discrimination, embodied in the reform. The last section discusses recent trends in FDI and the themes to be addressed in an updating of the regulatory environment affecting FDI in Brazil.

2.1) New issues in trade reform

The dismal economic performance of the eighties, described in sections 1.1 and 1.2, has bred a feeling that Brazil is lagging behind the more dynamic semi-industrial developing countries in terms of investment growth, which is likely to damage medium run prospects of growth and technological updating. Althought this poor record is seen as a result of macroeconomic disequilibria related to the adjustment to the shocks of the early eighties, there has been a growing perception that the trade and industrial policy framework has become detrimental to the attainment of dynamic efficiency and that this handicap is more serious now than ever before.

The reasons for this increased awareness of dynamic efficiency considerations are manifold. However, three of them should be singled out. The first is the influence, in the normative analysis of trade and industrialization, of the growing number of theoretical contributions emphasising the importance of factors such as learning and economies of scale as the basis for comparative advantage in manufacturing. The second reason is historical, as the perceived development challenges have definitely changed. As Brazilian industry grew and matured, the meaning of "industrialization" became quite different from what it was in the heyday of IS and so did the nature of the questions asked about strategic choices regarding industrialization. The policy problem today is no longer how to save foreign exchange by protecting the establishment of industries to produce for the domestic market at not too unreasonably large cost differentials relative to world prices in the not too distant future. The great challenge today is how to reform the policy framework extensively discussed in Part One - built to answer the former problem - so as to overcome its obvious inadequacies to generate the managerial dynamism required to meet the challenges posed by the world's fast changing technological trends and the continuous need of export upgrading by middle-income manufactured exporters.

Last but not least, the need to overcome the macroeconomic constraints on growth increased the concern with the attainment of efficient

industrialization. There is a growing consensus that the task of restoring sustained growth after the painful contraction of investment levels in the 1980s requires, as argued in Part One, lifting a potential foreign exchange constraint imposed by the debt burden, restoring domestic savings from its very depressed levels, and redressing government financial balance. However, this should be achieved in a context of rising demands for greater distributive equity and the provision of social overhead services given Brazil's dismal social indicators. Now, the only way to simultaneously lift the foreign exchange and savings constraints on growth, and allow a rapid and sustained rise in real wages and of government consumption expenditures on social services is to increase productivity growth, as it would prevent both the erosion of manufactured exports competitiveness as well as the shift in income distribution towards wages and a consequent fall in the savings ratio[1].

These imperatives of macroeconomic policy had two concrete bearings on the debate on trade and industrial policy in Brazil. On the one hand, as mentioned above, they placed the concern with efficiency considerations at the centre of the stage. On the other, the imperative of restoring public sector financial equilibrium and raising social expenditures sharpened political perceptions of the opportunity costs involved in allocating public money and of the vast network of rent creating government regulation reviewed in Part One. This made quite explicit the very high costs (and the very uncertain public benefits) of the large subsidies and, especially, tax expenditures, associated with traditional industrial and export promotion policies as well as the allocative distortions related to the operation of public enterprises. This slow move of the opinion of local elites towards deregulation - especially in the sphere of trade and industrial policy - was also undoubtedly reinforced by the almost permanent pressure from some OECD governments and multilateral organizations on Brazilian public authorities for trade liberalization and industrial policy deregulation and, eventually, led to the announcement of the sweeping reform of the regulatory framework by the newly elected Collor government.

The dissatisfaction with the trade and industrial policy framework had, however, not led to a consensus as far as the precise nature of policy

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[1] For an elaboration of the argument, see Fritsch & Franco (forthcoming-b)

reforms are concerned. In fact, in the debate going on for some time before the March 1990's measures, there wer profund divisions of opinion on at least three key issues directly related to the reform of the trade and industrial policy regime. First, the complexity and discretionary character of the existing regulatory environment affecting trade and industrial policies have been often criticized by those favouring a less personal and market based relationship between the bureaucracy and the private sector. However, the weight of opposing views, particularly within the bureaucracy, is very considerable to judge from the ambitious reforms attempted through the 1988 "New Industrial Policy" mentioned in section 1.3.

Another key policy principle on which contrasting views were often found relates to the issue of "automaticity" of incentives, i. e. incentives regulated only by discritionarily defined rules of access to the benefit but not tied to performance requirements. The position of business associations is that "automatic" incentives given to certain activities issues unambiguous signals to investors and reduces the scope of government interference. Critics, of course, have argued that incentives without performance requirements can be pure waste, a serious concern in times of fiscal crisis, especially as businesses pressures over the years led to the generalization of fiscal incentives, thus magnifying its fiscal costs. Heavy conditionality on incentives is favoured by those concerned with a more careful allocation of public money and regulation, though it amounts to a heavier use of credit incentives, which are certainly not free of ideossincrasies in the project approval procedures of official credit institutions[1].

A third key point of dissent is the extent of market discipline domestic firms should be subject to. On the one hand, criticism are levelled on the non-competitive nature of market structures and the loss it represents in terms of inducements towards technological dynamism. On the other, the very contrary point of view is defended on grounds that factors as size and concentration are significant determinants of competitiveness, along lines explained in section 1.4, and on grounds that national firms should be protected and estimulated, a point of view that assumed very specific contours during the 1988 discussion within the Constitutional Assembly, on the issue of criteria favouring national firms in public sector procurement.

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[1] See The World Bank (1990) for an analysis of lending practices of BNDES.

These issues were of crucial importance in shaping the "style" of trade policy reform the new government would favour. These issues were discussed in the 1989 electoral campaign in the context of the more general debate on the relations between government and the private sector. Corporatist and interventionist positions were openly defended by the orthodox left, and less openly by some business interests, while liberal positions, though in quite generical terms, were championed both by social democrats and by the dark horse independent candidate Fernando Collor, the eventual winner of the election. The 1990 reform, discussed in the next section, reveal specific choices as regards the issues discussed above.

2.2) The 1990 trade policy reform

The sweeping reform of the Brazilian trade policy reform started in March 1990 has to be understood in the context of the wider changes concurrently introduced in the traditional principles, objectives and instruments of industrial policy, of which it is a crucial part. The core of this new industrial policy is the shift of emphasis to productivity growth as the prime objective of policy. The rationale for such shift of emphasis, as mentioned in the last section, was the need to garantee macroeconomic consistency between the strategic objective of real wage increases and the constraints on sustainable long term growth. This, as the first government document outlining the reforms state, "requires the radical reform of the scope and of the traditional instruments of the country's industrial policy in which the concern with promoting efficiency gains was, at most secondary ... To overcome this defficiency requires defining a new style of industrial policy geared atstimulating competition as the rule of the game and the quest for competitiveness as the prime entrepreneurial objective"[1].

To fulfill these objectives, the new industrial policy would contemplate two sets of different but complementary objectives and instruments. On the one hand, a "competition policy" creating "stable and transparent rules for industrial competition" and chiefly based on import liberalization and the enactment of an effective anti-trust policy for the the non-tradable sectors,

[1] Exposição de motivos nº 48, Medida Provisória nº 158, March 16, 1990.

apparently subscribing the idea that market discipline should be taken as the basic inducement of technological efforts. On the other, a "competitiveness policy", which would define "a set of instruments destined to support the growth of competitiveness of national firms". This would be implemented through two sets of measures. The first, would consist on a thorough revision of the current maze of fiscal and credit incentives to industrial production, investment and exports, with a view to narrowing them down to a few selective incentives to investment. The other, would concentrate on attacking market failures inhibiting technological efforts, through the provision of fiscal subsidies or risk sharing in financing of R & D projects, and creating positive externalities through massive expenditures in technical training. In both cases, performance requirements should be enforced.

The implementation of trade liberalization was conceived to take place in a phased way, following a rather conventional path. First, a rationalization of the import regime would take place, whereby most "special regimes" would be abolished. Then, the actual liberalization process would begin with the abolition of QRs and its replacement by tariffs, conceived to be "the only instrument of import policy"[1], and subsequently tariffs would be progressively brought down.

The first step in this sequence was made together with the vast array of measures issued in the first day after the new president's inauguration, mostly aimed at inflation fighting, commonly known in Brazil as the Collor Plan. It proposed the end of some import duty exemptions under special regimes (those within investment programs - group III in Table 3 above - imports of state enterprises and by the broadcast and movie industry), a cut in surtaxes on freight revenues earmarked to finance shipper's purchases from Brazilian shipyards and investments in Brazilian ports, the nullification of the decree authorizing the formation of new export processing zones (besides the existing Manaos Free Zone), and the abolition of the list of forbidden imports[2], established by CACEX and known as *Anexo C*

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[1] Ministério da Economia(1990).

[2] Although the previous government had began reducing the itens on the list under US pressure, the list still comprised over one thousend items out of the 13,500 in the Brazilian tariff schedule.

Although regional and sectoral lobbies succeded in making Congress to soften the decision on export processing zones and on subsidies to shippers and shipbuilders, the rest was carried out quite rapidly. The abolition of the *Anexo C* was in effect in May, when new - and high - tariffs were created for the previously prohibited products. In July, the long-standing quantitative controls administered by CACEX were relaxed, as the government announced that the issuance of import licenses by CACEX would become automatic. Shortly after, the financing requirements were eliminated and important definitions were made regarding the extent and timing of the future fall in tariffs. It was decided that a new tariff would be put in force at the beginning of 1991, together with advance notification of the pattern of fall up to 1994, when tariffs would average 20% within a range from zero to a maximum of 40%. Moreover, in the same breath, the government announced the beginning of the revision of the "market reserve" policy for "informatics goods", which was eventually carried out by the end of the year. It was agreed within the CONIN (The National Council of Informatics and Automation) that the open-ended spectrum of "informatics goods" was reduced to a list of 47 products whose imports will continue to be prohibited until the expiry of the Informatics Law in 1992, with the proviso that the domestic price of any of these products shall not exceed 2.5 times its international price.

The new tariff schedule, with the projected yearly variations until 1994, was announced on January 1st, 1991 to be in force in February 15th. Generally speaking, the methodology followed by the Tariff Commission - now labelled *Coordenadoria Técnica de Tarifas* - consisted in classifying the 13,500 items according to the following seven tariff brackets: (i) Zero tariff: products with natural comparative advantages (mainly primary or semi-processed traditional exports), with natural protection (due to high transport costs), with no competitive domestic production and commodities with low value added; (ii) 5% rate: products which already paid 5% in 1990; (iii) rates between 10% and 15%: products using zero tariff products as their main input (such as the paper and pulp or cotton chains); (iv) 20% rate: the bulk of manufactured products; (v) 30% rate: fine chemicals, wheat, wheat biscuits, pasta, TV sets, record players, video cassettes and sound equipment; (vi) 35% rate: autos, trucks and motocycles; and (vii) 40% rate: informatics goods.

Having classified the products according to this general rule, the pattern of fall was designed to follow a rule of concentrating the heavier reductions during the first two years on intermediate and capital goods, thus enhancing effective protection and competitiveness of consumer goods sectors. The aggregate result of this exercise is shown in Table 7.

Table 7
The new Brazilian tariff, 1991-94

	1990	1991	1992	1993	1994
average	32.2	25.3	21.2	17.1	14.2
Mode	40.0	20.0	20.0	20.0	20.0
Standard deviation	19.6	17.4	14.2	10.7	7.9

Source: Coordenadoria Técnica de Tarifas, Ministério da Economia.

It can be seen that the new tariff falls rather gradually over time and protection becomes more homogeneous among goods, witness the fall in the standard deviation of the rates. Nevertheless, if one takes into consideration that the tariff in force after the 1990 round of abolition of QRs had a maximum of 105%, the extent of the projected liberalization looks quite impressive.

The reform of the trade regime also comprised changes in the extensive gamut of export promotion instruments. The first attack came in March 1990, within the Collor Plan. First, the fiscal incentives conceded as income tax exemptions for export earnings, were abolished together with several other subsidies and tax expenditures as part of a comprehensive fiscal package. Second, the BEFIEX programme was terminated but for the contracts then in force.

The second turn came in the June guidelines (*Diretrizes)* document, when the government announced a new export policy. According to the stated aims of this policy, the mainstay of export incentives would be export credit, and while the traditional Finex credit lines provided by the *Banco do Brasil* were frozen, it was announced that a new Brazilian Eximbank would be founded under private control. However, there were non-negligible difficulties with this private Eximbank initiative, mostly derived from the lack of interest of the part of the private financial sector in providing export finance in internationally competitive terms even with the public backing of export guarantees. Thus, to reduce the plight of some segments of the capital

goods sector hard hit by the collapse in domestic demand following the early stabilization measures, the BNDES eventually stepped in creating an special line for finance of equipment exports (Finamex).

2.3) Problems in the design and implementation of reforms

In Part One it was argued that the structure of protection was strict and complex and the Brazilian economy was markedly underinvolved in international trade. Yet, the reader may easily notice that the implementation of trade liberalization in these conditions is likely to meet many problems. The first, discussed at length in subsection 2.3.1, is related to sequencing issues in light of the peculiarities of trade barriers in Brazil. Next, macroeconomic obstacles are discussed with a view on the classic argument against trade liberalization under macroeconomic instability and the somewhat paradoxical wave of liberalizations in Latin America in the late eighties. Finally, sub-section 2.3.3 considers the targeted nature liberalization will most likely assume during the transitional phase towards an open trade regime, and the implied political economy.

2.3.1) Trade liberalization, Brazilian style

It is very clear from the analysis of the last section that the liberalization program in Brazil was conceived to be phased, though somewhat tentative given the uncertainties on the effects of a greater integration into the world industrial economy for a country so underinvolved in international trade for so many years. This gradualism is perceived in the hesitations in dismantelling some key NTBs, especially the vast network of local content requirements practiced throughout the economy, and also on the schedule of tariff reductions planned to be completed only in 1994.

The Brazilian program loosely follows the cannonical sequence that starts with the removal and "tariffication" of NTBs, i. e. their substitution for tariffs near their "tariff-equivalent" and it is followed by a phased reduction of these tariffs. A real devaluation usually accompanies this process,

especially when tariffs are reduced below "equivalent" levels. It is indeed observed that the real exchange rate depreciates significantly after March 1990 when it stars in a level about half of the one corresponding to the average for 1985, and recovers this level in May 1991. It should be noted that in March the government announced the demise of the crawling peg system and its replacement by a (dirty) floating exchange rate system. Since the control over foreign exchange transactions was maintained the floating rate was actually very much controlled by the Central Bank both through the definition of rules of access to the market and through direct intervention. In any event, the government left clear that a further devaluation would naturally obtain under the floating exchange rate system if import volumes increase significantly in response to lower import barriers. Whether real devaluations would take place, however, seems to depend on the coming debt agreement, as the liberalization did not give much impulse to imports, which were also depressed by the recession in 1990.

Despite the apparently conventional design, one should not loose sight of the peculiarities of the Brazilian system of protection. Firstly, given the decentralized, diversified and sector specific nature of NTBs in Brazil it is clear that a sequential removal of NTBs necessarily confer a targeted character to the Brazilian liberalization. Indeed, the elimination of the *Anexo C* liberalizes mostly consumer goods, while the maintenance of local content requirements (only with a slight reduction in levels practiced by BNDES[1]), of restrictions on "informatics goods" and, at least initially, of external financing requirements, kept the large Brazilian capital goods and the informatics industries in a quite protected regime. Moreover, with the suspension of new BEFIEX contracts an important mechanism firms could use to gain access to imported capital goods was eliminated, so that the capital goods and parts industry was even more protected than before.

The government's unwillingness to review the incidence of local content requirements, is a crucial element in the Brazilian liberalization experiment, since the these requirements affect most modern industrial

[1] Local content requirements were first reduced in the financing of the acquisition of domestically produced capital goods through the FINAME program, and in February 1991 it was further reduced to a maximum of 60%. Note, however, that a 1988 law still in force establishes that all firms receiving any kind of fiscal subsidy and financing from official banks and involved in government procurement should be subject to a local content requirement.

segments, as noted in section 1.3, representing possibly more than 50% of manufacturing output. The prospects of a meaningful increase in imports of producer goods in such conditions are certainly not bright, except for consumer goods, whose imports increased by 25% in 1990. Indeed, no increase could be observed in imports of intermediate goods since March, which may certainly be due to the recession.

In addition, there was considerable hesitation in advancing reforms in the informatics policy, particularly as regards import control powers exercised on "informatics goods", mostly because the main body responsible for this policy, the CONIN, maintained its "sectoral chamber" structure, with a high level of politization of decisions, which tends to minimize the scope for reforms. It is unclear - except for political reasons - why a list of prohibited goods *cum* a cap on price differentials was not simply replaced by a tariff. It is yet uncertain whether when the informatics law is bound to expire, a meaningful change would take place in the very restrictive Brazilian informatics policy practiced since the early eighties. Expectations are that the government will announce general rules for infant industry protection in high tech segments in the future.

This rather odd nature of the Brazilian liberalization program - biased for consumer goods and against producer goods - is complemented by an anti-export attitude visible in the suspension of new contracts in the BEFIEX program, the elimination of some export incentives and financing mechanisms and the slow speed, by the Central Bank, in reversing the marked exchange rate appreciation observed during the last few months of the Sarney administration. Although the appreciation would be reversed some time after, that illustrates the lack of commitment with an aggressive export policy as far as the exchange rate is concerned. This orientation stands at variance with the recent liberalization experience of other Latin American countries, who very explicitly targeted exports liberalizing inputs used therein either through import-to-export schemes or through export processing zones[1]. The successful experience of the BEFIEX program, besides the experience of other countries (South Korea, most notably), would appear to indicate that Brazilian liberalization could proceed by extending and generalizing this program, but for reasons that may be related to the

[1] See Fritsch & Franco (1989a) and Laird & Nogués (1989).

complex political economy of trade reform in Brazil, exporting was not considered a priority.

The extent of the process of "tariffication" of NTBs is very much affected by these developments. As far as consumer goods are concerned, the outright prohibition was obviously replaced by tariffs lower than "tariff equivalents" leading to a meaningful expansion of such imports. No major import surge could yet be seen, but the potential expansion in the next years may be very high. For capital goods and industrial inputs the permanence of important NTBs places the discussion of the redefinition of tariff schedules in a secondary place. In fact, the crucial motivation in changing tariff rates in these goods during 1990 had to do with the perceived importance of these imports in price formation of a number of industrial segments whose products affect inflation rates. For many such goods, notably in chemical intermediates, capital goods and also in textiles, tariff rates were brought to zero on an *ad-hoc* basis. At least until local content requirements are eliminated, tariffs will have but a function of definig the costs of imports that happen to by-pass the barrier created by these requirements.

2.3.2) Trade liberalization and macroeconomic instability

Another classical problem is that of implementing a major trade liberalization program in the context of a highly inflationary economy, that is, the problem of the optimum timing between the stabilization and liberalization programs. Until recently, the consensus view on this issue stressed the need to stabilise, or more generally, to reduce macroeconomic instability, before launching a major trade liberalization experiment[1]. The basic rationale underlying this prescription is twofold. First, that the structural adjustment costs during trade liberalization will be lessened by a higher rate of investment, foreign and domestic, which is unlikely to obtain in the context of the contractionary demand management required by the stabilization effort. Second, that the rise in imports due to the fall in their relative price may place strains on the balance of payments leading to an

[1] See Sachs (1988).

actual or expected exchange rate devaluation, with negative effects on inflationary expectations. Some recent contributions have disputed this traditional view by arguing that, as the greatest asset in a stabilization program is credibility, commitment to a major liberalization effort may boost public confidence in the economic policy authorities and thus help the success of the program[1]. More disturbing to the traditional view is the fact that, as already argued in sub-section 2.3.1, many Latin American and highly indebted countries of other regions have liberalized their trade regimes starting in the accute moments of the debt crisis. It was noted that in most cases liberalization was targeted toward export industries and were accompanied by devaluations, but even so, if liberalization may have a positive balance of payments effect, a powerful case can be made against the traditional view.

In the Brazilian case, the government strategy was designed according to the traditional view. While the stabilization program was launched in the day following President Collor's innauguration in March 1990, the decisive phase of the trade liberalization program, as described above, was scheduled for the period 1991-94. The expectations at that time were that when tariffs would begin to fall the worst phase of the stabilization program would already be over. The fact that things did not happen according to plan in the stabilization front - with inflation rates still rigidly stuck around 20% per month by the beginning of 1991 - and that the government has not made a major revision of it is trade liberalization timetable means that, in practice, Brazil is launching a liberalization program at a time when a major stabilization effort is still needed. In fact, a new price freeze started in March 1991, and it is scheduled to last way through the second semester. This poses some important difficulties for the management of economic policy which, if not properly addressed, may generate macroeconomic disequilibria which will substantially increase the costs of the trade liberalization program.

Let us begin by analysing the likely impacts of trade liberalization on inflation itself. It is interesting to notice that trade liberalization as conducted in Brazil had two sequential effects on the domestic price level. The first happened during the first phase the program, comprising

[1] The most articulate step in this direction was made by Rodrik (1990).

dismantling of some "special import regimes", was necessarily pro-inflationary. Indeed, as "true" protection increases, the cost of importing is increased generating an inflationary effect of the same nature of an adverse terms of trade shock. Simulations based on models of inflation would suggest that a 30% increase in "true" (nominal) protection would increase an annual inflation rate of, for exemple, 500% to approximately 655% and one of 50% to 88.7%[1]. However, in spite of the abolition of many special import regimes, some important ones have remained, like the on-going BEFIEX contracts, international agreements, draw-back schemes, Manaos Free Zone imports, air transportation and *ad-hoc* foodstuff imports, under which a substantial percentage of Brazilian imports - perhaps half - are made. For this reason the increase in "true" protection is likely to be small in the first years.

The relevant effect, however, is that to be felt along the implementation of the tariff cuts to begin in early 1991, i. e. that of the fall in the height of the protection on domestic producers' mark-ups. A naive understanding of this effect - which is quite current within government circles, judging from official discourse - leads to the view that liberalization will provide an important additional weapon to the stabilization program as the fall in tariffs will erode monopolistic margins enjoyed by an over-protected industrial sector, thus imposing greater price discipline at least in the manufacturing sector. Although there is a lot to say about greater price discipline generated by a more competitive environment in the long run if the liberalization program eventually happens to meet is targets, it is rather obvious that the relevant competitive price to domestic producers depends not only on the tariff but also crucially on the real exchange rate and, as argued in subsection 2.3.1, on the prevalence of "market reserves" created by local content requirements. Besides, one has to consider that for imports to have a meaningful effect on sheltered domestic markets, import penetration ratios in manufacturing would have to reach values much higher than to ones curently observed - as seen in Table 1 - which most likely will not be feasible in the short run given balance of payments limitations.

Thus, there is a clear conflict of objectives in assigning the exchange rate in the context of a liberalization *cum* stablization program in an

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[1] The simulation is based on models accounting fot the direct effect of shocks on inflation and their feed-back effects through indexation. For details see Franco (1990b).

economy which still faces a severe threat of external disequilibrium on account of its heavy dependence on oil imports and high contractual foreign debt service. While maintaining external equilibrium would require compensating the effects of a fall in average tariffs by devaluing the exchange rate to the same extent of the fall in the average tariff, using trade liberalization as an aid to stabilization would require not allowing the exchange rate to fall to the full extent of the fall in the average tariff.

A second crucial problem is the effect that liberalization, if conducted in the context of a drastic stabilization program, may have on the level of employment. A typical and dangerous policy mix in such a situation - witnessed, for instance, in the liberalization experiments undertaken in the Southern Cone of Latin America during the seventies[1] - is that of tight monetary policies and a sharp fall in protection of consumer goods. The reason is that, in the context of rapidly falling barriers to consumer goods imports, the high interest rates and shortening of lending terms produced by the tightening of monetary policy tend to severely inhibit investment but not consumption financing. This has important negative short - and long - run consequences on employment. In the shorter run, by stimulating fast import penetration it increases the adjustment costs in the consumer goods industries. In the longer run, high interest rates inhibit investment - thus delaying the needed structural adjustment towards comparatively advantaged industries - and expenditure diversion towards consumer goods inhibits domestic private savings - thus reducing potential output and employment.

Last but not least there is the potential effect of trade liberalization on balance of payments equilibrium, which has been the traditional argument for protectionist import substitution policies and against liberalization experiments in Brazil. The reasons here are, of course, related to fears of an import surge caused by the fall in the final price of importables relative to competitive domestic production, resulting from the fall in the average tariff on. Whether these fears are justified is, however, an empirical question. Econometric estimates of import equations for Brazil with significant

[1] See Ffrench-Davis & Vial (1990) for a lucid account of the Chilean experience.

coefficients for the relative price term[1] are available only for intermediate and capital goods which are[2] responsible for the bulk of manufactured imports[3] and, thus, their reaction is very important to assess the early response in terms of the demand for foriegn exchange coming from the rise in imports. Moreover, as the efficiency enhancing motivation for liberalization tend to favour liberalization of inputs, an import surge of consumer goods which threatened external equilibrium is likely to be counteracted by temporary prohibitive surcharges.

The typical elasticities for the intermediate and capital goods sectors are of the order of 1.0 for the income term, 0.5 for the relative price term for both sectors, and around 2.0 and 3.0, respectively, for capacity utilization. Thus even if one allows that the widespread use of administrative restraints on trade in the past may result in some underestimation of the price elasticities in these econometric exercises, the figures show that the impact of a fall in the avegare tariffs of around 40% to about 20%, as contemplated in Brazil, will result in a rise in the volume of imports of slightly more than 7%. This figure does not look terribly large when compared to the possible influence of patterns of fast recovery in output growth, given the relevant elasticities. The crucial policy instrument to countervail the threat of external disequilibrium during the liberalization program is, however, the exchange rate. In fact, an offsetting real devaluation of just 14.3%[4] is all that is needed to completely neutralize the impact on import volumes of an average tariff fall from 40% to 20%, as proposed in the Brazilian program.

On the other extreme, the balance of payments concerns raised by liberalization may be enhanced if one considers that, with the dismantelling

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[1] See for exemple Abreu (1987). The standard specification of import (excluding oil and wheat) equations is of the form:

$$\log M = a \cdot \log Y + b \cdot \log RP + c \cdot \log U$$

where Y stands for domestic demand, RP for relative prices between importables and domestic production - given by the product $[e(r).(1+t)]$, where e(r) stands for the real exchange rate and t for the average tariff rate - and U for capacity utilization.

[2] Econometric estimates for consumer goods imports are not seriously considered given long standing non-price restrictions, such as administrative controls and outright prohibitions, which are difficult to picture in statistical terms.

[3] In the twelve months between mid-1989 and mid-1990 they accounted for 83% of total imports excluding oil and wheat.

[4] To neutralize the full effect of the fall in tariffs on relative prices and thus on import volumes - the exchange rate has to be devalued by $de(r)/e(r) = dt/(1+t)$ so that $dPR/PR=0$. See footnote 2 in the previous page.

of non-border QRs (local content requirements), Brazil would tend to approach levels of import penetration similar to those observed in countries of a comparable level of development such as, for example, Mexico and Turkey. In these two cases, one should expect manufactured imports to be approximately increased by a factor of 3 and a factor of 5, respectively, most likely creating serious balance of payments constraints if an export surge is not simultaneously produced[1].

The discussion above indicates that the implementation of a liberalization program may create a conflict in the assignment of both long term interest rates and the exchange rate. The reduction of structural adjustment costs will require assigning these instruments to the objectives of trade liberalization. Thus, on the one hand, it will be important to decouple the long term interest rate to the upward pressures placed upon the short end of the term structure of interest rates by tight monetary policies. This is not difficult as far as the present institutional arrangements in Brazil work, as long term lending is mostly provided by public development banks, notably BNDES, whose funding comes from special sources largely independent from conditions prevailing in private capital markets. The enlargement of the basis for industrial financing without tying more public or publicly garanteed funds will, however, depend on criative financial engineering and, above all, lasting suceess on the stabilization front.

On the other hand, the authorities will have to chose to allocate the exchange rate to the objectives of trade policy, allowing some real devaluation both to compensate for the loss in competitiveness of producers of import competing goods due to the planned fall in protection as well as boosting export performance to avoid balance of payments stringencies to appear. Of course, the timing and extent of such devaluations will perforce be subject to constraints imposed by the stabilization program.

[1] For details see Franco (1990b, p. 17).

2.3.3) Trade liberalization and industrial targeting

Finally, it remains to discuss to what extent the new Brazilian trade regime will retain elements of industrial targeting[1] which figure so prominently in the design and administration of import protection over the past decades. To put this question in perspective one has to bear in mind that, as described above, the trade liberalization program is part of a broader reform of trade and industrial policies which has as a prime objective to coordinate the use of all - border and non-border - policy instruments affecting the sectoral compostion of manufacturing investment. Thus, according to the stated aims of the authorities, the structure of protection to be designed as a partial instrument in industrial targeting. Its selectivity will thus reflect the "strategic choices" defined in the broader design of industrial policy.

Unfortunately, at the time of writing, the government had not yet defined these strategic choices. However, in the basic guidelines document (*Diretrizes Gerais*) published in June 1990, it was announced that targeted sectors would fall into one of each of the following two groups. The first were segments of high tech industries - informatics, fine chemicals, precision mechanics, new materials and biotechnology - to be selected for infant industry promotion on a traditional import substitution basis. The second set of industries was an undefined group of segments which was expected to attain international competitiveness through restructuring.

Broad as they are, these guidelines quite clearly suggest that high trade barriers will continue to be overtly used as a policy instrument for industrial targeting in the former, "new industries", group. Indeed, the document puts forward quite expliciting that the maximum 40% tariff target for 1994 will not be binding for these sectors, as price differentials between domestic products and competing imports are much larger. This policy choice merits some comments. A first point to note is the fact that within this group there are several inputs - such as automation instruments, computers, computer-aided machinery and so on - whose diffusion should clearly be stimulated. However, the higher domestic prices produced by import

[1] Industrial targeting is defined here on the lines of Krugman (1987), as the effort to change the allocation of investment among industries so as to favour industries in which the market is believed to underinvest.

protection, besides increasing producers' surplus, reduces the level of demand relatively to a freer trade regime. Thus, in this case, the optimum policy would be to provide a direct subidy to producers, instead of erecting high barriers to trade. A second point is that, for a country so poorly endowed with the basic elements for the fast attainment of capability in advanced technologies, it is very risky to embark upon targeted policies in sectors where learning curves in the innovating centres are still very steep and product life cycles very short due to technological obsolescence. In these cases, chances are that either domestic producers will never reach international cost standards or reach them too near the date in which production is discontinued in the innovating centre, so as to make unlikely the fulfillment of the Mill-Bastable criteria for infant industry promotion[1].

In the second set of industries - i. e. those "in need of restructuting" to attain competitiveness - tariff protection will be given, as defined in the trade liberalization schedule, but no mention was made of dismantelling local content requirements sheltering many such sectors. In this case, it will fall to the other announced instruments of industrial policy - such as subsidised long-term credit, government procurement and so on - to try and increase the level of investment in each targeted industry. However, given Brazil's institutional realities it is very difficult to believe that creating sectoral *loci* for the administration of discretionary instruments of policy will not lead to the maintenance of non-border measures to discriminate against imports in the allocation of incentives, such as the current practice wich maximum import content requirements on a more or less generalized fashion. This may be even worsened by the government's intention, as stated in the June guidelines, of enforcing a system of "consensual planning" through what was called GEPS (*Grupos Executivos de Política Setorial*), an outgrown of the past experience of sectoral chambers under the 1988 decree. This is a dangerous development as far as the idea of having a less personal and market based relationship between the government and the private sector is concerned,

[1] The Mill- Bastable condition requires that the present value of losses incurred by protecting, or subsidizing, an "infant industry" be at least equal to the discounted value of gains produced after the infant matures and competitiveness is reached. For an ellaboration of this arguments with reference to the Brazilian experience, see Fritsch & Franco (1989c).

and denotes the bureaucracy' resistence of deregulation in trade and industrial policy making.

2.4 Recent trends in FDI and the regulatory framework

Given the important contribution FDI has been providing in enriching the links between Brazil and the world industrial economy discussed in Part One, the prospects of FDI in the 1990s should be seen as an important element in the redefinition of trade and industrial policy instruments. In this connection two issues should be addressed. On the one hand, it should be noted that a deteriorating macroeconomic "climate" for investment activity in general through the eighties has not contributed to a greater presence of FDI in Brazil. On the other, the proliferation of new forms of FDI and the increasing role played by transactions with intangible assets within the FDI process poses new challenges to the regulatory framework afftecting FDI in Brazil.

As regards the effects of macroeconomic instability, it may be seen in Table 8 that the notable fall in FDI inflows after 1982 can be perceived not only in net inflows and reinvestment but also in the increase in dividends and repatriations. This was induced by the conjunction of a sharp recession, the uncertainty prevailing during the acute moments of the debt crisis and the acceleration of inflation. The economy would experience a recovery in the second semester of 1984 to last until the collapse of the Cruzado Plan late in 1986, but FDI flows would not regain pre 1982 levels. The observed increase in FDI flows after 1987 is somewhat surprising, and the more so given the uncertainties that surrounded the treatment to be given to foreign capital in the new Brazilian Constitution then being voted. Most of these uncertainties had disapeared by the end of 1987, but the very significant recovery of FDI in 1988 was almost entirely due to debt-to-equity conversions following the more liberal regime enforced in this year: while ordinary FDI (not through conversions) and reinvestments maintained levels comparable to the previous years, conversions rose to over US$ 2.0 billions in 1988. It has been also noted that the opportunity to effect debt

conversions may have induced substantial increases in dividends payments and repatriations only to reenter the country through conversions[1]. A significant decrease is observed during 1989 after the suspension of conversions, which reinforced the impression that they may not have been important to induce *fresh* investment decisions, the sharp increase in FDI in 1988 being explained by investments postponed in the expectation of a more favourable legislation which was also expected not to last very long.

Table 8
Direct investment, reinvestment and dividends, 1978-1988
(US$ Millions)

	1978-82*	1983-87*	1988	1989	1990'
(1) GROSS INFLOWS	1,682	991	2,732	1,358	614
% of exports	9.5	3.9	8.1	3.9	2.4
(2) THRU DEBT CONVERSION	110	466	2,095	930	228
% of gross inflows	6.8	47.0	76.7	68.5	37.1
(3) REPATRIATIONS	176	324	290	675	285
% total stock'	1.0	1.2	0.9	2.0	n.a.
(4) DIVIDENDS	492	974	1,539	2,400	n.a.
% total stock'	2.9	3.7	5.0	7.0	
(5) - (1) - (2) - (3) - (4)	904	-773	-1,192	-2,647	-
(6) REINVESTMENTS	881	555	714	n.a.	n.a.
% total stock'	5.0	2.1	2.3	-	-
(7) TOTAL FDI (5)+ (6)	1,785	-218	478	-	-

' For the first nine months. * annual averages. Source: Adapted from Correa do Lago (1988). Original figures from Banco Central do Brasil, and Gazeta Mercantil.

The worsening outlook for FDI in Brazil is related to the overall investment climate in the country that is now plagued by macroeconomic instability. It is totally unreallistic to expect FDI to regain past levels without rebuilding the basic conditions necessary for a sustained recovery, that is, to resolve the huge budgetary difficulties, to achieve a drastic reduction in inflation - in sum to "put the house in order". Basically, the factors currently constraining FDI are the very same that constrain capital formation in general.

In parallel, complaints has been increasingly voiced regarding the regulatory regime governing FDI, which has always been taken as exemplary

[1] Differences in discounts observable in the secondary market for Brazilian debt and adopted by the Brazilian Central Bank in freeing domestic currency counterparts of swap operations created several opportunities for profitable arbitrage leading to a blosomning of debt swap operations in the late 1980s.

regarding operation of foreign subsidiaries in manufacturing. According to the existing rules, dividends can only be remited at the official exchange rate without progressive taxation if below 12% of registered capital. Yet, the Central Bank allows the registration of foreign capital only to the proportion of the fixed investment in goods, machines and buildings. Intangible assets cannot be registered, which artificially reduces the base upon which dividends can be remited in businesses for which such assets are important[1]. These sectors are very obviously penalized the consequence of which is creating a disincentive for FDI in such sectors, most notably services and high technology industries. In parallel Brazil adopts a very restrictive and highly discretionary stance towards technology transfer contracts, limiting the possibilities of technological associations and franchising relationships to the very minimum. In consequence, the country's expenditures in foreign technology are maintained in very reduced levels: around US$ 150 million in 1988, one tenth of the Korean figure when normalized by GDP[2].

As a result of this regime, FDI presence in services, for example, is significantly inferior to what is generally observed internationally. FDI in services have represented a proportion between 53% and 57% of outward FDI flows from the US, the UK and Japan in 1981-85, and these years inward FDI flows in services in Brazil have been only 18.4% of total inflows[3]. The increasing share of services in global FDI possibly reflects the importance of information technologies and associated intangible assets involved in operations of international businesses. The fact that, in the first half of the 1980s, inward FDI in services in Brazil responded to a much smaller proportion of total inflows than the corresponding proportion of outward flows of major investor countries does indicate an inadequacy of the Brazilian regulatory regime, to which we may add a number of sectorial restrictions on foreign owned firms in services' activities, that may become serious as intangible assets form the bulk of assets transferable to foreign locations through FDI and "new forms" of relationship between MNCs and host countries - joint ventures, licensing, technical assistence, marketing

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[1] Despite some exceptions granted on an *ad hoc* basis. For details see Franco (1990c).

[2] See Franco (1990c). Note, in addition, that the Brazilian statistics overestimate services as foreign capital in holding companies, no matter if they control manufacturing businesses, are registered as in "financial services".

[3] Sauvant & Zimny (1988, p. 27) and Banco Central do Brazil.

agreements, etc. - tend to predominate. Indeed, with a rapidly moving technological frontier, and with an increasingly internationalized world, there should be an increased role for "new forms" under which one could legitimately expect, according to Dunning (1982, p. 370), "international business to flourish [though] its character will change and its structure will become a lot more diversified. The integrated MNE should remain a dominant force in technology and information intensive industries, but probably will not be the typical foreign investor of the future."[1]

During the1950s, the typical Hymerian period of FDI, Brazil offered a landmark example of a regulatory regime in line of international trends to the extent that investment in goods (machines) was allowed (still is), permiting whole factories to be transplanted and added to the firm's operational assets without any foreign exchange transaction, and dividends could be remited on the basis of the presumed value of physical capital. The incentive proved very effective, especially in the auto industry, as it was especially adequate for rellocating manufacturing operations. Later, in the "global reach" phase, emphasis was given to joint ventures and import-to-export schemes (the BEFIEX program) and other mechanisms seen as crucial by MNCs for their plans of worldwide rationalization of activities. Very clearly the new challenges posed in a world in which FDI is intensive in intangible assets are yet to be properly met, and in these conditions Brazil might loose some of its weight as a host country.

[1] Furthermore, increasingly, one should expect MNCs to find it "more advantageous to reduce the cost and the commercial risks associated with direct investment and to play a role as intermediaries on the input side (technological innovation) as well as on the output side (control over markets through marketing agreements)". OECD (1988, p. 76).

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