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COMPETITIVENESS

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THE BRAZILIAN EXPERIENCE IN FOSTERING COMPETITIVENESS

Renato Baumann

Competitiveness has become a central topic for discussion in most debates related to economic policies. Different ways of measuring it, distinct approaches to the more adequate policy measures required to foster it, country-specific characteristics that affect competitiveness, and - perhaps more than anything else - the various ways of defining it are only some of the ingredients that make such a debate rather complex.

As Tavares/Haguenauer/Machado (1990) have put it, the concept of competitiveness should not be confounded with some of its effects, like profitability and export performance, neither with the factors that lead to foster competitiveness, such as technological updating, nor with events that follow from governmental action, like exchange rate policy, subsidies, wage and price control and others. The concept of competitiveness should, on the other hand, allow for several distinct levels of sectoral aggregation. Needless to say, what these observations lead to is that the number of possible concepts that can be proposed is quite large.

In this work we will not go into that discussion, and hence shall not opt for any specific definition. Instead, the purpose here is to present some basic features of the recent Brazilian experience, stressing the government measures that might have contributed to shape the productive structure and to foster competitiveness.

Before we go into the appraisal of the main policy measures adopted recently it is important to realize that the economic environment in which these measures were expected to work had two unprecedented basic characteristics - a deeply integrated productive structure and a very unstable macroeconomic framework. The following Section illustrates the basic points of the former characteristic; the macroeconomic conditions of the recent period can be summarized by the negative variation of 8% in the industrial production in 1990, coupled to an increase of over 1800% in Consumer Price Index in the same year.

I - The Qualitative Changes of the Productive Structure

From the mid-fifties up to the late seventies economic growth in Brazil was largely influenced by direct State intervention in the form of rather clearly defined industrial policies. Expansionist macroeconomic policies, institutional reforms, direct participation

of the State in the productive sector, all of them have contributed to design a rather integrated productive structure. This process was further deepened in the late seventies, when a new cycle of public and private investments allowed an additional verticalization of production.

As a net oil importer, Brazil was heavily affected by the shock of oil prices in the early seventies. Total imports doubled between 1973 and 1974, leading to a trade deficit of unprecedented magnitude. Instead of a recessive adjustment, policy-makers opted for a growth-cum-debt approach.

The expansion of productive capacity resulting from the large sectoral projects implemented after 1975 came fully into operation at the beginning of the next decade, thus allowing a basic capacity to face the difficulties to import that would otherwise constrain the Brazilian economy from 1979 onwards. Improving offshore crude oil production, expanding the steel sector, improving the telecommunications system, expanding the petrochemical sector, expanding the production of non-ferrous metals, pulp, paper, cement, fertilizers, capital goods, the nuclear energy program, adopting strict market reservation for national producers of informatic goods, building large hydroelectric power plants and others ranked high among the priorities of economic policy in the second half of the seventies.

The instruments used to implement such active industrial policy were of virtually every kind adopted by most countries. According to Suzigan (1978), by the late seventies one could find examples of nationalization programs, sectoral programs, direct coordination of central government purchase policies, definition of basic criteria for the acquisition of capital goods by public enterprises, creation of new State enterprises, fiscal and financial incentives, support to small and medium enterprises, granting of preferential credit to priority sectors and varied incentives to national enterprises and others.

Two main outcomes of this policy were, first, that the index of nationalization - the share of domestically produced equipments - of industrial projects jumped to over 3/4 by the end of the decade, with obvious multiplier effects in terms of demand stimuli and incentive to technical improvement. Second, new comparative advantages were acquired via - among other factors - the systematic production in large scale of sectors until then marginally explored, like pulp and non-ferrous metals.

Table 1 shows (based on estimates by ISIC (International Standard Industrial Classification) Divisions) how the structures of industrial value added and industrial exports have changed in the relevant period.

Table 1 - Brazil - Percentage Composition of Industrial Value Added and Industrial Exports - 1970 / 1980 / 1988

Manufacture of	% Share in Value Added			% Share in Industrial Exports		
	1970	1980	1988	1970	1980	1988
Food, Beverages and Tobacco	16	14	14	75	48	22
Textile, Wearing Apparel and Leather	13	12	10	4	8	11
Wood and Wood Products, including Furniture	4	4	4	6	2	2
Paper and Paper Prods., Printing and Publishing	7	6	6	0	3	5
Chemicals and Rubber, Petroleum, Coal, Chemical and Plastic Prods.	18	20	24	3	8	13
Non-Metallic Mineral Prods., except Prods. of Petroleum and Coal	6	6	6	0	1	1
Basic Metal	8	7	8	5	6	21
Metal Prods., Machinery and Equipment	28	30	26	5	23	25
Other Manuf.	0	1	2	2	1	0
Total	100	100	100	100	100	100

Source: data processed by CET/CEPAL Unit, kindly provided by R. Bielschowsky

It comes out quite clearly from the figures in this Table that the relative weight of (traditional) wage goods industries - processed food, beverages, tobacco, textiles, apparel and footwear - in industrial value added was reduced during this period, whilst chemicals, machinery and equipment gained momentum at a marked pace. Furthermore, the composition of industrial exports was also affected to a significant extent: the share of natural resources-based wage goods corresponded, in 1988, to less than one-third of its relative weight in 1970; in 1988, over 60% of industrial export value were metal products, machinery and equipment, products from basic metal industries and chemicals.

It has been estimated (Castro/Souza (1985)) that as a consequence of the expansion and diversification of production following the implementation of these large projects in only six of these sectors - petroleum, non-ferrous metals, chemicals, fertilizers, pulp and paper and steel products - the economy in foreign exchange (defined as the combined value of import substitution and export expansion involved in each of these sectors) was as high as US\$ 7 billion in 1984, which would account to as much as 27% of the country's total exports that year.

The main point to retain from these considerations is that the Brazilian economy had, at the beginning of the eighties, a recent record of heavy State intervention, an institutional framework that had proved to be instrumental for industrial policy making and an unprecedented productive capacity. This is a basic starting point for the appraisal of more recent policies.

II - Macropolicies with Effects over Competitiveness

As different from the three previous decades industrial policy in the eighties became far more passive. The basic institutional framework did not change significantly throughout most of the decade, but the overall economic instability and - for the first time in the post-war period - the lack of well-defined long-term policies led to a new situation where the State failed to orientate industrial investment. Macroeconomic rather than sectoral policies provided the relevant signals to be followed.

II.1 Price Policies

An important tool in recent Brazilian economic policy with strong consequences for the competitiveness of domestic production has certainly been its price policy. At least two aspects of such policy are worth stressing: the influence of price controlling agencies and the role of (repressed) public tariffs.

The system of price control that characterized Brazilian economic policy making in the last three decades dates back to 1967; sharp price increases in the mid-sixties led to more strict legislation than the one in vigour since the 1930s and to the creation of the administrative network that would play a significant role in the coming years. The cornerstone of such system was the CIP (Interministerial Council of Prices), with its basic action oriented towards monitoring profit margins.

In the late seventies price-control agencies have also acted in promoting industrial combines (Fritsch/Franco (1991a)): since the common pattern of competition in Brazil was one such where (large) foreign firms could act together with several small national firms, it was assumed that fusions and acquisitions among national firms should be stimulated as a means of gaining scale and stimulating competition. When fusions and acquisitions could not be implemented alternative combines would be stimulated and the CIP would sponsor sectoral agreements through which firms in a given productive chain would agree as a group on a given set of profit margins. The outcome of such approach seems to have been - according to several analysts - a higher degree of industrial concentration favoured by institutional barriers to entry in several markets, the formation of oligopolies and the constant demand for economic regulation.

Government price policies were also instrumental for competitiveness purposes in that public tariffs were often repressed in real terms in order to counterbalance inflationary pressures. Given the strong presence of the public sector in the provision of basic inputs this has also meant a reduction of cost structures for several productive sectors (needless to say, at the cost of reducing the attractiveness of investment in those basic sectors as well as increasing the debt burden of the State enterprises involved in the process).

Table 2 illustrates this point, showing the evolution of the real price of public tariffs (tariffs deflated by IPCA - Consumers Price Index) for eight basic inputs during the last decade.

The rationale for the antiinflationary administration of public tariffs was based on the high weight these products have on the cost structures of several sectors and the price transmission mechanisms found in a verticalized productive structure like the Brazilian economy. At the same time, however, since these basic products are supplied by public enterprises any price lag means increased subsidization to private producers and contributes to the public sector deficit. The longer this mechanism operates the higher the amount of subsidy and the higher the percentage of price correction needed (and hence the more intense the inflationary pressure that follows the recuperation of real price levels).

Throughout the eighties we observe some public tariffs being systematically repressed, like telecommunication costs ¹/₁, post rates and transportation fares. For steel products and the energetic inputs there is a varied pattern of increasing real prices up to 1984 (largely as a consequence of the higher oil prices) and a systematic fall in the late years, reflecting the general price policy orientation.

Table 2 - Brazil - Real Price of Public Tariffs - 1980/88

Year	Elec- tricity	Telecommu- nications	Diesel Oil	Fuel Oil	Steel Prods.	Post Rates	Rail Fares	Port Fares
1979(dez)	100	100	100	100	100	100	100	100
1980	84	85	84	253	117	78	90	76
1981	91	86	107	246	124	96	98	91
1982	90	80	106	245	120	94	95	101
1983	88	69	119	302	141	67	91	87
1984	87	62	149	363	147	57	93	82
1985	104	49	100	262	146	54	108	120
1986	93	48	66	164	91	56	62	68
1987	122	47	77	202	100	68	93	86
1988	118	47	80	176	95	58	105	83

Source: IPEA (1989), pg 175

Electricity fares did fall significantly until 1984, with a less defined pattern in the second half of the decade. The point to retain from these figures is that during this period it might be said that on the whole competitiveness of domestic production did benefit from repressed public prices.

Competitiveness of domestic production in Brazil did also benefit from wage and exchange rate policies. Export performance required to assure the substantial trade surpluses needed to face the external financial constraints that characterized the economic relations of the economy with the rest of the world throughout the eighties made the creation of favourable conditions to the export sector a constant target of economic policy.

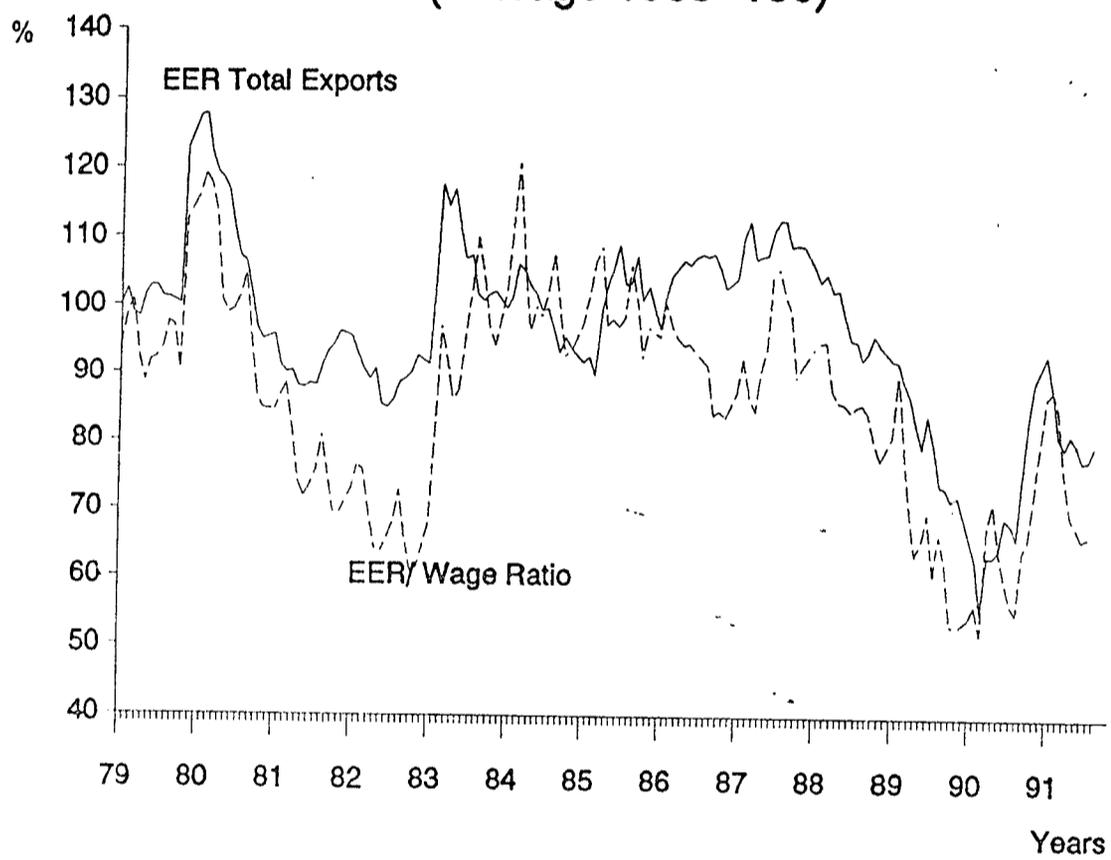
¹ It is not clear at this level of aggregation to what extent these real price falls reflect a universal tendency associated with technical improvements or the influence of domestic public prices policy.

As shown in Graph 1 ²/, the level of real effective exchange rate - measured in relation to the price levels of the ten most important trade partners - did go through a troubled path between 1980 and 1983, but presented relatively small variations since then until at least 1988, decreasing sharply in the two following years. An approximately similar trajectory is observed in the ratio between the effective exchange rate and the wage rate.

This reinforces the point that domestic policies with regard to the relevant prices did contribute positively to foster competitiveness of domestic production during most of the last decade.

² Graph 1 is drawn from data presented in IPEA, Boletim Conjuntural No.15, outubro/91

Brazil-Effective Exchange Rate (average 1985=100)



Other aspects of macro policies that have contributed to improve competitiveness of domestic production are linked to protection against competing imports and to granting incentives to exports.

II.2. Trade Policies

II.2.1 Protection Against Imports

As shown above, the active trade policies adopted in Brazil had a background support of a fairly well managed crawling peg system for the exchange rate that had been in operation since December 1969. This is one of the characteristics that differentiates the Brazilian experience from the corresponding exchange rate management in other Latin American countries in the last two decades: the much lower coefficient of variation of the exchange rate indicates that economic agents were able to deal with far more stable market signals in the Brazilian economy than elsewhere ^{3/}.

Another characteristic of the Brazilian foreign trade policy is the frequent use of protective devices. Since the early 1950s policy makers have followed a deliberate policy of protecting domestic industry against competing imports. In 1967 an attempt to offset the anti-export bias of the trade regime led to a short-lived experiment of tariff reduction and to devising a rather complex system of export promotion, which will be considered later on. A second significant shift in the trade policy occurred after 1974: as a reaction to the first oil shock tariff rates were increased by an additional temporary tariff surcharge and a "negative list" of prohibited imports came into operation. Furthermore, an yearly "import budgeting" policy was adopted, by which every public agency and every firm had to submit for approval by the central economic authorities its forecasted import needs for the next year.

Estimates of imports affected by some of the most important non-tariff barriers indicate that these influenced about 20-25% of the imports of manufactured products in the second half of the seventies (Guimaraes, D'Authouguia (1988)). This system of non-tariff import controls has experienced rather limited variations and lasted until as late as 1990.

The basic nominal tariff structure and tariff-setting mechanisms in operation in the last two decades in Brazil dated from 1957 when Law 3244 set the basic tariff schedule and created the public agency that would be responsible for implementing it - the CPA (Comissao de Politica Aduaneira). CPA was encharged of authorizing

³This point is illustrated and discussed in Baumann (1990b).

the imports of specific items under special import regimes, its officials negotiate bilateral trade concessions, it coordinates the basic structures that puts into practice the mechanisms set by the Subsidies and Antidumping Codes, and it defines new tariff levels.

The 1957 tariff schedule remained virtually unchanged up to 1987, when the government started a process of redesigning the whole trade policy, with significant changes in tariff schedule, a reduction in the number of items in the list of forbidden imports and more flexible administration of import programs. In 1988 a new and more expressive set of changes in the trade policy took place. Several special import regimes were eliminated, as well as many indirect composite tax on import goods, at the same time that the whole tariff schedule was modified.

In the following year and again in 1990 and 1991 further rounds of nominal tariff reductions took place. The average tariff rate fell from 51% before 1988 (with extreme values of 0-105) to 35% (within the limits of 0-85) after the 1989 reform. In 1990 a number of additional tariff changes comprised tariff reductions for products from the agricultural and textile sectors, inputs and capital goods, food, and for some products domestically produced by oligopolies and monopolies. Again in 1991 a new round of tariff reduction took place, this time accompanied by a signalling of further phasing out of tariff levels, such that the average tariff level should be expected to fall from 32% in 1991 to 14% in 1994.

The quite extensive literature on trade policy in Brazil has seldom dealt with the analysis of tariff structure, and even less with the process of determining tariff levels. This is partly due to the fact that nontariff protection and a number of special import regimes have been far more important in restricting import value than nominal tariff rates. The analysis of the processes that have been submitted to CPA, demanding nominal tariff changes seem nevertheless useful in that it indicates the sectoral distribution of the benefits of those changes.

An investigation of the products (8-digit classification) that made part of the processes analyzed by CPA between 1980 and 1988 (Baumann (1990a)) revealed that in each of these years the number of nominal tariff rate increases was quite small, and for the whole 1980-88 period the cases of tariff exemption and reduction accounted for 94 % of the total number of cases. Of course, this reflects the extent of the excessive nominal tariff levels that were further reformed and the effectiveness of other barriers to imports: of a total of 2665 cases for only 169 products tariff increases were granted, suggesting that non-tariff restrictions were sufficiently binding so that few domestic producers felt threatened by import competition and have therefore appealed to offsetting increases in tariff rates.

The appraisal of the sectoral concentration of these concessions

might give an approximate idea of which industries benefitted from this process of administered protection. For the whole 1980-88 period Organic Chemical Products was the most affected sector, accounting for over one-fifth of the total number of products involved. Also noticeable was the participation of Fertilizers and Iron & Steel, which was quite expressive in 1980, but fell to marginal percentages by the end of the period.

If the reasons alleged to justify differentiated import conditions are taken into consideration, it turns out that for imports of raw materials, food and intermediate goods (including chemicals, petrochemicals, fertilizers and steel) tariff reductions and exemptions were granted on a demand-supply balance basis: concessions took place only when imports were assumed to complement domestic production.

CPA decisions were closely coordinated with those of other government agencies ^{4/} as was the case, for instance, for chemicals, petrochemicals, agrottoxics and pharmaceuticals, where every project had to be approved by CDI (Council of Industrial Development). Examples of multiple government agencies affecting specific sectors are abundant. This in fact led to a web of intertwined protective devices. Actual barriers to entry in several sectors added to CPA's tailored protection, all of which meant that imports or competing domestic production could hardly threaten the market position of already established firms (Baumann (1988)): discretionary import permits did affect competitiveness but at significant costs in terms of both foregone tax revenue and the resulting concentrated market structure.

II.2.2 Export Incentives

Restrictive import policies have, thus; been part of the industrialization strategy since its early stages. Another peculiar feature of the economic policy was, however, that since the late sixties there has been a clear concern with the reduction of the anti-trade bias induced by the import policy. The official argument has always been that import devices were unavoidable - due to balance of payment pressures ^{5/} - and that it was necessary to compensate for the distortions these devices would enforce on

^{4/}Decisions were taken by a collegiate of sixteen members, of which thirteen represented different government agencies.

^{5/}Determined, among other things, by the considerable presence of foreign capital in the industrial sector: there is a structurally determined demand for hard currencies to allow for a higher import component of production and for profit remittances.

traders ^{6/}. Since the late sixties, then, export incentives were given such a priority as to be referred in the country's constitution.

Export promotion comprised a number of aspects, ranging from the directional action of government agencies to the overwhelming stimulus provided by the already referred exchange rate management. The structure of export incentives was also quite diversified, comprising several types of fiscal and financial incentives, with different degrees of implicit subsidization.

As in most other Latin American countries, the structure of both fiscal and financial incentives to exports was designed in such a way as to benefit relatively more the exports by some (non-traditional) sectors, and available empirical evidence is suggestive that actually the sectoral distribution of incentives might have contributed to the diversification of the export bill (Paula Pinto (1984)).

As far as the effects of export promotion for competitiveness are concerned, specific consideration should be given to an instrument originally aimed at stimulating multinational enterprises in the automobile industry to generate net positive foreign exchange balance by means of granting them incentives to import inputs required by their productive process, but which has in its later years affected a number of industrial sectors and several domestic firms of varied sizes. The BEFLEX program lasted between 1972 and 1990, and exports made under these contracts corresponded in 1987 to about half the total value of manufactured exports.

The essence of the program was to make firms sign a medium-term contract by which they were allowed to import free of taxes and administrative barriers an amount corresponding to up to one-third of the export value (which should reflect an improved performance, in the case of already exporting firms) and provided that the firm presented net positive balance of foreign exchange (comprising all its trade and financial transactions) each year and invested a given amount in the purchase of domestically produced equipments.

About 400 firms benefitted from this mechanism, during the two decades it lasted. A detailed analysis of it (Baumann (1990a)) would reveal, however, that there was an intensification of the number of applicants after 1980 - when the facility of having preferential access to imports became specially attractive - and that although

⁶There is some empirical support to this argument: positive and relevant (rank) correlation coefficient have been found Baumann(1985) between the sectoral structures of effective rates of protection and effective rates of export promotion in 1973 (0.63) and in 1977 (0.72), suggesting that incentives were largely designed to neutralize the anti-export bias of the import policy.

the program was quite successful in terms of generating the foreign exchange surplus for which it was originally designed⁷, that was achieved with significant costs not only in terms of fiscal revenue foregone, but also in terms of inducing concentrated market structures in several sectors: even in rather competitive industries firms formed consortia to achieve the scale required to sign a BEFIEX contract, and this seems to have actually operated as a barrier to entry, benefitting the largest firms in each sector⁸.

From the viewpoint of competitiveness, it is worth stressing that although the BEFIEX incentives did represent a significant margin of reduction of investment costs, the incentives were not sufficient to induce the implementation of new productive units in significant magnitudes: evidence indicates that the major effect of those incentives over investment was to increase the capacity of already installed firms and to modernize production lines in several sectors, thus supporting profitability without large variation in the volume of investment per total sales.

An impressionistic view of the magnitude and trajectory of the whole set of export incentives granted to manufactured exports in Brazil is presented in Graph 2⁹.

The incentives increased markedly throughout the seventies. Foreign pressure led to a drop in 1980, but the worsening of the external trade conditions soon led to resuming the incentives at an even sharper pace, reaching in the early eighties quite high percentages of the export value¹⁰. In the second half of the latter decade the curve became much flatter, with an almost inexistent subsidy component (i.e., incentives comprised essentially tax rebates and mid to long-term financing).

In spite of the impressive magnitude of the incentives, and despite the indications that they have been able to influence the sectoral composition of the export bill, it must be stressed (as recalled by Fritsch/Franco (1991b)) that the (numerous) econometric analyses of

⁷Not only did the program's export revenue and net foreign exchange balance increase markedly, but the ratios of imports of capital goods and imports of inputs per unit of exports remained well below the three-to-one legal rule.

⁸BEFIEX firms were on the whole 5 times larger than the average firm size in each sector (Baumann (1990a)).

⁹Based on data presented in Baumann (1990b)

¹⁰Notice that this curve reflects the incentives as defined in the legislation (a "potential" criterion). A series of actually disbursed incentives would, however, show a very close trajectory (see Baumann (1990b)).

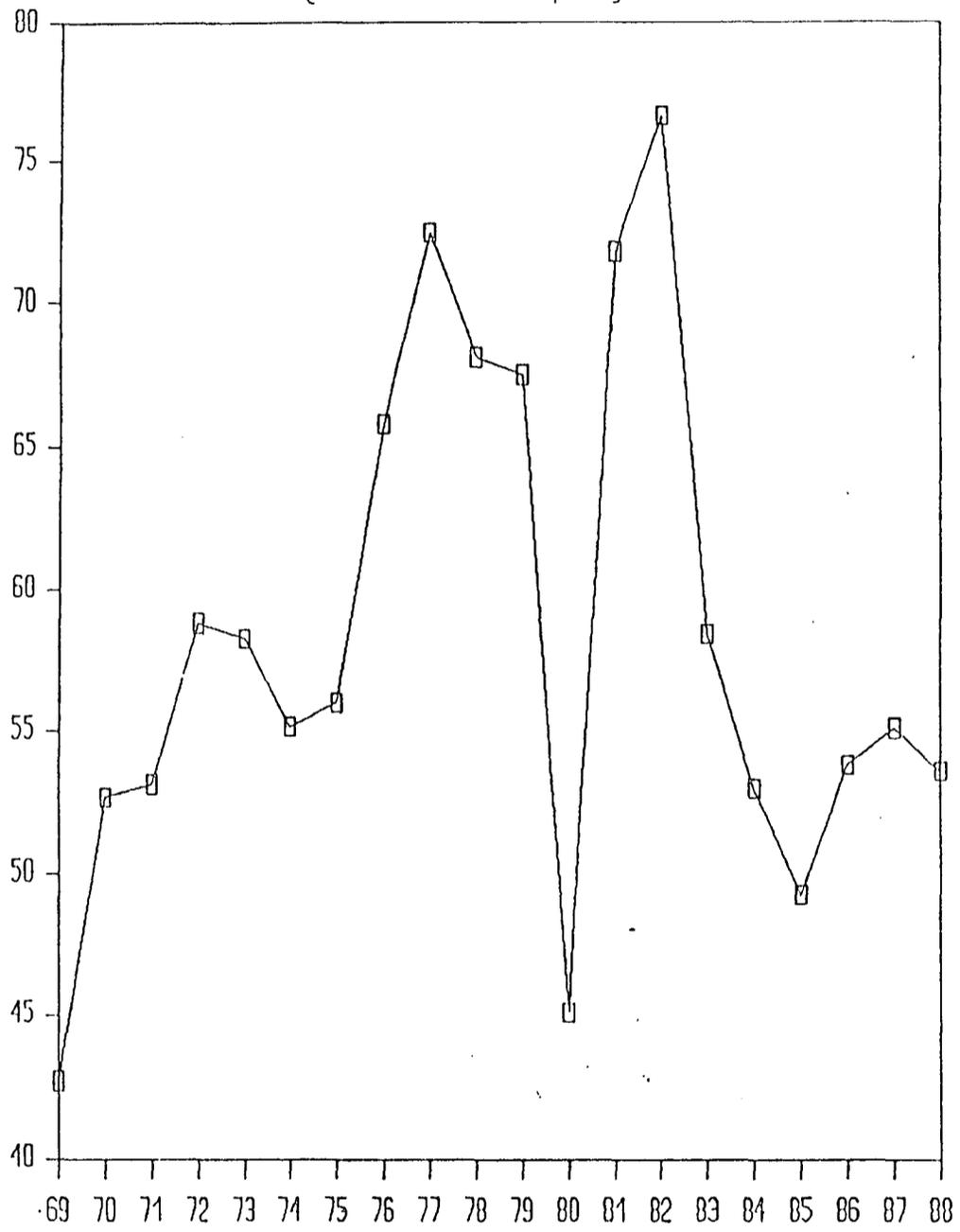
the Brazilian experience with industrial exports often point to more important influence of other factors like foreign demand and its complementarity with the domestic business cycle, as well as to "structural competitiveness" as reflected in elements such as firms size, capital ownership, technological strategies, scale economies, and others.

The relevant point to stress from these various indicators is that whatever their specific intensity and the ways they influence competitiveness, it should be emphasized that they certainly have contributed to create a favourable economic environment which allowed an uniform improvement of competitiveness indexes for Brazil throughout the seventies and at least until the mid-eighties, in spite of the domestic recession of the early 1980s (Matesco (1988)).

Needless to say, these generic policy orientation were coupled to specific sectoral stimuli of various kinds, as briefly considered in the following section.

BRAZIL - INCENTIVES TO EXPORTS

(% of manufactured exports)



III. Micro and sectoral policies - regulation of industrial activity

It is beyond the scope of the present work to go into all the sectoral policies that have been put into practice in the last two decades. Among other reasons, suffice it to recall the very diversity of forms of intervention that were adopted, as already mentioned. Specific institutional framework, ranging from the creation of State enterprises to sector-specific regulatory agencies, special import conditions, fiscal and credit incentives as well as other forms of economic stimuli were often adopted with different intensities in the various sectors.

A concise view of the degree of intervention at the sectoral level might be obtained by considering: i) the extent to which explicit regulatory instruments (including capacity licensing) and lack of access to fiscal, financial and procurement-related incentives are high, moderate or low constraints on mobility and competition in these subsectors and ii) the magnitude of fiscal, credit and procurement-related incentives granted to each sector. Table 3 summarizes the information, weighting the sectors by their contribution to manufacturing value-added in 1989.

Table 3 - Brazil - Extent of Regulation and Promotion in Manufacturing Industry Weighted by Value-Added in 1989 (%)

	High	Moderate	Low	Not Classifiable
Regulation	26.2	28.6	41.2	4.0
Promotion	21.6	42.2	32.2	4.0

Source: World Bank (1989), Table 3.2, pg.30

According to figures in Table 3 sectors representing about 55% of industrial value-added were subject to moderate or high regulatory and promotional entry barriers in 1989. The outcome was certainly marked asymmetry between promoted and non-promoted firms and significant barriers to entry.

For some sectors the main policy instruments are quite easily identifiable, such as CDI's power over the Chemical and Petrochemical industries, the regulation of the steel sector by SIDERBRAS, the regulation of projects in the Non-Ferrous Minerals industry by CONSIDER, and so on. Indicators of high regulatory policies were found (World Bank (1989)) in as diverse sectors as wheat milling, paper products, railway material, electrical equipment and others.

Apart from State monopolies - like oil production - certainly the industry where regulatory power was used more intensely is informatics.

The first concerns with defining a sectoral policy with regard to informatics might be traced back to 1971, with the creation of a Working Group linked to the building of a national computer for naval operations. Henceafter the basic lines of sectoral policy have always been strongly affected by preoccupations with national security.

The basic Brazilian model with regard to informatics put emphasis in the technological capacity of local producers and in the market reservation for national firms (defined as those firms with technological and decisory control in the hands of national capital).

The main instrument has evidently been market reservation for national firms adopted since 1976, essentially via the previous control of imports of informatic goods, including parts. Furthermore, multinational producers were limited to the market for large data processing systems.

In 1984 a major step was the approval of the Law of Informatics, which aimed at promoting the scientific and technological development of the sector, assuring preferential incentives to national firms and defining a time horizon - up to 1994 - for market reservation.

This is not the place to go into the appraisal of that specific policy, a quite controversial issue. For the present purposes it seems sufficient to refer to some of the main results, such as the fact that in 1987 57% of the domestic market for computers and peripheric equipment was attended by national firms; national capital also responded for 40% of the production of equipment for informatics. Other positive indicator often referred to is the number of jobs of highly qualified workers (Dupas/Suzigan (1988)).

The net contribution of the Law of Informatics to the competitiveness of the Brazilian productive system is an endless discussion. The positive effects mentioned in the previous paragraph are often qualified by the presumably damaging consequences of refraining the access by domestic producers of non-informatic goods to imported, updated technology and equipment.

A final observation with regard to the sectoral incentives is that the precise mapping of all the instruments affecting each given sector is not a trivial task. It has been shown (Baumann (1988)) that some sectors could in principle benefit simultaneously from the incentives granted by several government agencies. Estimating the fiscal cost of such a system can only be an approximation; for 1985 it was calculated that for only four agencies - BEFIEEX, CPA,

CDI and CONSIDER - the fiscal cost would be worth over 0.5% of GDP.

Another policy component that has certainly contributed to improve competitiveness but is neither considered among macropolicies nor as sectoral specific is the active policy put in practice by the National Development Bank (BNDES).

Brazilian firms have typically financed their investment projects from retained earnings and --whenever they had access-- from BNDES financing, the only provider of subsidized, targeted term loan to industry. The Bank has played a major role in the design of industrial policy ^{11/}, often reinforcing the concession of fiscal incentives by other government agencies, sometimes providing credits with a sizeable implicit subsidy component, as in the early eighties ^{12/}.

Finally, one could refer to the creation - in 1985 - of the Ministry for Science and Technology, to coordinate all the public initiatives in these two areas. The conditions of the Brazilian economy ever since and - even more - the fiscal constraints on the government have certainly contributed to a limited performance.

IV - The Latest Moves

The scenario has changed somewhat since 1990. The poor economic performance of the eighties led to the diagnosis that Brazil was lagging behind other more dynamic industrializing economies. Also, the need to increasing the degree of exposure of the economy became a matter of increasing consensus among entrepreneurs, academics and government officers.

The previously described policy environment changed in at least two directions. On the one hand, administrative reform sharply reduced the degree of institutional interference, by the elimination of a number of incentives or even by the extinction of a number of agencies. Government decisions were in this regard largely helped by new constitutional prohibition to grant subsidies.

¹¹See World Bank (1989) for an appraisal of the role of BNDES in financing industrial projects.

¹²Uncertainty associated with high inflation shortened the maturity of most domestic financial transactions. When compared with market conditions, actual BNDES transaction costs and the longer maturity of its financing would reveal a significant subsidy component.

Trade policies were also substantially changed. To start with, the administered crawling peg system of determining the exchange rate was replaced by a "dirty floatation", whereby the rate should be market determined, although the Central Bank does play a major role in the process. Also, export incentives were eliminated, except for a few (value-added) tax rebates and some types of export financing (at close-to-market rates).

On the import side, the above referred rounds of nominal tariff rate reduction, coupled to the elimination of special import regimes led to a more transparent system and to the signalling of a decreasing future trend for the barriers to trade. However, it has been argued that the very fact that most of the nontariff barriers that were replaced by tariff rates to be reduced later on refer to consumer goods rather than producer goods (Fritsch/Franco (1991b)) raises doubts about the possibility that the present trade policy might be leading to an anti-trade bias still hidden by the domestic economic recession that pulls down the demand for imports.

Furthermore, the appraisals of export promotion schemes of the BEFLEX type tend to stress the high fiscal cost, its discretionary characteristics and the distortions the overall economic environment introduced in its administration (as illustrated by the high number of relatively small firms with BEFLEX programs). It would seem, however, that these (and other) negative aspects should be an argument not to dismantling the instrument altogether. A reshaping into some kind of automatic (i.e., non-discretionary) mechanism that might recuperate the attractiveness of inducing (mainly multinational) firms into presenting positive net foreign exchange should perhaps be considered, the more so as the context for international trade becomes increasingly administered and productive structures acquire a global perspective.

Other new, relevant facts were included in the Guidelines for an Industrial and Foreign Trade Policy circulated by the government in June, 1990. Apart from the announcement of the faster reform of the import tariff schedule, the policy comprised a number of other relevant measures, from the viewpoint of their impact on competitiveness:

- .the index of nationalization required for financing by BNDES or for the purchase of equipments by the public sector was reduced from 85% to 70%

- .the time limit for market reservation in informatics was proposed to be anticipated to 1992

- .a Brazilian Program for Quality and Productivity was installed, intended to improve the competitiveness of goods and services via the formation of human resources, the systematic motivation of the productive sector, the development and diffusion of methods of technological improvements, the adequation of the technological infrastructure and the creation of networks of technological information

.projects of law regulating the Industrial Property Code and the antitrust legislation were to be sent to Congress

.sectoral executive policy groups were to be regulated

.R & D financing should increase from 0.5% of GDP in 1989 to reach 1.3% of GDP in 1994, with significant increase of the contribution from the private sector

.administrative procedures should be simplified with regard to the registration of new firms and the operation of private agents, mainly in the foreign trade sector

.a Program for Industrial Competitiveness was adopted, comprising sectoral specific subprograms aimed at the identification of products, markets and services that might amplify the positive effects of the use of new technologies

.the SEBRAE - Brazilian Service to Support the Small and Medium Enterprises - was to be granted more resources and increased autonomy

In February, 1991 - together with a new stabilization program - the government announced new measures that directly or indirectly affect competitiveness of domestic production. Indexed contracts were forbidden, the administration of the government budget resources was centralized, prices and wages were frozen once more (except the exchange rate and interest rates), a tentative of making longer the term structure of financial contracts led to the creation of funds aimed at long-term investment in social projects, and public tariffs were adjusted in quite significant proportions.

It goes without saying that these recent sets of measures lead to a quite different scenario than the one observed in the two previous decades, when the macroeconomic environment did favour an interventionist orientation of industrial investments.

V - A Few Last Comments And The Role of Regional Integration

This paper aimed at presenting in broad terms the recent evolution of the main policies that have affected competitiveness of Brazilian production in recent years. It seems quite evident that significant improvements have been achieved either directly - by means, say, of sectoral policies - and indirectly, as an outcome of generic macroeconomic policies creating a favourable environment, and this has contributed to the oddity of experimenting sustained competitiveness of the country's goods and services for a long period, and even during periods of macroeconomic adversity.

It should also have become clear that the underlying logic of policy making that allowed these achievements have changed to some extent in the latest two years, due to a number of determining factors (most of them related to economic hardship of the public sector) as well as to changes in the very conception of the role to be played by the public and private sectors.

When considered in regional terms, the previous achievements look quite impressive, as they have allowed the country to benefit from exploring intensely the gains from scale made possible by its large domestic market and by active export activity.

What is less clear is the next step to follow. As in other Latin American countries, the diagnosis often point to the diminishing competitiveness of the productive structure, due to several reasons, and to the need of a technological updating. That could hardly be achieved by replicating the previous policy models, among other reasons for the lack of public resources. At the same time, it is often stressed that international trade tends to assume new characteristics, in which integrated productive structures play a central role.

This line of thought often leads to reconsider - on a new basis - the potential gains that could accrue from regional integration, if the conditions are created for the participating countries to commonly develop dynamic comparative advantages, based - in the case of Brazil and Argentina - mainly on the introduction of technological changes in primary producing sectors and the efficient production of new manufactures close to the technological frontiers. If conceived in generic terms, taking into account the intersectoral relations in each economy, an integrated market structure could allow for multiplier effects, broadening the demand stimuli and the diffusion of technical progress.

REFERENCES

- .R.Baumann (1985), Exportacoes e Crescimento Industrial no Brasil, INPES/IPEA, Monografia No.33, Rio de Janeiro
- ._____ (1988), "Uma Avaliacao da Estrutura dos Incentivos ao Investimento na Industria Brasileira", mimeo
- ._____ (1990a), "A Political Economy Analysis of Import Tariff Policy in Brazil - 1980-88", mimeo
- ._____ (1990b), "Ajuste Externo - Experiencia Recente e Perspectivas para a Proxima Decada", in IPEA/IPLAN, Para a Decada de 90 - Prioridades e Perspectivas de Politicas Publicas, vol.2, Brasilia
- .M.Barata de Paula Pinto (1984), "Efeitos Alocativos da Politica de Promocao de Exportacoes: Uma Reavaliacao", Pesquisa e Planejamento Economico, vol 14, No.2
- .A.B.Castro, F.E.P.Souza (1985), A Economia Brasileira em Marcha Forcada, Ed. Paz e Terra, Rio de Janeiro
- .G.Dupas, W.Suzigan (1988), A Nova Articulacao da Economia Mundial e as Opcoes para o Brasil: Estrategia Industrial e Modernizacao Tecnologica, mimeo
- .W.Fritsch, G.Franco (1991a), "Competition and Industrial Policies in a Technologically Dependent Economy: The Emerging Issues for Brazil", Revista Brasileira de Economia, vol. 45, No.1, pp 69-90
- ._____ (1991b), "Trade Policy Issues in Brazil in the 1990s", report presented in the UNCTAD Conference **Trade Policies for Developing Countries in the 1990s**, mimeo
- .E.Guimaraes, A.L.D'Authouguia (1988), "Descricao e Avaliacao das Barreiras Nao-Tarifarias no Brasil", IPEA/INPES, mimeo
- .IPEA (1989), Perspectivas da Economia Brasileira, Rio de Janeiro
- .V.Matesco (1988), "As Novas Diretrizes da Politica Industrial: Relatorio do Seminario", IPEA/INPES, Serie EPICO
- .J.Tavares de Araujo, L. Haguenuer, J.B.M. Machado (1990), "Protecao, Competitividade e Desempenho Exportador da Economia Brasileira nos Anos 80", Pensamiento Iberoamericano, No 17, pp 13-38

.W.Suzigan (1978), "Politica Industrial no Brasil", in W.Suzigan (ed.), Industria: Politica, Instituicoes e Desenvolvimento, IPEA/INPES, Monografia No.28, Rio de Janeiro

.The World Bank (1989), Industrial Regulatory Policy and Investment Incentives in Brazil, mimeo.

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