

Private sector responses to economic liberalization policies in Brazil: a look within São Paulo's capital goods sector

*Respostas do setor privado para as políticas de liberalização econômica no Brasil: uma olhada no setor de bens de capital de São Paulo**

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RESUMO: A tendência de concentrar-se unicamente na análise de indicadores macroeconômicos quando se estuda a liberalização econômica na América Latina levou a uma visão extremamente homogeneizante das experiências dos atores econômicos e a uma atenuação dos efeitos da liberalização sobre a representação política. Há também uma tendência geral de assumir que toda classe empresarial apoia essas políticas. Este estudo testa esses pressupostos examinando os efeitos da liberalização comercial sobre a indústria de bens de capital no Brasil, desde o final dos anos 80 até 1994. As respostas políticas à liberalização são também examinadas. De modo geral, os dados demonstram uma concordância generalizada em relação às políticas de liberalização, embora matizada por uma tendência reformista que busca fazer com que o novo paradigma econômico brasileiro seja mais palatável aos interesses da indústria. O modelo de resposta seletiva é proposto como uma estrutura teórica para estudar a dinâmica e o comportamento multifacetado do setor privado durante períodos de profundas transformações econômicas e políticas, como é o caso hoje, no Brasil. PALAVRAS-CHAVE: Globalização; liberalização; economia política.

ABSTRACT: The tendency to concentrate solely on the analysis of macroeconomic indicators when studying economic liberalization in Latin America has led to an extremely homogenizing view of the experiences of economic actors and to a mitigation of the effects of liberalization on political representation. There is also a general tendency to assume that every business class supports these policies. This study tests these assumptions by examining the effects of trade liberalization on the capital goods industry in Brazil, from the late 1980s to 1994. Policy responses to liberalization are also examined. In general, the

* I would like to thank the Study Abroad Office and the Institute of Latin-American Studies, both of the University of Texas at Austin, for helping make this research possible by providing essential funding. I also want to thank the Fundação Getúlio Vargas in São Paulo for generously inviting me as a Visiting Researcher, and the Centro Brasileiro de Análise e Planejamento for their help with this research.

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data demonstrate a widespread agreement in relation to liberalization policies, although nuanced by a reformist trend that seeks to make the new Brazilian economic paradigm more palatable to industry interests. The selective response model is proposed as a theoretical framework to study the dynamics and multifaceted behavior of the private sector during periods of profound economic and political changes, as is the case today in Brazil.

KEYWORDS: Globalization; liberalization; political economy.

JEL Classification: F61; F62.

1. INTRODUCTION

Broadly speaking, capital goods are things that help make other things. Thus, the capital goods industry is an integral part of virtually all other industries because it provides the tools and machines that other industries use in their own production. Capital goods' role as a diffuser of technology makes it an important component of all industrial production and manufacturing, especially in a large and developing economy such as Brazil. Directly linked to the economy via the investment and production decisions of other industries, the performance of the capital goods industry is a widely used indicator of the overall economic situation. Politically speaking, as well, the industry is closely linked to new developments and capital goods producers have been at the vanguard of changes in the business community in Brazil. This political and economic integration makes capital goods an informative case study for understanding private sector responses to economic liberalization.

This case study moves beyond the national level and macro-economic indicators that characterize so much of the literature on economic liberalization by demonstrating the effects of the changes associated with liberalization on actual producers (here capital goods) and their industry up through the end of 1994. In general, economic terms, the opening up of the Brazilian economy has not returned the capital goods industry to its former economic strength. Production has either fallen or remained at low levels. Despite gains in efficiency and periods of modest growth, the industry struggled throughout the period of study.

However, the industry's economic struggles did not engender any sort of open opposition to liberalization on the part of producers. Instead, the data demonstrate general agreement with the reforms though tempered with a reformist tendency among machinery and equipment producers aimed at making Brazil's new economy work better for their interests. Producers are quite conscious of the new policies when they directly impact their interests. Otherwise, the data show a surprisingly casual approach to liberalization measures among producers.

These data are important because they show actual business responses in a liberalizing economy and point out important, sometimes subtle variations and degrees of those responses. First, this paper provides a brief survey of the capital goods industry in Brazil and the impact of liberalization on industry indicators. Then it considers private sector responses to liberalization by examining data on capital goods producers and industrial producers as a whole. Issues of agreement

and divergence are sketched out between the two actors. This discussion is followed by an examination of how the machinery and equipment producers' association responded to the introduction of economic liberalization. Next, attempts by capital goods producers to reform the corporatist system of interest representation are examined. Finally, the paper proposes the Selective Response Model as a theoretical framework for studying private sector behavior during periods of profound economic and political change such as that underway in Brazil.

2. THE CAPITAL GOODS INDUSTRY IN BRAZIL¹

As Brazil prepared to open up its economy, the national development bank there produced a study on competitiveness in the capital goods industry. The study's introduction began by pointing out the industry's pivotal role in shaping Brazil's fortunes in a liberalized economy.

The capital goods industry determines the spread of technological progress to the rest of the industrial park. Thus, an understanding of the questions relative to the industry's competitiveness is vital when moving toward a model of greater insertion of the country in the international market (BNDES, 1988, p. 25).

Another key dimension of capital goods is that the industry must follow, if not anticipate, economic developments such as production patterns, product lines and the sectoral demand for those products. One study notes that the industry "is not distinguished by its importance in terms [of] production value, but by its role within the productive structure, as a vehicle of technical progress for the using sectors" (Erber & Vermulm, 1993, p. 163). In some fundamental respects, the capital goods industry is "meshed" into other parts of the economy through its own need for sales and through the technological developments that it disseminates to other industries via the machinery that it produces. It is highly sensitive to fluctuations in these areas as well as to change in the international market. Thus, linked to both the domestic and international markets, capital goods provide an excellent lens for understanding private sector responses to economic liberalization.

Production of capital goods is divided into two component sectors. The made-to-order capital goods sector and the machinery and equipment sector are distinct from each other in important ways. Non-serialized capital goods, more commonly referred to as made-to-order equipment (*sob encomenda* in Portuguese), are big machines used in productive activities such as the generation of electricity, steel or petrochemical production, and sea and land transportation equipment. Made-to-order capital goods are for industries that require machinery built to custom specifications; their fabrication is a long-term process. The sector plays a central eco-

¹ Data sources differ slightly in how each defines capital goods. The Brazilian industrial census, for example, includes transportation equipment and others do not. Divergences in defining the categories do not hamper this study's attempt to examine private sector responses to liberalization.

conomic role in the creation and diffusion of technology into production processes as well as its role as a consumer of primary materials and components (Tadini, p. 1). Technological innovation is key to the sector's success.

The other sector in the capital goods industry is comprised of serialized machines (i.e., produced in large numbers), which in Brazil are referred to as máquinas e equipamentos (machinery and equipment) or sometimes as máquinas-ferramentas (machine tools). Machine tools, as the industry is labelled in the United States, are defined as "power-driven metal-working machines, not portable by hand, that shape or form metal by cutting, pressure, impact, electrical techniques, or a combination of these processes" (Standard & Poor, p. 18). This type of equipment is "mass" produced according to the requirements of particular industrial lines of production. Typical serialized machines are agricultural equipments, turbines, lathes, industrial hoods and stoves, cutters, and furnaces, all of which can be fabricated relatively quickly. These are the basic machines of modern industrial production, placing machinery and equipment producers in a unique relationship with the rest of the economy. A recent study describes the machinery and equipment sector as strategically important "for industrial development because they incorporate technology that determines a good part of the productivity of manufacturing activities, despite representing a small fraction of production" (Nogueira da Cruz, p. 1).

This sector is further divided into machines equipped with numeric control or automation devices and conventional or non-computerized machines. Numeric control devices are computer components that transform machines beyond hand driven devices to the automation stage, "enabling them to switch quickly from one job to another" (Standard & Poor, p. 19).

3. WHAT LIBERALIZATION MEANT TO THE INDUSTRY

The capital goods industry is commonly said to be "the first to enter the crisis and the last to leave", a reference to the elastic demand for machinery and equipment during Brazil's periodic economic swings. The reduction of tariffs and other liberalizing measures in Brazil did not signal an end to the industry's economic problems. Rather, the establishment of the new policy orientation generally brought further economic decline.

General economic indicators. "The worst year in history" was the headline of a 1990 review of the Brazilian capital goods industry (*Balanço Anual*, 1991, p. 240). The immediate impact of President Collor's reforms on the production of capital goods was negative. *Exame*, Brazil's leading business magazine, published a survey of eleven major economic areas 45 days into the *Plano Collor*. The survey reported mixed results overall, though, of those harmed by the new policy orientation, capital goods was the most "afflicted". The magazine cited grim figures from an industry report that was being prepared for delivery to Brasília: 20% of existing orders in both machinery and equipment and made-to-order capital goods sector were cancelled; 40% of remaining orders had been suspended; and 3200 workers

were let go during the first month and a half of liberalization. An additional problem was that many firms which sold to the government or to state-owned enterprises were late in paying their bills (*Exame*, 5/2/90, pp. 22-4). A follow-up report found that the cancelled or revised orders in the capital goods sector amounted to US\$ 600 million, and that two-thirds of firms reported not receiving any orders in April (*Exame*, 5/16/90, p. 25).

Appendices 1 and 2 illustrate the industry's struggles as it entered the 90s. Coming on the heels of the difficult economic decline of the 80s in the Brazilian economy in general, production in the machinery and equipment sector in 1990 was more than 25% less than it had been a decade earlier in 1980. Though the 1990 level was higher than at different points throughout the 80s, the 1990 figure of US\$ 18.9 billion was the third consecutive year of falling production and was at its lowest level since 1985. President Fernando Collor's introduction of liberalizing measures brought further economic decline rather than a return to growth. Production dropped during the first three years of the new decade, recovering slightly in 1994 to a level of US\$ 15.7 billion. The number of employees fell nearly 30% between 1990 and 1994 and production dropped 17% during the same period. Thus, in 1994, production in the machinery and equipment sector was just under 40% of what it had been in 1980. The sector's export portfolio steadily improved during the first part of the 90s. With the exception of 1989 (which was somewhat anomalous in sector import/export trends of that period), 1993 was the first year since 1986 that the machinery and equipment sector exported more machines than were imported into Brazil.

The situation was equally unsettling for producers of made-to-order capital goods. Production was down 25% in 1990 over the previous year. Though modest gains returned to sector indicators in 1991 and 1992, production again declined, if only slightly, over the next two years. Production figures for 1994 were over 30% improved over 1990, but still represented only 44% of the 1982 level. Similarly, the employment level for the sector had fallen nearly 30% between 1990 and 1994 and was only 60% of the number it had employed in 1982. Most promising for the sector was the rise in exports. Beginning in 1989, exports of made-to-order capital goods increased steadily until 1992 when they were at a record high level. Imports also rose during the period but at a slower pace than exports, creating a positive trade balance for the sector. By 1993, however, these gains began to erode and in 1994, exports had fallen to below the 1990 figure.

Tariffs. On the policy front, President Collor's March 1990 announcement repealing tariff exemptions and the various "special regimes" caught most economic actors by surprise. Other measures in the *Plano Collor* such as the elimination of the Law of the National Similar, reduction of the domestic product requirements for financing, and an end to price controls, were unexpected and bad news for the beleaguered makers of capital goods. The initial reaction of capital goods producers to these measures was extremely negative. According to Venilton Tadini, director of planning at BNDES at the time the measures were introduced, the reac-

tion was especially bad in the machinery and equipment sector, which was still very closely tied to domestic demand.²

Table 1 shows the Collor government’s planned reductions of import tariffs. The average tariff for all capital goods was scheduled to fall from 36% to 19.3% over the five-year period from 1990 to 1994, which was still above the average for all imports throughout the period. The tariff on parts and accessories was slightly lower than those for entire machines. The table shows that in 1990 and 1991 machinery and equipment had a significantly higher level of protection than the average for other goods. Numerically controlled machines had considerably higher tariffs. However, by 1993, the tariff on conventional machinery and equipment was down by half to a 20% level and the tariff on numeric control machines was reduced by just over 60% by 1994.

Table1: Brazil-Tariff reduction schedule (1990 -1994)

	1990	1991	1992	1993	1994
Average Tariff-All Goods	32.2	25.3	21.2	17.1	14.2
Average Tariff-Capital Goods ^(*)	36.0	29.2	25.0	21.0	19.3
Average Tariff-Capital Goods Parts and Accessories	34.0	27.8	24.3	20.9	19.1
Machinery and Equipment- Conventional	40.0	30.0	25.0	20.0	20.0
Machinery and Equipment- Numeric Contrai	65.0	50.0	45.0	35.0	25.0

(*) Does not include transport equipment.

Source: Various, cited in Erber & Vermulm (1993).

Nominal tariff rates set by the government do not necessarily represent the extra cost of importing items over buying domestic ones. In many cases, the cushion is not as large as it appears for domestic producers who must absorb a series of “hidden” costs. Representatives of industry have calculated these costs and labelled them *Fator Brasil*, or the “Brazil Factor”. These additional costs (e.g., taxes on production, the cost of high interest rates, social service requirements, etc.) sum to an additional 15% on top of the basic operational costs for products “Made in Brazil”. For example, if the tariff for a machine is 20% (i.e., the common external tariff among *Mercosul* countries), the real cost of importing that machine is only an additional 5% because *Fator Brasil* shaves off 75% of the protection (*Revista Sindimaq*, January 1994, p. 18).

A study on the impact of President Collor’s measures on capital goods production, especially the made-to-order sector, concluded that the measures were beneficial. Even so, Venilton Tadini, one of the formulators of the Collor policies, finds some fault in the way that the program was designed.

² Interview with Venilton Tadini (October 7, 1994), São Paulo.

These measures were necessary but not sufficient for the recuperation of the sector. The big error in the Collor government policy with respect to made-to-order capital goods was the failure to define compensatory instruments that gave the sector alternatives to the domestic market [and] that would possibly accelerate its restructuring process in an organized manner (Tadini, p. 13).

Nevertheless, this same 1993 survey of made-to-order capital goods argued that liberalization was not a “lethal strike” to an “already weakened sector”. Rather, the entry of foreign made machines and cheaper components supported the sector’s efforts to become more competitive.

Comparative crisis and response. The general economic crisis that occurred at the beginning of 90s differed fundamentally from the 1981-1983 crisis. While the earlier period had brought significant market retraction, the latter crisis introduced instability and uncertainty as staples in the Brazilian economic vocabulary. In the early 80s, both the government and producers maintained a level of optimism that the economic difficulties and growing inflation was temporary and that the problems could be corrected. This optimism expired over the course of the decade, causing capital goods producers to react defensively by laying off employees and slashing capacity where previously they had taken proactive responses like increasing research and production in numerically controlled machines. These proactive moves early on served to close the industry’s technological gap with its foreign competitors and left it in a better position to weather the demands of the 80s (Erber & Vermulm, pp. 192-6).

Producers began to entertain new production techniques and new modes of organization. A 1991 industry study recommended the idea of fusing or joining firms, thereby pooling the particular resources of each into a greater partnership. The study found that the market for capital goods was too small for the number of firms that were then present but might be manageable for more specialized firms with greater capacity. This notion sparked a handful of joint ventures among leading capital goods firms. Most well-known of these moves was the *fusão* of industrial giant Indústrias Villares with General Electric to produce machinery, and the union of heavy equipment producers Grupos Zanini and Dedini in their export operations.

The challenges of liberalization brought other positive responses. For example, a study on competitiveness of Brazilian industry found that the *abertura* (the term most often used in Brazil to refer to the commercial opening and trade liberalization) in the machine tools sector brought “dynamism in the adoption of new organizational techniques, incorporating new quality control systems and displaying changes in the direction of reducing verticalization and nationalization of products” (Nogueira da Cruz, p. 7).

However, there were also a significant number of firms that reacted by simply closing down operations. A survey by Abimaq/Sindimaq, the producers’ association for the machinery and equipment sector, registered 66 firm closings in 1989. Between 1990 and 1992 that number grew by another 205 firms. In the first four months of 1993 (the last date for which figures are available), another 61 firms

shut their doors. Industry figures indicate, however, that the Collor plan merely accelerated trends already underway. By 1989 the impact of declining sales had already begun to result in the closure of firms. The total number of closures for the 1989-1993 period was 332, or 12% of the firms in operation in 1989 (*Exame*, 5/26/93, p. 16).

In general terms, the crisis provoked by the advent of economic liberalization measures was more than an economic shock for the private sector. It was also a crisis of models and of basic philosophical orientations to the economy. After industry had shrunk over the 80s, liberalization forced the capital goods industry to look for gains beyond aggregate production increases in order to survive. If they had not already, firms began taking stock of alternatives to overcome the crisis.

4. CAPITAL GOODS PRODUCERS SPEAK

A full understanding of economic liberalization is not possible unless research moves beyond national level and macroeconomic indicators to the business level where actors form interests that may, in turn, be expressed politically. First, data on capital goods are examined from the four-year series of survey data taken by Brazil's National Confederation of Industry (CNI) on industrial producers' evaluations of liberalization measures. From these data we can elaborate a comparative analysis of the reactions and interpretations of liberalization by the capital goods industry to those of Brazilian industry as a whole. Having examined the aggregate responses to economic liberalization, I then present data on two leading capital goods firms and their experiences in the transition from a protected to a market economy. These data present some unexpected findings on how the industry views liberalization. They also show how the industry has been slow to adapt to the new economic opportunity structure, despite general support for the changes.³ This intra-industry comparison provides an enhanced understanding of how capital goods producers view the opening up of the economy, how they compare with other industrial producers, and how they see themselves responding to liberalization.

Appendix 3 charts the CNI data on capital goods producers and Appendix 4 shows the industry wide evaluations. Additional data presented here have been culled from a poll on industrial competitiveness issued by the CNI in 1993. The survey data on capital goods presents a profile that both coincides with industry wide opinion and shows important variations. In addition to demonstrating support for liberalizing the Brazilian economy – itself an intriguing finding in light of the industry's inability to return to growth – these evaluations also reveal producers' striking indifference to many aspects of economic liberalization. Another important

³ Though a comparison of industry as a whole to other economic areas (i.e. banking and finance, commerce) would reveal more clearly the cleavages developing between the various parts of the private sector, such data do not exist.

finding is that in comparison to industrial producers as a whole, capital goods producers responded less positively about the *abertura* and were more inclined to feel harmed by imports.

Velocity and rhythm. The majority of respondents in both capital goods and industry as a whole consistently felt that the *abertura* was proceeding at a moderate pace. In 1991, 69% of capital goods producers expressed the opinion that the opening was proceeding at a “moderate” pace. That sentiment grew slightly to 72% in 1992 before dropping to 59% the following year. Very few – never more than 8% – felt the *abertura* should have been proceeding more rapidly.

In general, capital goods producers were more apprehensive toward the economic opening than industry as a whole. Surveys in 1991, 1992, and 1993 showed that capital goods producers were consistently, if only marginally, more inclined to express the opinion that the *abertura* was going too fast. A finding that stands out is the gradual rise among capital goods producers’ evaluations that the opening was proceeding too fast. This suggests that apprehension toward the changes rose as policy implementation deepened. Though they are not the majority opinion, the increase in negative sentiment is important because it is a demonstration that a growing number of capital goods producers perceived themselves as being threatened in some way by the new policy orientation. The 22% negative evaluation in 1991, or just over one-fifth of the capital goods producers surveyed, rose to one-third, or 35%, two years later.

The 1994 data illustrate a cleavage between industry and the subset of capital goods producers. In 1994, the survey question was reformulated to reflect the fact that scheduled tariff reductions were being completed that year. The new question asked producers to provide an evaluation of the balance of the process up to 1994. The majority response, at both the aggregate industry level and among capital goods, was positive – though with significant differences in degree. Sixty percent of industry as a whole responded that the *abertura* was positive. In contrast, just under half (49%) of capital goods producers evaluated as positive the balance of the opening. Nearly as many (43%) evaluated it as moderate. Thus, only 6% of capital goods producers had a negative evaluation of the economic opening. However, if only the extremes of positive or negative responses are analyzed, capital goods producers proved much more enthusiastic about the process than before. Only 18% responded negatively while 80% felt positively. Still, the average among industry as a whole was higher at 90%.

Thus, capital goods producers supported the *abertura*, if less enthusiastically than industry as a whole. What also remains clear from the 1994 “balance” question is that significant ambivalence pervaded the industry about opening up the economy. The large group of moderate evaluations (43%) is almost as large as the group of positive evaluations (49%). Because they have been so closely oriented to the domestic market and have enjoyed some degree of protection, casting a wary eye toward the new policies would be a logical response.

A different explanation for this ambivalence is found in the CNI poll on industrial competitiveness. When asked about determinants of firm strategy, 88% of

capital goods producers responded that the retraction of the domestic market was a determinant. This was the highest response level among all industries for this question (72% average), pointing to how critical the domestic market continued to be for capital goods. In comparison, only 23% of capital goods producers responded that the *abertura comercial* in their sector was a determinant of firm strategy, a figure which was slightly higher than the industry average (22%). Globalization of markets was the next most cited determinant of firm strategy among capital goods producers. These statistics differed substantially in degree from industry as a whole, of which 26% responded globalization of markets and 50% responded consumer demands.

Impact on investment decisions. Both groups shared the evaluation that Brazil's opening had had no impact on their investment decisions. Though most respondents hovered in the middle category of "no impact", stating that the *abertura* had not changed their investment scenario – for better or for worse – capital goods producers were not as likely to express a negative opinion as they were regarding the velocity and rhythm question. This high level of "no impact" responses is surprising considering that the opening was designed to give producers a new incentive structure that would spur investment and create growth. Furthermore, if capital goods producers had found the domestic market saturated, it is logical to expect they would look to foreign markets for their machines.

A possible explanation is that rather than linking their decisions about investment to the new opportunity structure [i.e., principles of neoliberal economics], producer concerns are still dominated by other factors such as shifts in domestic demand and perceptions about economic stability. This explanation substantiates the previous finding that less than 25% of capital goods producers consider the opening a determinant of firm strategy.

Adjustments to tariff reductions. Some light is shed on these findings in that the majority of respondents in both categories (i.e., industry wide and capital goods) felt that only moderate adjustments were being made by their industry to accommodate the scheduled tariff reductions. Though over the period there was a slight increase in "strong" adjustment responses, the figures remained quite low (never rising over 30%) in light of the fact that the Brazilian economy was undergoing fundamental changes in its philosophical and structural underpinnings.

Again, this finding shows an unexpected apathy toward the model shift and economic changes underway. What factors might explain such "casual" concern toward a fundamental reorientation of the economy? Did producers consider the changes unimportant? Other survey questions provide some insight into why producers across industries approached economic liberalization measures with such passivity.

Difficulties in adaptation. There is strong agreement among capital goods and other industrial sectors on the most important difficulties in adapting to the commercial opening. With overwhelmingly high percentages of both groups responding affirmatively, by far the three most important difficulties for each were, in order of importance: taxes, economic uncertainty, and the question of financing.

The tax burden was the biggest challenge for both groups, each averaging re-

sponse levels above 90%. More than 80% of both groups were concerned about the uncertain economic environment. Over the four-year survey period, capital goods producers were more likely to be concerned about financing. At least four-fifths of capital goods producers reported financing concerns compared to industry averages in the 70 percentiles. Responses to questions on difficulties with the exchange rate and concerns about safeguards [e.g., anti-dumping legislation, producer subsidies in countries Brazil imports from] both lagged 20% to 30% behind the other possible responses.

That producers across industries consider Brazil's tax burden excessive and also feel a strong degree of economic uncertainty provides some explanation for the timidity with which industrial producers have adjusted to liberalization. As well, the lackluster impact (positive or negative) of liberalization policies on investment may also be explained by the weight that producers confer to excessive taxation, the uncertain economic environment, and the lack of affordable financing. Put another way, producers may simply be so overwhelmed by the day-to-day concerns of doing business and keeping up with rule changes in a fluid business climate that they do not or have not yet begun to seriously take into account the new economic orientation.

Suffering from imports. Responses to a question which asked producers to gauge the degree to which their sector had been affected by imports show a distinguishing feature between capital goods producers and industry as a whole. Throughout the four-year survey, the majority industry wide response was that sectors were only weakly suffering from imports. Though, once again, the majority response among capital goods producers was that the level of harm from imports felt was moderate, this middle ground response was not as overwhelming a margin as with some of the other questions.

Initially, capital goods producers responded that imports were not a significant problem. In 1991, just over half (52%) of capital goods producers responded that the impact of imports was still weak. However, that response declined over the survey period while the tendency to report strong suffering from imports grew steadily. The perception of a strong impact doubled from 15% in 1991 to 31% in 1994. These shifts reached a point in 1994, the year tariff reductions were to be completed, that there was virtually a three-way split among the weak, moderate, and strong responses. Though the tendency among industry as a whole to feel that one's area was suffering from imports also grew slowly but steadily over the survey period to just over one-fifth of respondents in 1994, it never reached the level reported by producers of capital goods.

Thus, capital goods producers seemed not to be worried by the increased entry of imports until the tariff reductions were nearly complete. Indeed, by 1993, the average tariff for all capital goods was down to 21 %, 15% less than what it was in 1990. The reduction between 1993 and 1994 was minimal (another 2%) but the biggest leap in producer sentiment that their sector was suffering from imports came between 1993 and 1994 after the newly reduced tariffs had become an operational norm.

Ready for import competition. Here again the two groups differ in their perceptions of preparedness for the challenges of increased imports. In general, industry as a whole felt that it was moderately well prepared for import competition. Half or more consistently reported moderate preparation for an increase of imports into the Brazilian market. The tendency to feel weakly prepared declined over the survey period, though to a slightly lesser degree than the gain in the “strong” category.

The majority responses among capital goods producers over the period were also the “moderate” preparation category. Here, however, responses were sporadic, jumping up nearly 20% to 72% between 1991 and 1992, only to have that confidence level fall to 42% between 1992 and 1993. In the 1992-1993 interval, many respondents switched their evaluation to the weak preparation category, which at 39% was the highest level in the four-year period. Imports rose in both sectors in 1993, especially the made-to-order sector which saw nearly 40% more imports over the previous year. In 1994, these fluctuations leveled out with 56% of capital goods producers feeling moderately well prepared, roughly the same percentage as in 1991 when the survey began. Though more than half in both groups consistently felt moderately prepared for import competition, the tendency to feel strongly ready for imports was higher among industry as a whole. Except for 1992, capital goods producers were more likely to respond that they were only weakly prepared for import competition.

The two questions about imports showed that capital goods producers saw themselves as less prepared and more harmed by import competition than the rest of industry. They also showed that rather than a blanket indifference toward economic liberalization, capital goods producers were quite conscious of the new policies when they directly impact production interests.

The next section moves away from producer evaluations of economic liberalization to examine the effect that the *abertura* has had on the organized expression of sector interests. This examination is carried out by looking at responses to the new policy orientation by Abimaq/Sindimaq, the interest association responsible for the subset of the capital goods industry that produces serialized machines.

5. SECTOR INTEREST GROUP POLITICS

“Change is the basis of our day-to-day” experience, according to Sergio Magalhães, who became president of Abimaq/Sindimaq in 1993. The industry intrinsically lives by change, adapting its machines to new products and anticipating market demand. Magalhães asserted that this malleability is what allowed the sector to survive the past years of Brazil’s turbulent economy: “Our sector lives by change and it adapts itself very well”.⁴ With the vast economic change that has occurred in Brazil and what Magalhães terms the “enormous movement in rules”, the sector

⁴ Interview with Sergio Magalhães (November 16, 1994), São Paulo.

finds it difficult to separate out the changes from one another. Rather, Magalhães and the leadership of Abimaq/Sindimaq felt that they could not separate all the important, simultaneously occurring developments in Brazil (e.g., tariff reductions, fiscal crisis of the State, globalization of markets). Rather, like many in Brazil, the group tended to place them all under the rubric of “abertura comercial”, or commercial opening. These differences in meaning and levels of interpretation provide another clue to why producers can feel both indifferent to economic liberalization and feel harmed by the increase in imports.

Regardless of whatever semantic and interpretive issues were at play in producer evaluations, the official position of Abimaq/Sindimaq has always been to support the abertura comercial. In 1990, even before President Collor announced the new policy measures, *Revista Sindimaq*, the sector’s periodical, reported an internal survey that member firms recognized the exhaustion of the import substitution model and were ready to move toward a “model of competitive integration” (January-February 1990, p. 5). The survey also showed that members accepted the need to reform the State, including privatizing state-owned enterprises and enacting fiscal reform. However, for Abimaq/Sindimaq the objective of reforming the public sector was not to simply replace public sector initiative with that of the private sector.

[Our] proposal is not totally liberalizing, but, on the contrary, searches to endow the State with instruments that would allow its continuation as [the] propeller of development (ibid., p. 5).

In the same issue of *Revista Sindimaq*, the group laid out a program of six “medicines” to cure the sector’s economic ails. These points are important because they were the group’s first articulation of proposals to formally change the economy. Furthermore, continued to be the basis of the group’s policy prescriptions. The nature and specifications of these medicines demonstrate that the machinery and equipment sector wanted economic change in Brazil to be a controlled process, organized in such a manner as to insure the sector’s re-vitalization.

Most salient among the prescriptions was the development of an industrial policy with “coherent sectoral programs (...) long term, in order to stimulate and direct growth and that require voluminous investments with long periods of maturation (...)” The need for Brazil to adopt an industrial policy remained the principal concern of machinery and equipment producers throughout this period of research. Another prescription was a governmental policy for national private industry and policies “to benefit all the productive chain and not only determined sectors, prioritizing essential activities”, a reference to the sometimes unequal distribution of initiatives and favors under the military regime. The document seemed to assert the abandonment of import substitution but not of protectionism. Brazil’s commercial policy, it argued, should be directed “toward the protection of the internal market, stimulating exports and selective abertura of components and final products not available [domestically]”.⁵

⁵ The proposal also included a technological development policy as well as investment and energy

Despite any possible misgivings or worries about what the new economy might look like, Abimaq/Sindimaq lent its support to Collor's liberalizing policies when they were announced. It did so, however, with a continual dose of reminders that measures to foment growth in the sector were being neglected. In addition, machinery and equipment producers argued (as they had done in the 70s) that the strategic position of their sector should bestow upon its special status in the new development model.

Then Abimaq/Sindimaq president Luiz Carlos Delben Leite articulated concerns about the rapid and abrupt way tariffs were to be reduced, as well as voicing his preoccupation that the industrial policy component of Collor's reforms, by late 1990, had yet to get off the drawing board (*Revista Sindimaq*, November-December 1990, p. 12). Yet rather than make objections to specific liberalization measures that were being adopted in Brazil, the group increasingly pointed out differences between Brazil's abertura and the way in which other countries, particularly more developed nations, carried out the process: "The great problem, and in contrast to what the more developed nations do, is that [Brazil's] national machine tools industry was never elevated to the status of a strategic segment of real importance for the country" (*Revista Sindimaq*, January-February 1991, p. 13).

Revista Sindimaq continued this line of criticism in its analysis of the first year of Collor's industrial policy package. Again, noting its agreement on the basics of the policy itself, Abimaq/Sindimaq's report card was clear in communicating to machinery and equipment producers that the new policy direction had done little to support their sector. In particular, they noted that the policy was stalled and criticized the government for not moving ahead with industrial policy and for not reforming the State as a necessary complement to the economic reforms (*ibid.*, May-June-July 1991, pp. 26-36). The lack of concrete action toward an industrial policy continued to be a main preoccupation. To compensate for the absence of governmental initiative, Abimaq/Sindimaq sought to foment initiative in the early part of the 90s by re-circulating the group's 1989 policy blueprint for an industrial policy for Brazil's machinery and equipment sector (Abimaq/Sindimaq, 1990).

In addition to industrial policy, the other principal concern voiced by the group was the need for tax reform. An important arena for this discussion was the planned Constitutional Revision in 1993. Though Abimaq/Sindimaq supported issues such as easier entry of foreign capital into Brazil ("necessary for resuming growth") and political reforms like switching to a parliamentary system and proportional representation during the discussions on the Constitution, representatives of machinery and equipment producers used the opportunity to assert that Brazil's tax structure was the central impediment for their sector to move beyond the crisis and compete internationally (*Revista Sindimaq*, February-March, 1993 p. 5).

Tax reform, if not implemented, will make all industry non-viable, principally after the abertura of our market to the world. In order to be competitive a tax

policies (*ibid.*, pp. 6-8).

system similar to the countries with which we compete will be necessary – that taxes consumption and not production, that taxes accumulated wealth and not the accumulation of wealth (ibid., June-July-August 1993, p. 4).

When neither tax reform nor an industrial policy was forthcoming, evaluations of government policy efforts became increasingly critical in industry press. A kind of pessimism set in during the caretaker administration of Itamar Franco, until a new president with a mandate could be elected in 1994. Typical of this attitude was the evaluation of President Franco's mid-1993 economic policy package, the Program of Immediate Action. Essentially, the package was chided for not being an industrial policy. *Revista Sindimaq* reported that the plan was "(...) yet another declaration of intention, that, in general terms, bears a certain likeness with previously announced proposals by the Government and other persons, attending to the basic complaints of society. However, its details do not imply [a] compatibility with goals, formulation of adequate measures and identification and application of resources in various parts of economic activity" (June-July-August 1993, p. 12).

Around the same time, representatives of all parts of industry began utilizing the "Fator Brasil" calculation as a new tactic in their effort to promote tax reform. Capital goods producers were especially vocal in using "Fator Brasil" (described earlier) as a mantra for reform. Abimaq/Sindimaq's use of "Fator Brasil" and other policy prescriptions described in this section were important determinants in shaping sector responses to economic liberalization. The interest group's attempt to positively engage the new policies rather than undertake bluntly negative and politically costly campaigns likely helped shape producer's positive evaluations of the abertura. The constructive agenda also likely furthered producers' general, if sometimes quite moderate, commitment to the process.

This section has shown responses by the capital goods industry to liberalization as they were expressed by the industry's producer association. After a period of hesitation, Abimaq/Sindimaq generally acquiesced with the new policies and supported liberalizing efforts aimed at reorienting and reinvigorating the Brazilian economy. The industry also articulated several concerns with the direction of the new economic policies as well as their impact on the capital goods industry. At the same time, capital goods producers, weakened by years of economic decline and policy stagnation, found themselves in a defensive position, both politically and economically, in which the formulation of comprehensive (counter) proposals to the new policies would have been politically costly. Consequently, their concerns were most often expressed in a constructive manner that sought to refine the new policies and avoid or minimize further political conflict over economic policy. Furthermore, when Abimaq/Sindimaq did formulate an actual policy proposal, as they did by developing a blueprint for a sectoral industrial policy, the interest group most often acted both selectively and dynamically by reacting to what it perceived as lacking in the new policy orientation rather than what the government had already put forth as policy.

6. ATTEMPTS TOWARD INTRASYSTEMIC REFORM

This section shows how the pressures of economic liberalization caused beleaguered machinery and equipment producers to attempt to reform or FIESP (the São Paulo Federation of Industries), the corporatist body responsible for defending the interests of industry in the State of São Paulo where the bulk of capital goods production is located.⁶

Setting the stage. Historically, machinery and equipment producers got along well with FIESP in the decades after its founding in 1942. Nevertheless, there was tension over the level of protection that the State bestowed or appeared to bestow upon the capital goods industry. These tensions stemmed from the desire of other parts of industry to be able to purchase foreign-made machines at lower prices than were available in Brazil's protected economy. Though long-standing, these tensions expressed themselves more as underlying resentments than open conflict. Since the late 80s, however, relations between the two groups have been anything but tranquil. The battles that arose are in many ways manifestations of problems that plague FIESP in general: cleavages between small and large sized producers; internal divisions over the direction of industry and economic policy; and, tensions over whether or not to continue traditional organizational practices or introduce modernizing reforms.

By the late 80s – after Brazil had returned to civilian rule and domestic demand had been declining for a decade – machinery and equipment producers began to publicly articulate their growing dissatisfaction with FIESP and some aspects of corporatism. *Revista Sindimaq* published an editorial about FIESP suggestively entitled “A Boat Adrift”. Abimaq/Sindimaq president Luiz Péricles Muniz Michelin openly accused FIESP/CIESP⁷ of being out of touch with the process of modernization underway in that country. Voting in FIESP/CIESP, he argued, was not a democratic process but an electoral college type system that the nation had since abandoned in favor of direct elections. The president of the machinery and equipment producers' association also argued that the relatively low number of actual members in CIESP made it questionable whether or not the entity was representative of São Paulo's huge industrial class.

Furthermore, the article attempted to discredit FIESP's monopoly on organization and introduced to its members a business group that had recently formed outside the corporatist system as an alternative to the traditional hierarchy of representation.

⁶ This section deals exclusively with the machinery and equipment sector.

⁷ CIESP is the Centro de Indústrias do Estado de São Paulo, the civil arm of FIESP. Membership in CIESP is voluntary, which is not the case with FIESP. Some observers believe CIESP's non-compulsory nature makes it more democratic and representative because CIESP directors are required to consult with their membership before undertaking initiatives or casting votes. Consultation is not a requirement of FIESP leaders.

Initiatives like the Pensamento Nacional das Bases Empresariais (PNBE) already indicate that there is not evolution in FIESP and CIESP, capable of accompanying the innovations of society and of industry itself, there will be within these entities a gradual emptying and an endless burst of new entities, that truly seek the position of dignity and respect sought by the entrepreneurial class (*Revista Sindimaq*, January-February 1990).

Included in the same issue was an interview with PNBE leader Emerson Kapaz which accused both FIESP and the CNI of being controlled by a small group of businessmen who made decisions that harm the interests of small and medium sized producers – the vast majority of Abimaq/Sindimaq members.

Thus ensued a debate within the ranks of machinery and equipment producers over their role within the corporatist system and over the nature and type of representation that industry and the private sector in general should have. Sergio Magalhães, who became president of Abimaq/Sindimaq in 1993, took an openly antagonistic stance toward the powerful regional federation of industry. In an opinion editorial published in the conservative newspaper *O Estado de S. Paulo*, Magalhães charged that FIESP was single-mindedly concerned with bureaucratic proceedings and ignored important questions before industry. Referring to FIESP's recent ballot on its governing rules and procedures, the producer of ceramic tile machines wrote:

“What is important in this moment [of history] is not to discuss an entity's juridical regime, or if its elections should precede those in another, as is occurring in FIESP/CIESP, as if the calendar could resolve the question of greater or lesser representation ... The message of Brazilian society emerging from the voting boxes [i.e., 1994 election] is clear ... modernization and emphatic ... condemn [ation of] statist corporatism. This is the message that must be read by those that direct and participate in entities of representation, especially those in industry. Industrialists cannot hide themselves anymore” (11/11/94).

By “modernization” Magalhães referred to the compulsory contributions that producers are required by law to make to the corporatist organizations that they are obliged to join. Though machinery and equipment producers, like all producers, are required by law to make financial contributions to their producers' association (sindicato patronal),⁸ Sindimaq (the obligatory portion of Abimaq/Sindimaq) argued that such contributions were anachronisms, the hallmarks of outmoded and undemocratic private sector representation. The machinery and equipment producers' association stated that it retained only about 3% of the contributions it took

⁸ FIESP, which had an annual budget of around US\$ 2 billion in 1994, received its funds entirely from member producers, and from workers who are required to “contribute” 2.5% of their paycheck to SESI and SENAI, the popular and highly regarded social services component of FIESP. Interview with Mário Bernardini (November 24, 1994), São Paulo.

in. The remainder were returned to contributors as Sindimaq attempted to become increasingly self-funded by undertaking revenue generating activities such as industry fairs. Magalhães' basic argument was that modernizing efforts aimed at making representation more democratic and responsive were not underway in FIESP, the largest and most influential of the regional industry federations. In this sense, liberalization had yet to bring to the producers' associations the changes that it had brought to firms.

Reform from within. Magalhães was not the only leader in the machinery and equipment industry to criticize continued corporatist reliance on compulsory contributions to interest groups and the larger implications of FIESP style representation for business interests. Mário Bernardini, former vice president of Abimaq/Sindimaq and a prominent spokesman for machine producers, was another outspoken opponent of compulsory contributions and compulsory membership in corporatist entities. Compulsory contributions, or what Bernardini calls the "original sin" of the system, "allows groups to continue to exist independently of their efficiency". Though such activity had the "merit" of nurturing growth of producers' associations where they would not otherwise have existed, they had the "defect" of being obligatory. The idea that only through voluntary association with a group can members demand results was the thinking of Bernardini and others who banded together to attempt to do away with this practice within FIESP.⁹

On this issue producers found inspiration in the example of Brazil's more progressive labor unions which, beginning in the late 70s, had begun to break away from the traditional model and form associations independent of the corporatist system. When Brazil began to liberalize politically, some empresários began to think that the exclusive and undemocratic "igrejinha" should be eliminated. In the first fifty years of the machinery and equipment producers' association there were only three or four presidents. This situation made Sindimaq neither representative nor democratic. According to Bernardini, who was himself a founding member of PNBE, rather than work for those whom they represented, these "eternal presidents" would do little more than occasionally sign documents and distribute favors.

In 1986, Abimaq/Sindimaq began a series of internal reforms and Luis Carlos Delben Leite became the group's first president to be chosen in a contested election. Other measures adopted were a prohibition on being elected for more than two terms (six years total) and increased participation in the directory from a handful of seats to thirty spots. As well, Delben Leite's election represented the ascendancy of small and medium sized producers into sector leadership circles. These internal developments also signaled the end of several decades of amiable relations with FIESP. Many within Abimaq/Sindimaq began to think that they no longer needed FIESP and that they should form a new organization independent of the corporatist system. After the Constitutional Revision of 1988 had permitted the formation of alternative groups, some began to think about creating a Federação Metal-

⁹ Interview with Mário Bernardini (op. cit.).

Mecânica and to transform the more than twenty departments (corresponding to type of machine(s) produced) within Abimaq/ Sindimaq into full scale producer associations. In effect, Abimaq/Sindimaq would become its own FIESP.

However, the idea of forming an alternative federation was shelved after concerns mounted about how divisive such a move would be and how harmful rupture would be to the overall representation of industrial producers' interests. By this point at the beginning of the 90s, it had become obvious that Brazil's economy was going to change in fundamental ways and that close relations and frequent consultations between the State and the private sector were a fading remnant of the old economic model. Thus, if industry was to have an effective voice, it would have to be a unified one.

With this in mind, the group of reformist machinery and equipment producers decided to work within FIESP and to attempt reforms through participation. The 1992 election to head FIESP provided a vehicle for their campaign and participation, not rupture. The fruition of this effort was the formation of the Novo CIESP group, an internal movement to modernize CIESP, by Bernardini and twenty to thirty others who sought to reinvigorate the corporatist body by making it more responsive to its members and more effective in representing industrial interests. The decision to participate within FIESP was solidified by the fact that Novo CIESP's reform agenda was accepted by Carlos Eduardo Moreira Ferreira, the representative of traditional FIESP leadership and then vice president of the federation, and not by the maverick opposition candidate Emerson Kapaz from the PNBE group. When Moreira Ferreira won, some in the reform group took appointed positions in FIESP and became high level representatives of the system they had set out to reinvigorate.

Most points on Novo CIESP's reform agenda were adopted within FIESP, including the establishment of an Industrial Policy Group.¹⁰ The question of whether to hold elections in CIESP, the voluntary association, before those in FIESP, the compulsory body, was voted down by member ballot. The key compromise supported by Moreira Ferreira that remained unfilled was the question of obligatory contributions. For Bernardini, a producer of rock cutting machines, who stayed with the reformist group and occupied leadership positions in FIESP, this remaining challenge of doing away with compulsory dues was "politically the most important" of the reforms. Without it CIESP could not be strengthened as an organization. CIESP, he argued, is important to reforming corporatist representation because to promote CIESP is "to strengthen not the compulsory but the voluntary" in the corporatist system.¹¹

¹⁰ Bernardini, for example, headed this group when it was first started in 1992 but left after one year because he felt "nothing was going to happen". He moved to head FIESP's Department of Economics. interview with Mário Bernardini (op. cit.).

¹¹ Ibid.

7. CONCLUSION

There is little doubt that Brazilian producers were aware or were becoming aware that import substitution was no longer a viable policy for the economy, even before liberalization began to be implemented there. Many economic indicators had been falling or languishing for a decade and there seemed to be no alternative but to liberalize Brazil's markets. Furthermore, producers could not have been unaware of scheduled tariff reductions and the accompanying rise in imports. Nor were they ignorant of impediments such as Brazil's high cost of finance capital and excessive taxation that producers face in their daily operations, and which were politicized further through *Revista Sindimaq*. Furthermore, the data demonstrate that general support for liberalization was widespread among capital goods producers.

How, then, can we account for the apparent inconsistencies, for example, between the findings that the majority of capital goods producers supported opening up Brazil's economy but also reported that their particular sector was making only moderate adjustments to accommodate the new opportunity structure? Also, how can we explain differences between industrial producers' relative satisfaction with the pace of liberalizing changes and their continued preoccupation with unresolved and unaddressed structural problems like high levels of taxation and inadequate financing?

As a way to make sense of these discrepancies, I propose the Selective Response Model (SRM) as a framework for understanding political choices by the private sector during periods of profound policy change, such as the transition to a market-oriented economy. The SRM posits that business does not necessarily prefer a particular political regime type or economic regime type. Instead, its interests and responses to politics and policy change are diverse, multilayered, and selective, and therefore transcend regime type. Furthermore, business responses are not necessarily derived from a rigid set of variables or interests; they are dynamic, especially in periods of dramatic policy change as in many Latin-American countries in the late 80s and 90s. While the private sector does have material interests (e.g., pursuit of profits, tariff, or credit policy) that motivate its actions, political interests (e.g., modes of interest representation) may also motivate private sector behavior.

The SRM suggests three key patterns of responses in a context of national economic liberalization. First, the private sector is likely immediately to perceive only mixed benefits from the rapidly unfolding new policy regime, and consequently will neither strongly support nor oppose the process. In situations of dramatic policy change, private sector energies are occupied with merely keeping up with the volume of new policies and their manifold implications for day-to-day business. Also, this caution is a pragmatic response to business' operating environment in countries like Brazil, where a history of frequently oscillating decrees and laws have often given rise to an unstable policy environment. Business, consequently, has become accustomed to a wait-and-see attitude that aims to make longer term assessments of interests and opportunities, both those opened up and those lost.

The second pattern of responses are derived from the material concerns of individual businesses which, though relatively fixed, may be both selective and dynamic in nature as firms respond to policy change. These material interests supersede regime type. Thus, the private sector does not have a strong preference for particular economic regime type(s). It will, however, respond to new economic regimes or substantial alterations of existing economic policy by identifying specific policy concerns as elements of the existing program that it opposes or by proposing elements that it feels should be integrated into the larger program. These responses reflect the relatively fixed material concerns of business actors, and are likely to be expressed without rejecting the economic program or without strongly endorsing it except in the most general of terms. In terms of the specific policy recommendations made by various elements of the private sector, the SRM builds on the approaches of Frieden (1991) and Cleaves (1995) by recognizing the centrality of relatively fixed material interests. Frieden's focus on specific types of capital (i.e., degree of mobility) and the profitability dimension of Cleaves' three categories (i.e., property rights, profitability, and market predictability) both highlight the importance of material interests and the specific policy proposals that business will make to promote them.

The SRM posits that the policy preferences of individual business will vary according to the nature of the activities in which they are engaged. Each economic activity or sector operates according to a particular "core business interest" or logic (Cleaves, 1995) that determines which policy areas most directly impact the central concern of profitability, and more generally material interests. This business logic similarly helps predict how individual firms will respond to policy stimuli. Profitability or material interests can be construed broadly or narrowly to encompass either (or both) short (e.g., rates of taxation) and medium-long term concerns (e.g., access to low interest research and development financing). Among the short, medium or long term profitability concerns of individual businesses are lower taxes, easy credit, minimal regulation, enhanced infrastructure, and individually beneficial trade policies. Though this list is not exhaustive, it identifies some major areas of concern. However, saliency issues are complex. Business actors have multiple interests and individual business logics that cause them to focus on the most salient policy area(s) to the relative neglect of others.

Finally, the third set of responses are the other-than-material interests which also motivate private sector political activity. In the confusion caused by the limits of existing modes of interest aggregation in a dramatically changing political and economic context, the private sector experiences fundamental challenges to its structure of interest representation. As in the example of corporatist models of interest aggregation like in Brazil, existing representation may be unable to adequately respond to the aggregation demands of dramatically different policies. Changes in political values may also further undermine the utility of the existing system. This set of responses is, again, dynamic in nature because of the fact that business actors are attempting to shape responses at the most fundamental level – the model of interest organization. Table 2 illustrates the distinctions between the two variables

(material and political interests), both in normal times and extraordinary times of rapid, fundamental policy change. Although the table segregates the two types of interests, it must be emphasized that the two interact in a dynamic way (i.e., each affects the other). The struggle over modes of representation is intimately linked with the developing identification and articulation of material interests.

Table 2: The selective response model Relative stability and saliency of types of business interests

	Material interests	Political interests
Stability- normal times	Fixed	Stable
Stability- extraordinary times	Fixed	Dynamic
Saliency- normal times	High	Low
Saliency-extraordinary times	Medium	High

Thus, the SRM addresses the central problematic for understanding business responses to rapid policy change of conceptually unifying the relatively fixed material interests (i.e., bottom line business concerns of costs and profits) of individual business actors and their more dynamic political (e.g., representational) interests. As the table indicates, the SRM posits that individual business actors have relatively fixed material interests in both normal and extraordinary times. The key impact of the time period for material interests is seen in their relative salience vis-a-vis representational interests. In normal times when both the economic policy regime and system of interest articulation are relatively stable, the fixed nature of material interests causes them to maintain high saliency. However, the uncertainty caused by the pace and depth of policy change, combined with changes in governmental institutions designed to carry out new policies, causes business actors to direct increased energy to political issues such as interest aggregation and articulation, thereby reducing the relative salience of fixed material interests.

During normal times, when policies and governmental institutions are relatively stable, the representational interests of the private sector also remain in relative equilibrium, and consequently enjoy relatively low saliency. But these interests are dynamized in extraordinary times, during which their saliency rises dramatically due to the centrality of articulating material interests in the rapidly unfolding new economic policy regime. As a result, business actors are likely to direct increased political energy to issues of interest aggregation and articulation, thereby reducing the relative salience of fixed material interests. The focus of these energies is to ensure that organizational forms will be able to effectively articulate business interests in the policy framework of the new economic policies.

All three of the SRM patterns were demonstrated in the case study. Although capital goods producers' rather casual attitude about liberalization policies that were contributing to a deepening of the industry's recession is itself surprising, especially given their interconnectedness to other economic sectors, the model explains why they perceived little impact from liberalization and made only moderate

adjustments to the new paradigm. In Brazil, where a history of frequently oscillating decrees and laws has created an unstable policy environment, cautious responses are a pragmatic effort to attempt to maintain a stable operating business environment. As well, several factors impeded the industry (here machinery and equipment producers) from developing comprehensive counter proposals to the more damaging aspects (e.g., relatively quick tariff reductions) of the new policy orientation. The industry is composed of diverse subparts whose material and political interests are often in competition. Organized by economic categories, the segregated structure of corporatist business associations in Brazil also impedes the formulation of broader (counter) proposals. Because economic liberalization there occurred within a political system where democratization was already underway but in which pressures for additional political liberalization were also present, the organization and aggregation of private sector political interests was also subject to these political strains. Finally, the industry's loss of political and economic clout (and that of business as a whole) also impeded strong policy (counter) responses and the supported the general tendency to favor liberalization. all these factors combine to produce a situation where individual businessmen and business actors are cautious in either embracing or rejecting new policies.

The second set of SRM patterns were found in the industry's policy responses to liberalization. Owing to the inherent nature of the industry, it should be expected that many of the elements of liberalization programs are not salient, while other policy issues are likely to be of central concern, even if they are not directly related to liberalization per se. The capital goods industry was most concerned with types and rates of taxation, the pace of tariff reduction, subsidies and other incentives for industrial investment, and the cost of credit. Thus, even though trade liberalization meant a reorientation of operating rationales for the industry and capital goods producers has tended to be more apprehensive about liberalization in general than other industrial sectors, the industry tended to moderately support the process. This general support demonstrated in the survey data and the review of Abimaq/Sindimaq activities is perfectly consistent with producers' strong feelings about structural problems such as taxation, lack of an industrial policy, and institutionalized economic uncertainty. These structural problems have greater saliency for firms because they have a daily impact, an immediacy, on business decisions and outcomes in a way that the notion of an abertura does not. In turn, these structural problems become impediments for firms in making decisions about further adjustment to liberalization. Such responses are selective because, in effect, the industry picked the battles it chose to pursue from a wide range of possible concerns. They are dynamic because most of the content of policy proposals formulated by the industry was based on what it perceived to be lacking in the government's liberalization project. As such, they were proactive responses rather than reactive.

As stated at the outset of this section, private sector political behavior transcends regime type and cannot be correlated to an exclusive set of stimuli. Determinants of material interests such as asset specificity or property rights, profitability and market predictability are very important factors but may not be the only

motivation for business to act politically. Rather than oppose liberalization as an economic orientation, Abimaq/ Sindimaq chose to constructively engage the new model and to apply pressure to implement complementary measures such as industrial policy and tax reform that would help the industry overcome the challenges of the new paradigm. Therein lies the third set of SRM predicted patterns of private sector responses.

In order to effectively pursue policy issues that most effected their interests, producers of machinery and equipment found that they first had to overcome obstacles presented by their existing representation. After a series of reforms had been enacted in their own producer's association, some machinery and equipment producers attempted to reform FIESP, the larger corporatist body which encapsulated (or ought to have) industry interests. These examples do represent political behavior by the private sector as the efforts were not only geared toward articulating business' material interests but the political interests of business as well. These other-than-material interests are of fundamental importance because they represent attempts by actual producers to reshape their system of interest representation and the private sector's relationship to the policy process.

This research has shown that industrialists in general, including capital goods producers, support liberalizing economic reform, though not unanimously or uniformly; and that their responses to fundamental change in the economic policy regime are multilayered and dynamic. This dynamism operates on both economic and political levels, and in both policy and institutional dimensions. The private sector does not simply adapt to new policy orientations. Instead, it sifts through the policy changes, consciously selecting what is perceived to be beneficial to its diverse and layered interests and seeking to refine harmful or unaddressed areas of concern. In Brazil, data on industrial producers demonstrate that the private sector has shown fundamental support for liberalization but has varied that support across issue areas and articulated specific desired policy revisions. Moreover, the dismantling by political elites and the economic bureaucracy of the state of the corporatist institutions of societal interest articulation that developed during the more than half century of import substitution industrialization in Brazil, has promoted greater contestation among the private sector over the desired means of aggregating and representing business interests before the government. Finally, this work proposed the Selective Response Model of business' behavior during periods of profound policy change. The diverse and dynamic set of responses on the part of capital goods producers were examined through the lens of the model, suggesting some important considerations of the nature of business responses to change.

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APPENDIX 1
Machinery & equipment production: Brazil, 1980-1994

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Production (US\$ billion)	25,7	22,9	18,8	15,4	16,2	19	21,8	22,3	21,7	20,8	18,9	15,7	14,1	13,9	15,7
% change		-11	-18	-18	5	17	15	2	-3	-4	-9	-17	-10	-1	13
Employees (thousand)	341	314	277	234	264	320	370	358	357	356	300	252	216	207	214
% change		-8	-12	-16	13	21	16	-3	-0	-0	-16	-16	-14	-4	3
Exports (US\$ million)	1054	1192	907	889	1158	1336	1207	1430	1991	2167	2027	2014	2234	2642	3000
% change		13	-24	-2	30	15	-10	18	39	9	-6	-1	11	18	14
Imports (US\$ million)	1650	2110	1441	900	793	902	1175	1633	2171	1772	2413	2398	2380	2557	3000
% change		28	-32	-38	-12	14	30	39	33	-18	36	-1	-1	7	17
Trade balance in machine tools US\$ million	-596	-918	-534	-11	365	434	32	-203	-180	395	-386	-384	-146	85	0

Source: Figures from *Abimaq/Sindimaq*. 1994 data are preliminary. US\$ 1993 dollars.

APPENDIX 2
Made-to-order capital goods production: Brazil, 1982-1994

	1982	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Production (US\$ billion)	09	07	08	07	5,9	5,2	3,9	4,7	5,4	5,2	5,1
% change		-24	14	-13	-16	-12	-25	21	15	-4	-2
Employees (thousand)	90	84	87	103	103	101	73	64	57	54	52
% change		-7	4	18	0	-2	-28	-12	-11	-5	-4
Exports (US\$ million)	444	386	340	364	360	486	750	779	1065	979	692
% change		-13	-12	7	-1	35	54	4	37	-8	-29
Imports (US\$ million)	788	517	623	599	702	702	737	745	748	1038	nd
% change		-34	21	-4	17	0	5	1	0	39	—
Trade balance in made-to-order capital goods	-344	-131	-283	-235	-342	-216	13	34	317	-59	—

Source: Figures from ABIDIB (Associação Brasileira para o Desenvolvimento das Industrias de Base).

APPENDIX 3

Capital goods producers' evaluation of economic liberalization in Brazil survey results: 1991-1994 (% affirmative response)

		1991	1992	1993	1994
Velocity and rhythm	Slow	8	4	7	nd
	Moderate	69	72	59	nd
	Fast	22	24	35	nd
Impact on investment decisions	Positive	34	24	33	38
	No impact	43	46	44	42
	Negative	16	17	13	16
Adjustments to tariff reductions	Weak	30	9	11	17
	Moderate	57	68	59	62
	Strong	11	20	30	21
Difficulties in adaptation	Taxes	nd	89	96	95
	Economic uncertainty	nd	82	94	85
	[In]Adequate financing	nd	91	83	84
	Exchange rate	nd	57	63	68
Suffering from imports	[In]Adequate safeguards	nd	69	54	61
	Weak	52	37	39	33
	Moderate	31	46	41	36
	Strong	15	17	20	31
Ready for import competition	Weak	28	15	39	21
	Moderate	55	72	41	56
	Strong	15	13	20	23

Obs.: As the reduction in tariffs was being completed in 1994, the question asked for an evaluation of the commercial opening. The responses were: 6% negative; 43% moderate; and 49% positive.

Source: Confederação Nacional da Indústria (1991, 1992, 1993, 1994). Not all numbers round to 100.

APPENDIX 4

Industrial producers' evaluation of economic liberalization in Brazil survey results: 1991-1994 (% affirmative response)

		1991	1992	1993	1994
Velocity and rhythm	Slow	16	9	14	nd
	Moderate	65	73	63	nd
	Fast	18	16	23	nd
Impact on investment decisions	Positive	27	32	35	42
	No Impact	54	48	42	40
	Negative	15	12	13	12
Adjustments to tariff reductions	Weak	32	23	18	20
	Moderate	56	57	56	53
	Strong	11	19	26	26
Difficulties in adaptation	Taxes	nd	91	94	92
	Economic uncertainty	nd	80	88	82
	[In]Adequate financing	nd	76	73	75
	Exchange rate	nd	60	64	60
Suffering from imports	[In]Adequate safeguards	nd	66	64	56
	Weak	58	51	49	41
	Moderate	29	35	30	36
	Strong	12	13	21	23
Ready for import competition	Weak	27	20	19	18
	Moderate	49	54	52	58
	Strong	23	25	28	27

Number of interviews: 1991 = 699; 1992 = 578; 1993 = 532; and, 1994 = 1136.

Obs.: As the reduction in tariffs was being completed in 1994, the 1994 survey question asked for an evaluation of the commercial opening. The responses were: 3% negative; 37% moderate; and 60% positive.

Source: Compiled from CNI (1991, 1992, 1993, 1994). Not all numbers round to 100.