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Industrial Crisis in the Centre of the Periphery: Stabilisation, Economic Restructuring and Policy Responses in the São Paulo Metropolitan Region

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Summary. This paper is concerned with the impact of economic stabilisation and internationalisation on the São Paulo metropolitan region and, in particular, in the industrial heartland of the Greater ABC region. The paper begins with a general discussion of the issue of globalisation and inequality in Brazil. It then examines the background to economic development in Brazil with special emphasis on the pattern of economic instability in the 1980s, before discussing the attempts to address this instability in the form of the Real Plan. The paper shows that the introduction of the Real Plan has not been socially or territorially neutral. In particular, the position of the ABC region has been undermined by the processes unleashed by the Real Plan. The final section looks at the response of different actors in the region to these developments.

Introduction

The swift and somewhat radical insertion of Brazil into the world economy since the early 1990s and especially after 1994, as a result of the introduction of a large package of macroeconomic measures, known as the Real Plan, is opening up new opportunities—and posing new challenges—for the development of the country. Relatively low inflation rates, a stable currency, sustained growth and a moderate reduction of the inequality gap over a period of four years may represent the foundations upon which future development can be constructed. Recently, Brazil has been regarded by foreign investors as an attractive market and as a relatively stable country—despite periodical economic upsets. However, 'globalisation' and the implementation of the Real Plan have also provoked serious territorial and sectoral problems of adjustment in a country that had grown accustomed to living with high and unstable inflation rates (Blumenschein, 1996, p. 652) and with a protected market.

One of the areas most affected by these changes is the industrial heartland of the country: the Greater São Paulo metropolitan area, in general, and, the area known as the Greater ABC region (the cradle of the Brazilian automobile industry), in particular (see Figure 1). Recent transformations are altering the hegemonic role Greater São Paulo plays in the industrial development of Brazil.

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Figure 1. Brazil, its states and the Greater ABC regions.

Greater internal and external competition are at the origin of a significant industrial crisis in this core. However, despite the fact that the changes unleashed by the recent macroeconomic reforms are in some cases the continuation of long-term trends in industrial location, the magnitude of recent processes seems to have caught local entrepreneurs, trade unions and the regional and local administrations by surprise: unprepared to face the new challenges and divided between their traditional ways of acting and the need to adopt new strategies. In this paper, we will concentrate on how recent economic changes in Brazil are threatening the established industrial supremacy of the São Paulo region, with special attention devoted to the crisis of the automobile industry in the Greater ABC region within the São Paulo metropolitan area. The paper then describes the responses and the strategies adopted by the main socioeconomic actors to the process of industrial decline. The experience of the Greater ABC region highlights how the process of 'globalisation' presents challenges to even the traditional manufacturing heartlands of newly industrialising countries (NICs).

Globalisation and Inequality in Brazil

Recent decades have witnessed a large growth in flows of foreign direct investment (FDI) in the world economy and a shift to more integrated forms of international production on the part of transnational companies. These developments have themselves been stimulated by accelerated technical change, shorter product cycles, increased product differentiation, new inventory management systems and the shift to knowledge-based forms of production (see, for example, Cook and Fitzpatrick, 1997; Kozul-Wright, 1995). Moreover, the process of globalisation appears to be shifting power away from governments towards supranational and sub-national units (Amin and Tomaney, 1995; Ohmae, 1995; Rodríguez-Pose, 1994 and 1998; Storper, 1995) and transnational companies (Dicken, 1992; Stopford and Strange, 1991).

However, the spatial implications of globalisation for developing countries are much contested. Some argue that the process of globalisation is fundamentally beneficial for these areas, since it is not only contributing to the insertion of what were peripheral economies into world economic circuits, but also to the reduction of inequalities within developing countries. Williamson (1997) and Wood (1994) maintain that the increasing mobility of capital and the elimination of trade barriers provoke significant flows of FDI from developed towards less developed countries in search of lower costs.[1] This capital flow results in a relative convergence of factor prices which:

> raises the relative wage of workers with a basic education in the South and lowers it in the North, producing rising inequality in the North and falling inequality in the South (Williamson, 1997, p. 120).

Hence, developing countries would not only converge because of greater capital flows to the income levels of the developed countries, but also peripheral regions would benefit more than core regions in these areas from the flow of capital looking for low costs linked to the availability of unskilled labour. The result is a deconcentration of manufacturing activities and a relative decline of primate cities and other core areas in developing countries. From a similar position, the World Bank (1993) contends that:

> openness to external finance, as to trade, exposes the recipient country to international competition and can bring such benefits as technology transfer, management know-how, export marketing access, a reduction in the cost of capital, and a diversified investor base (quoted in Cook and Fitzpatrick, 1997, p. 63).

From this point of view, the process of liberalisation of the Brazilian economy would lead to a certain decline in the dominant role that São Paulo state and the São Paulo metropolitan region have played in Brazil, since other areas with less-skilled population will be benefiting more from capital inflows. The consequence would be a reversal of the polarisation of economic activity in São Paulo in favour of less developed regions elsewhere in the country.

Others take a less benign view, stressing the degree to which globalisation has been associated with growing inequalities between and within developing countries and point to the large adjustment costs which accompany the lowering of national barriers to trade and investment (ILO, 1995; UNCTAD, 1997). From this perspective, the globalisation process is not only leading to the dismantling of existing industrial structures in developing countries, but also to increasing inequalities in these areas. Regions and countries lacking the capacity to adjust to new trends and devoid of particular competitive advantages are hit first by global trends. In the case of Brazil, this would mean a greater concentration of economic activity in those areas with a more developed economy and, therefore, better prepared to compete. Consequently, São Paulo state and the metropolitan region of São Paulo would have better chances to adjust to changes and to attract capital—because of the higher skills of the local workforce and the density and diversity of its economic fabric—than less developed states in the rest of the country.

On the other hand, the actual impact of globalisation is an empirical question. Liberalisation and the surge of FDI cannot be linked automatically to greater equality or inequality in developing countries, although these processes are altering the prevailing pattern of regional inequalities. Trade liberalisation has fundamentally hit consumer-oriented industrial sectors which had prospered in closed markets, sheltered from external competition, whereas most industrial FDI has been channelled towards lower-cost areas outside the traditional industrial centres. However, this does not imply that there has been a decrease in inequalities, since many industrial centres have successfully transformed themselves into advanced service and financial centres, whereas only a handful of peripheral areas have benefited from the advantages of FDI. (According to Lavinas and Nabuco (1995, p. 359), São Paulo has witnessed a process of 'centralised decentralisation': it has continued to lead the advanced service sector in Brazil, especially in financial activities, real state and business services, "while industrial activities spread to other regions".)

Globalisation has therefore provided no real alternative for lagging areas in developing countries while contributing to the creation of serious industrial crises in the centre of the periphery. This process is increasingly evident in the São Paulo metropolitan region: São Paulo is becoming the financial capital of Brazil and probably of South America, but it seems to be losing its grip as the industrial heart of the country. Large industrial complexes and the network of small and medium-sized enterprises developed around them are becoming less competitive as a result of high wages and the development of structural bottlenecks. The advantages of large urban areas in terms of external economies and skilled workforce no longer compensate for higher costs and, as a consequence, companies seeking new locations frequently move outside the traditional industrial core of Brazil. This trend, which started in the 1970s, has accelerated as the Brazilian government has decided to open its economy. However, relatively little foreign direct industrial investment has ended up in this traditional haven of Brazilian industry, as most new industrial investment has looked for lower costs and subsidies elsewhere in Brazil.[2] The result is increasing urban labour surplus in the core, which is no longer exclusively related—using Gugler's (1997) terms—to increasing unemployment, underemployment or misemployment of the workforce with limited skills, but also to some of the best qualified and most experienced industrial labour in the country.

In sum, as Queiroz Ribeiro and Correa do Lago (1995, p. 379) indicate, the combined forces of liberalisation and globalisation are provoking greater diversification in peripheral areas, leading to a reproduction of the centre–periphery dichotomy among formerly lagging areas, to the spread of poverty throughout the metropolitan network and to the emergence of new forms of segregation of the middle classes. This paper seeks to shed some empirical light on these last two processes through a case study of the decline of the car industry in the Greater São Paulo metropolitan area—the area which, since the early 1930s, had been the main centre of the Brazilian car industry—and the responses adopted by local socioeconomic actors to these challenges.

Industrial Self-sufficiency, Lack of Competitiveness and Inflation in Brazil

In the 1930s, during the presidency of Getúlio Vargas, Brazil's economic policy shifted from an emphasis on primary exports to encouraging national industry to substitute for imported goods in order to achieve industrial self-sufficiency (Markusen, 1996). The 60 years of almost autarchic policies which followed engendered a large but uncompetitive and technically lagging industrial sector, made up basically of large state-owned companies in the heavy industry and early transformation sectors, together with a myriad of fundamentally privately owned consumer-oriented firms (Auty, 1995). Such an industrial sector was able to survive and even prosper thanks to Brazil's detachment from the world economy. The combination of a large Brazilian market with a very high degree of protection provided the framework for the development of the largest industrial sector in South America.

Autarchic industrial policies also led to the genesis of significant internal territorial disparities. On the one hand, industrial development was heavily concentrated in the state of São Paulo, and especially close to the main markets in and around the city of São Paulo. Whereas large primary industries were more evenly distributed across the country—especially as a result of regional policies—consumer-oriented industries clearly clustered in the São Paulo metropolitan area (Cano, 1977).[3] By 1970 "São Paulo's share of Brazil's industrial output climbed to its high point of just over 56 per cent" (Storper, 1991, p. 34). On the other hand, the regions whose economy had been traditionally based on primary exports, such as the North East, and, to a lesser extent, the West of the country, lost significantly in terms of their share of industrial production. These regions, while continuing to export their traditional primary products, were "forced through the country's protective policies to import [...] manufactured products from the center-south instead of abroad" (Baer, 1983, p. 299). As Baer underlines "in effect, the northeast was helping to subsidize the industrialization of the center-south of the country" (Baer, 1983, p. 299).

However, in the second half of the 1970s, and especially since 1983, two new elements came to distort the Brazilian economic balance and, to a certain extent, introduce slight alterations in the territorial pattern developed since the 1930s: high inflation and the development of a massive external debt. The combination of the two factors became a clear disincentive for industrial production and led to:

> huge distortions in the real economy, as banks, industrial companies and wealthy individuals gained more from playing the inflationary roulette than from productive activities (*Financial Times*, 1997a, p. I).

These pressures also contributed to a serious increase in the already huge social inequality gap, since the rise in prices had a strong negative impact on wage-earners, whereas the industrial and financial élite managed to adapt to and even to profit from changing inflation rates: all this at the expense of industrial output (Blumenschein, 1996). The results were highly volatile rates of economic growth throughout the 1980s and early 1990s. Periods of high growth (1980, 1984–87) were immediately followed by sudden and severe drops in economic activity (1981–83 and 1988–92). In 1981, 1983 and 1990, GDP per capita fell by more that 5 per cent in real terms.

Short-lived Economic Reforms

In order to curb high inflation, several democratically elected governments have, since the mid 1980s, implemented macroeconomic programmes designed to stabilise the Brazilian economy. The 1986 Cruzado Plan was followed by the Bresser Plan in 1987, the Summer Plan of 1989 and, finally, the Collor Plan of 1990. These successive anti-inflation programmes were cut from the same cloth: the state tried to impose wage and price controls, income policies and a change or a significant realignment in the value of the currency (Blumenschein, 1996). All four plans succeeded in taming inflation for a short period of time. The Cruzado Plan brought inflation down from levels of around 20 per cent per month to almost 0 per cent for a spell of almost 6 months. The Collor Plan gave the first steps towards trade liberalisation and reduced inflation from levels of 80 per cent per month to almost 10 per cent. However, the plans were always short-lived. The reasons behind the lack of capacity of these plans to deliver low inflation in the long run have to be sought, according to Blumenschein (1996), in the strong state intervention present in all plans, as well as in the traditional populist Latin American resort to budgetary spending in electoral years. The state proved unable to control prices, a factor which jeopardised the credibility of all plans. In addition, the advent of general elections greatly contributed to the demise of the successive plans, since increases in public expenditure in order to attract votes put the national budget under serious strain. As a consequence, stabilisation plans were implemented in post-electoral periods and collapsed in pre-electoral ones. In a highly volatile political setting such as the nascent Brazilian democracy, anti-inflation plans were thus doomed to fail. Furthermore, these plans never really implied a clear opening of the Brazilian economy, since the economic and political élites had strong vested interests against any substantial changes in the economic *status quo*. Only the Collor plan made significant steps in this direction, leading to a significant surge in imports and exports. (Car imports from Argentina were multiplied fivefold between 1990 and 1993 and exports to that country increased in a similar proportion (DIEESE, 1997).)

The Real Plan

A large corruption and political crisis involving the former president Collor de Mello brought the Brazilian zeal for macroeconomic programmes to a stand-still. Political paralysis contributed to a new rise in inflation—which reached levels of more than 40 per cent per month in 1994—and to a return to the economic problems of the 1980s. Only with the withdrawal of Collor from the political arena and the advent of a new government was a new anti-inflation plan implemented. In 1994 the then Finance Minister, and later President, Fernando Henrique Cardoso launched the Real Plan, a macroeconomic programme that shared many features with previous plans: wage and price control, creation of a new currency aligned to the US dollar (the Real), and tight monetary and income policies. However, it also introduced substantive new features different from previous plans. The Real Plan has marked the first serious attempt to open up the Brazilian economy to 'global' competition. It included a relative reduction of tariff barriers which have boosted imports in recent years and an ambitious plan of privatisation of state-owned companies and dismantling of state monopolies.

In contrast with previous plans, the effects of the Real Plan have been both spectacular and long-lasting. Inflation rates have decreased rapidly and are expected to reach annual levels of 8.5 per cent in 1997. Brazilian GDP per capita has grown at moderate but sustained levels (between 2 and 4 per cent) over the 4 years to 1997. The Brazilian Real has become a relatively stable currency, linked to the fluctuation of the US dollar. Foreign investment has soared and strong economic links have been established with fellow South American countries with the creation of Mercosur.[4] Political stability has greatly contributed to the success of the Real Plan, but there are increasing disquieting signs similar to those that led to the demise of previous macroeconomic plans, including an overvalued currency and an increasing budgetary deficit, together with escalating social unrest (see below).

Brazilian Industry in Transition and its Impact on the São Paulo Region

The effects of the Real Plan have not been socially and territorially neutral. Large sectors of Brazilian society have benefited from the Real Plan, but many others are struggling to adapt to changes and seem to have lost with the stabilisation of Brazilian macroeconomic indicators. But no sector has been as disadvantaged by the effects of the plan as manufacturing industry in Brazil. The opening up of the economy, with the consequent arrival of imports and foreign direct investment, has seriously struck a highly uncompetitive industrial structure. Large national monopolies have been actively trying to oppose privatisation and the introduction of competition, and private companies have often been forced to cut employment or close altogether, as a result of cheaper imports.[5] This negative impact of the Real Plan has led Cardoso's government to back up slightly in the opening of the economy and the reintroduction of import tariffs in 1995 and 1997.

And no area has been as struck by the industrial crisis as the industrial heartland of the country: São Paulo's metropolitan region.

Table 1. Evolution of employment in the metalworking sector in the Greater ABC region

	Number of workers	1987 = 100
1987	196 729	100.00
1988	194 245	98.74
1989	195 742	99.50
1990	188 889	96.01
1991	161 906	82.30
1992	148 493	75.48
1993	145 576	74.00
1994	143 185	72.78
1995	141 799	72.08
1996	125 426	63.76
December 1996	120 681	61.34

Source: DIEESE (1997).

Especially hard-hit has been the 'Detroit of Brazil'—the Region of the Greater ABC, an area of more than 2 million inhabitants in the heart of the São Paulo metropolitan region, which has been since the 1950s the centre of the Brazilian vehicle industry.[6] Large motor vehicle assembly plants located in the region from the 1950s (Ford, Volkswagen, Mercedes and Scania) have been seriously affected by greater internal and external competition. Employment in the metalworking sector (including the car industry) in the Greater ABC region has fallen by more than one-third since 1987 (Table 1). The closure or relocation elsewhere of some large (and invariably foreign-owned) plants has had a knock-on effect on local small and medium-sized firms. In addition, the increasing mechanisation of production and the passage from labour-intensive to capital-intensive activities have contributed to the enormous rise in industrial unemployment. Foreign direct industrial investment in capital-intensive production in other parts of the country is cutting industrial employment in the core, since existing industrial firms cannot easily compete with the advanced technology set up in new plants. The overall net result is a growth in industrial unemployment: industrialisation elsewhere in Brazil is creating less employment locally than it is destroying in the core. As Melo indicates, 1993 can be considered as the watershed:

> in that this was the first year in the history of industrial capitalism in Brazil that there occurred a boom in industrial production simultaneously with a sharp decline in industrial employment (Melo, 1995, p. 348).

The loss for the São Paulo area has represented a gain for other regions in the country. The Real Plan has made of Brazil an emerging market with a stable currency. For the first time in a long history, large sectors of the Brazilian population are able to participate in the consumer market, making Brazil one of the most dynamic markets in the world. The survival and even the reintroduction of significant tariff barriers have encouraged many foreign firms to invest in Brazil, in order to gain access to this thriving market. And the automobile industry is no exception. Up until June 1996, the creation of 17 new greenfield plants had been announced in this sector. However, and contrary to the developments in the 1950s and 1960s, the large majority of this foreign direct industrial investment is not directed towards the traditional industrial core of the ABC region, but to the interior of the state of São Paulo and to other Brazilian states (Table 2). The redirection of foreign direct industrial investment towards lower-cost locations outside metropolitan São Paulo reinforces a certain industrial deconcentration or reversal of industrial polarisation which started in the

Table 2. Planned investments in new automobile assembly plants, 1996–2000

Company	Planned investment (US$ millions)	Location
Investment in the Greater São Paulo area		
Hyundai	900–1000	São Paulo
Investment in other areas in São Paulo state		
Honda	300	Northern São Paulo state
Audi/VW	500	Probably in Northern São Paulo state
Toyota	400–600	Probably in Northern São Paulo state
Investment in other states		
Renault	760	Paraná
GM	600	Rio Grande do Sul
Fiat	500	Negotiating with the states of Rio de Janeiro and Minas Gerais
MBB	400	Minas Gerais
VW	250	Rio de Janeiro
Mitsubishi	150	Espírito Santo
Volvo	40	Paraná
Location still to be decided		
Asia	500	To be decided
Fiat	500	To be decided
Peugeot	200	To be decided
Chrysler	To be decided	To be decided

Source: DIEESE data.

Table 3. Hourly cost per worker in the automobile industry, 1994

Plant or country	Cost (US$)
Volkswagen (Upper São Paulo State)	6.80
Fiat (Minas Gerais)	7.30
Ford (Greater ABC region)	14.00
UK	19.09
Spain	19.16
Italy	19.57
France	21.08
Netherlands	23.01
Belgium	27.09
Sweden	28.05
US	28.25
Japan	32.48
Germany	40.76

Source: DIEESE and Ford Brazil.

1970s (Henderson, 1988, pp. 18–19). In this decade, lower overall factor costs and territorial policies led to a surge of industrial investment outside the São Paulo metropolitan area. New automobile plants were located either in Upper São Paulo state (Ford, GM, Volkswagen, Mercedes) or outside the state altogether (Fiat in Minas Gerais, Volvo in Curitiba)—although, according to Storper, this hardly suggested "a fundamental turning point in the pattern of geographical industrialization in Brazil", since most branch or assembly plants were located within a 200-km radius from São Paulo, leading to what could be considered as "the extension of the localization economies of existing industrial complexes from a strictly 'urban' to a somewhat broader 'regional' scale" (Storper, 1991, pp. 61–62). Proximity to São Paulo remained important for manufacturing firms (Diniz and Razavi, 1997). However, in recent years industrial decentralisation seems to have exceeded the limits of a supposed extension of industrial complexes to a 'regional' scale.[7]

The reasons behind the territorial redistribution of foreign direct industrial investment are manifold. First and foremost is the cost of the workforce. The hourly cost per worker in the Ford assembly plant in the Greater ABC region, is US$14—almost the same as in Britain, Italy and Spain in 1994 (all three countries between 19 and 20 US$) (Table 3).[8] These hourly wages are clearly above those of other car factories elsewhere in Brazil, such as the Fiat assembly plant in Minas Gerais (US$7.30) or the Volkswagen plant in the interior of São Paulo state (US$6.80) (Fonseca Silva, 1997).

High labour costs are coupled to low productivity. The productivity of car plants in the Greater ABC region (below 20 vehicles per employee per annum) is, with the exception of the Ford plant, below that of newer plants elsewhere in Brazil. And that of newer plants and even of the future plants in Brazil is below that of existing plants in the developed world. Production per worker in Europe hovers around 50 vehicles per annum, whereas in Japan many assembly plants are reaching levels of output of more than 100 (Table 4). Workers are basically not to blame for low productivity. The main reason behind these numbers is the use of obsolete techniques and a low robotisation in plants which, in some cases, were set up in the 1950s and 1960s. For most car companies, it is cheaper to create a new plant in a greenfield site than to invest in the restructuring of an existing 'brownfield' plant. Of all the car companies established in the Greater ABC region, only Ford has undertaken any

Table 4. Productivity of selected car plants in Brazil and Europe

	Vehicles/employee[a]
Brazil ABC region	
GM (São Caetano)	13.1
VW (São Bernardo)	14.5
Ford (São Bernardo)	24.2
Rest of Brazil	
GM (S.J.C)	20.5
Fiat (Betim)	25.4
VW (Taubaté)	37.3
Hyundai (São Paulo)[b]	40.0
Mercedes (J. de Fora)[b]	46.0
Renault (São Jose)[b]	48.0
Europe	
Seat (Martorell, Spain)	47.6
Fiat (Melfi, Italy)	50.0
Peugeot (Mulhouse, France)	51.7
GM (Zaragoza, Spain)	54.2
Ford (Saarlouis, Germany)	54.6
Ford (Valencia, Spain)	55.6
Honda (Swindon, UK)	64.2
Toyota (Burnaston, UK)	66.9
GM (Eisenach, Germany)	67.7
Nissan (Sunderland, UK)	73.2

[a] 1995 data for Brazilian plants; 1996 for European plants.
[b] Plants not yet operational
Sources: DIEESE and Economist Intelligence Unit.

substantial reinvestment in order to increase the productivity of its own plant. Other companies have directed most of their investment to the development of new plants elsewhere in Brazil (see Table 2). Volkswagen has set up a plant in Taubaté, which produces 37.3 vehicles per worker; two and a half times as much as its own plant in the Greater ABC region (14.5 vehicles per worker) (DIEESE).

A third factor which is regarded by employers as preventing investment in the metropolitan area of São Paulo is the power of trade unions. The Greater ABC region has been the cradle of Brazil's workers' movement, especially with the development of the powerful Metalworkers' Union, first, and the later development of a national Trade Union Confederation, which was started in the region with the strikes of the automobile workers in 1978 and 1979 (Becker and Egler, 1992, p. 165). These trade unions played a substantive role in the fight against military dictatorship. However, nowadays, the high level of trade union membership and the long tradition of strikes are increasingly brandished against the region by companies directing their investments towards territories with weaker and less dynamic unions elsewhere in Brazil.

The enormous congestion of the São Paulo metropolitan region and the absence of modern infrastructures are additional factors curtailing the territorial competitiveness of the Greater ABC. High land costs are a further burden. External and scope economies are thus countered by serious diseconomies of agglomeration. An additional issue in the São Paulo region concerns the high costs associated with the port of Santos, which is considered to be one of the most expensive and inefficient ports in the country. Large companies established in the region often prefer to use other ports in the states of Paraná or

Espírito Santo, rather than the neighbouring port of Santos.

Last but not least, the incentive and subsidy war started by many Brazilian states in order to attract foreign direct investment has also contributed to the decline of the São Paulo metropolitan area. Attracting foreign direct industrial investment and the creation of jobs related to it are regarded by many local and regional Brazilian politicians as the sure—if not the only—route to success. And the most common way to achieve it is to offer prospective investors incentives (land, infrastructural investments) and subsidies (tax exemptions and even lump sums). Prospective car investors are wooed by different state governments and thus enjoy an enormous bargaining power. This enormously reduces the reluctance and the risk to invest, especially for companies who still have in mind the collapse of the Mexican economy in 1995. Incentives and subsidies also protect foreign investors from the hangover accompanying the Mexican 'tequila' effect—or, in the Brazilian case, what is increasingly known as the 'samba' effect—which is characterised by the sudden collapse of the national currency as a result of the demise of the conditions on which macroeconomic stabilisation plans were set up. GM, for example, has recently announced an investment of US$600 million for the construction of a new plant in the state of Rio Grande do Sul. The conditions under which this investment is taking place are very favourable for GM. The car company and the state of Rio Grande do Sul signed an agreement by which the only duty for GM is to start production by the year 2000. The state of Rio Grande do Sul, in turn, has agreed to provide GM with a loan of US$222 million, repayable between the years 2002 and 2012 at an annual rate of 6 per cent. There are no clauses in this loan that take into account changes in the value of the currency. Additional loans are to be granted to spare parts companies that decide to settle in the area. Furthermore, GM is to be compensated for any change in the national or state fiscal legislation and the state of Rio Grande do Sul has to guarantee the supply of energy and of optic fibre networks, as well as to ensure the development of railway links to the plant.

The state of São Paulo, despite being the strongest state in Brazil, cannot compete with these conditions. Favourable factors, such as the greater skills of the labour force, are also unable to curb these trends.[9] Therefore, the industrial core of the country is now at a cross-roads, still trying to save its declining industrial structure, but also looking for alternatives. Each of the principal socioeconomic actors—employers, unions and local government—has had to respond to the changing economic environment in the Greater ABC region. The following section describes their dilemmas and how they have responded to them.

Policy Responses in the ABC Region

Employers[10]

Notwithstanding the earlier description of the problems facing the vehicle industry in the ABC region, this sector remains the core of the industrial economy and occupies centre-stage in all discussions about the future of the region. Macroeconomic stability and the sharp tariff reduction which occurred in 1994 have transformed the economic terrain upon which the Brazilian vehicle industry must compete and in the process is reshaping the economic geography of the sector.

The 1990s have seen a rise in car imports and, as noted previously, the period after 1994 has seen a 'boom' in foreign direct investments in the vehicle sector, most of which have been made in states other than São Paulo. Faced with these new competitive pressures, the major vehicle manufacturers in the ABC region have been confronted with the choice of upgrading their facilities in the ABC region or decentralising production to lower-cost states.

Firms such as VW and Mercedes Benz—both of which have plants in the ABC region—have located new investments in states which have offered low labour costs and investment incentives. Such productive decentralisation, however, has not been confined to the foreign-owned sector. Large Brazilian-owned firms have followed suit. For instance, Cofap, one of Brazil's largest vehicle parts manufacturers, with overseas plants in Europe and the US, embarked on a restructuring programme in the 1990s. This involved shedding administrative staff and shifting production from São Paulo to Minas Gerais in search of lower wage costs and a weak union environment (*Financial Times*, 1997b).

Within the Greater ABC region, the removal of tariffs, especially the sharp reduction which occurred in 1994, could have stimulated the existing producers to modernise what, in international terms, were outdated plants.[11] According to one analysis:

> In the past these firms made money in Brazil by producing small volumes of old-fashioned cars and selling them at high prices. Now they are pouring money into equipping their Brazilian factories to produce the same models and engines as they make in Europe—and with something like the same quality and efficiency. This has involved importing modish ideas, such as outsourcing work (*The Economist*, 1996a).

Yet, in the Greater ABC region there has been little response to the sharp decline in market. Ford is the only major car manufacturer to have undertaken a significant modernisation of its local Taboão plant at São Bernardo. It has invested US$750 million to manufacture the Fiesta and the Ka, as part of a planned US$2.5 billion investment in the whole of Brazil between 1995 and 2000 (Fonseca Silva, 1997). Ford's market share had declined largely because it lacked models in the 'popular' class, the fast-growing segment of the market. The growth of this segment was kick-started by the government, which lowered taxes on small-engine cars, as part of a sectoral agreement (see below). At the same time, lower inflation and an overvalued currency have given Brazil's lower-middle class greater purchasing power and access to consumer credit.

However, the new investments typically signal a new approach to production organisation. For instance, a major part of Ford's re-equipment of its Taboão plant involved the introduction of automated spot-welding, in an effort to reduce the labour costs which are seen as a major source of competitive disadvantage by firms in the Greater ABC region. Thus, large-scale investment is likely to result, at best, in 'jobless growth'; and more likely, in further job loss down the line. Despite this huge effort by Ford, it is unlikely that the Taboão plant at São Bernardo will reach in the future the levels of productivity of the new fully automated 'greenfield' plants developed elsewhere in Brazil. In the past two years, the plant has doubled its productivity, but with just 24.2 vehicles per worker per annun it is still far from being competitive. Aware of the problems of restructuring an existing plant, Ford is considering investing almost half of its US$2.5 billion investment until the year 2000 in the building of a new plant (Fonseca Silva, 1997).

Minor investments in comparison to developments elsewhere in Brazil have been conducted by the Swedish group Scania, which has made an investment of US$220 million in its São Bernado plant, reputedly the largest truck manufacturing plant in Latin America. Again, the focus has been on introducing a higher level of automation in order to reduce labour costs. However, the competitive pressures bearing down on Scania are not so intense as those affecting Ford and it has maintained its share of the Brazilian truck market and has improved its export performance to other Latin American countries. Volkswagen and General Motors are, in contrast, clearly shifting investment away from the ABC region to other areas of Brazil.

In addition, firms are making much greater use of outsourcing. Again, this has an ambiguous impact on the ABC region. Ford is reducing the numbers of its suppliers from 700 to 300, while simultaneously developing long-term relationships with the remaining ones. For instance, Johnson Controls has opened a plant nearby to supply Ford with seats. Also, as tariffs have fallen, firms have moved towards more international sourcing. Until 1991, Brazilian cars had practically 100 per cent local content. This figure had fallen to 88 per cent by 1995 and is expected to fall further to 66 per cent by 2000 (*The Economist*, 1995b). This has translated into the closure of some local engineering firms. Others have improved their quality levels.

Typically, however, Brazilian-owned parts suppliers are family-owned and lack capital or are unable to borrow it given Brazil's punitive interest rates. Moreover, they often lack the technology or management skills to develop themselves into 'world-class' businesses (*Financial Times*, 1997a). Thus, recently, Brazilian parts manufacturers have become targets for acquisition, typically by foreign-owned companies. The value of Brazilian mergers and acquisitions in all sectors rose from less US$1 billion in 1994 to over US$6 billion in 1996 (*The Economist*, 1996b).

There are now a number of examples of this trend. For instance, Lucas Varity acquired a controlling interest in Freios Varga (*Financial Times*, 1997c). A further example of the trend was the sale in 1996 of Metal Leve, a large but family-owned supplier of pistons and ball-bearings to the automotive industry:

> as Brazil's car industry has begun to modernise, scouring the world for components, the company could no longer compete in its home market. Faced with mounting losses, its owning families sold it to a groups of investors that includes Mahle, a big German car-parts firm (*The Economist*, 1996b).

In fact, the initial consortium which acquired Metal Leve, included the Brazilian family-owned parts manufacturer, Cofap. However, management difficulties in the new joint-venture led Magnetti Marelli of Italy to acquire control of Cofap. The new Italian/German controlled operation will be able to produce complete piston kits, meeting the increasing demand from assemblers for fewer modular units rather than a multitude of individual component parts.

The Metal Leve and Cofap experiences illustrate how the growth in outsourcing has not translated into simple benefits for engineering firms in the Greater ABC region. Most Brazilian-owned firms are likely to achieve only 'second-tier' status in the new extended supply chains. Others will close. SINDIPEÇAS, the parts industry association, estimates that the number of vehicle parts manufacturers will fall from around 1000 in 1997 to around 200 at the turn of the decade. Those that do survive find that as global quality standards begin to apply, the only way to attain the necessary technology, management skills and scale economies is to join a large international player (*Financial Times*, 1997b).

In short, internationalisation of the Brazilian economy has prompted new strategies on the part of large firms, which have intensified the problems facing the Greater ABC region. The inflow of investment which has accompanied macroeconomic stability and tariff reduction, together with the fiscal battles between the states, has improved the competitive manoeuvrability of, especially, the transnational firms, and has increased their ability to chose between investing within or outwith the Greater ABC as well as their capacity to demand greater investment in infrastructure from the local and the state governments. This, in turn, has heightened the challenges facing the unions and the local authorities.

Labour[12]

Levels of unionisation in the car plants of the Greater ABC region are the highest in Brazil (Bresciani, 1997). As well as being the crucible of the struggle against the military dictatorship, the trade unions in the car plants of the Greater ABC region became a byword for working-class militancy in the 1980s. The trade unions fought strongly to gain an influence in the main factories during this period and, by the mid 1980s, shop steward committees had been widely established and had begun to make plant-level collective agreements. At the same time, the macroeconomic instability and rampant inflation of that period were the background to a high level of strike activity as workers sought to protect real wages. This provided the main focus for trade union action at the local level.

The attitude of the trade unions to the problems facing the Greater ABC region is heavily influenced by their recent industrial and political experiences. After a period of instability in the 1980s, the car industry faced a severe crisis at the turn of the decade. The combination of recessionary conditions and unstable government, together with reduced tariffs on imported cars, led to a fall in domestic demand and a rise in imports. This translated into a dramatic fall in output and employment. These worsening conditions affected the whole Brazilian vehicle industry, but had an especially severe impact on the ABC region where employment in the manufacturing sector fell from 196 000 to 125 000 between 1987 and 1996. The sharpest declines were experienced in the periods 1990–92 and 1995–1996 (see Table 1).

In the face of this crisis, the unions in the Greater ABC were instrumental in persuading the employers to secure an agreement on the future of the vehicle industry supported by the federal government, the state of São Paulo, the manufacturers and parts suppliers and the trade unions. The agreement signed in 1992 (and renegotiated in 1993) covered price reductions, tax arrangements and a wages accord, all designed to stabilise conditions for the domestic car industry and to provide a basis for confronting the tariff reductions which intensified after 1994. Indeed, the agreement coincided with a general improvement in the performance of the domestic industry and, for a period, a stabilisation of employment levels in the Greater ABC region (Laplane and Sarti, 1997).

Building on this experience of participating in the construction of a policy for the vehicle sector, the unions have attempted to broaden their agenda to include more general employment issues and to influence the development of wider economic policies in the region. The unions face dilemmas in this respect. While wishing to establish a dialogue with the employers on the future of the region and wishing to see the Greater ABC and Greater São Paulo remain a significant (if reduced) centre of vehicle production, the unions are conscious that the new internationalised environment favours the employers. Large employers have the ability both to play regions off against each other in the fiscal war and, at the same time, to extract concessions from workers in existing plants.

The very strength of the unions (not just in the car plants, but in related industries such as the port of Santos) is frequently cited by firms as a disincentive to investment in the region. The unions are well aware, moreover, that calls on the large firms to invest more in their facilities in the region are likely to lead to further job losses, because most investment comes in the form of labour-saving technology. The challenge for the unions is to contribute, in an informed way, to the debate on the future of the region, while recognising that significant new employment growth is unlikely in their core sectors. The local unions—and especially the metalworkers' union—are therefore trying to set up new strategies to adapt to intensified territorial competition in order to curb the decline of the region. Questions like 'What trade union do we want?' have been at the heart of the discussion in the second congress of the metalworkers union held between December 1996 and May 1997 (Sindicato dos Metalúrgicos do ABC, 1997). However, any change in strategy is facing increasing opposition by a large percentage of trade union members. The discourse of international workers' solidarity as the only way to counter the greater bargaining power of transnational companies in a globalised world is still enormously popular among workers in the region.

Local State[13]

The local authorities in the Greater ABC region have faced large-scale productive decentralisation since the beginning of the 1980s, initially to the interior of the state of São Paulo. Thus, economic restructuring set underway as a result of the opening up of the

Brazilian market in the 1990s has merely intensified a process already entrenched. Brazilian municipalities undertake the bulk of public expenditure, the result of a trend established as far back as the 1970s, but which intensified in the 1990s. Most of the resources available to the municipalities come in the form of transfers from the state level. These transfers are based mainly on the value added that is generated within the city limits (Daniel *et al.*, 1997). A central problem confronting the seven municipalities in the Greater ABC is that industrial decline has left a dwindling resource base upon which the local authorities can tackle the pressing problems in the region. Industries such as petrochemicals and mechanical engineering have experienced sharp declines in their value added. Thus, just as the problems confronting the region intensify, the resources available to the municipalities are reduced.

As noted previously, the region faces many infrastructural problems. From the viewpoint of firms, the road system is overloaded; water supply and drainage need upgrading—levels of pollution are high (with large firms being the chief culprits) and the failure of the drainage system results in frequent flooding of major highways. There is great pressure from the private sector to address these problems, but the municipalities face other serious problems. Some 10 per cent of the population lives in *favelas*, although problems in this regard are not as serious as in other parts of São Paulo or in cities such as Rio de Janeiro. More generally, the whole metropolitan sub-region has grown in the most chaotic way imaginable without reference to land-use and environmental regulations. In addition, the municipalities face major challenges in upgrading the school and health systems and in addressing the almost complete absence of cultural and leisure facilities.

Politically, the region is a stronghold of the left-wing Brazilian Workers' Party (Partido dos Trabalhadores—PT) which has close links to the metalworkers' union and the national union centre, CUT. Currently, for instance, the PT controls the municipality of Santo André. In Santo André, the PT administration is committed to developing an integrated approach to the management and planning of the locality based on community participation. Clearly, the challenges facing the administration are manifold. However, while the bottom-up planning approach will undoubtedly bring dividends in the *favelas*, the key problem of the investment strategies of the large firms remains beyond the reach of a municipality like Santo André. In recognition of the spill-overs arising from economic restructuring and the common problems for all the municipalities in the region, Santo André local authority, under its dynamic mayor Celso Daniel, led the formation of an inter-municipal council, involving all the districts in the ABC region[14]. But, local authority planners recognise that even this body will find it difficult to shape, let alone to halt, the tide of restructuring flowing over the region. This strategy is regarded as the first step towards the restructuring of the region and towards the creation of a permanent forum for all the actors involved in the development of the area. It is believed that the process of socioeconomic change can be better monitored by strong local socioeconomic organisations (Daniel, 1994, p. 38).

Conclusion: Strategy and Conflict

Recently, the major employers, trade unions, the municipalities and the state government of São Paulo and other bodies have formed a Regional Chamber of the Greater ABC region (Câmara do Grande ABC) to discuss the development of an economic strategy for the region. Recent discussions within the Chamber on the future of the Greater ABC region, typified by a large conference held in 1997 to discuss regional strategies in Europe and North America, have tended to focus around strategies to defend the motor vehicle industry. Broader questions, such as what types of new economic activities could be created to replace jobs already lost, were given secondary importance. However, recent trends in foreign investment highlight the slim chances the Greater São Paulo metropolitan region has of remaining the heart of Brazilian manufacturing, let alone of the Brazilian motor industry. As noted earlier neither the state of São Paulo, nor the local authorities and trade unions of the Greater ABC region have the capacity to compete with other Brazilian states and other locations in order to attract new automobile plants. The comparative disadvantages of the region (high labour costs, obsolete technology, lack of space, congestion and external diseconomies) clearly outweigh its comparative advantages (mainly the existence of a large pool of skilled labour). Under these circumstances, there is only a small possibility that the Greater ABC region will maintain its current levels of employment in manufacturing. The development of greenfield sites in other Brazilian states will inevitably undermine the competitiveness of the local automobile industry, which will undoubtedly have a knock-on effect on the related and dependent manufacturing companies and on the local retail services. The creation of a regional chamber is unlikely to be sufficient to curb this trend.

For the region to have any future as a manufacturing centre, it will need to adapt to the new forms of production systems which emphasise integration, flexibility and greater knowledge intensity. In this new context, a high level of technological capability is an increasingly important determinant of international competitiveness. But the outlook here is not propitious. For those NICs, mainly in south-east Asia, which have been successful in attracting international technology, a key factor has been the creation of an indigenous technology base (Cook and Fitzpatrick, 1997). This base is weak in the Greater ABC region and recent discussions have not focused on this issue, although promotion of regional technology plans in lagging and declining industrial regions of the EU may contain some lessons for the Greater ABC region (CEC, 1994).

The Chamber of the Greater ABC region may, however, play a more important role in channelling and guiding the efforts of the local socioeconomic and institutional actors in order to attract economic activities more adapted to the conditions of the São Paulo metropolitan area. São Paulo is rapidly becoming the financial capital of South America, yet the types of services which are common in other world metropolises are still underdeveloped. The Greater ABC region, with its focus until very recently in consumer-oriented industries, has disregarded the development of dynamic services as a suitable alternative to its present manufacturing crisis. The only types of services which have prospered are commercial and retail services. However, and despite its privileged location at the centre of the São Paulo metropolitan area, financial services, real estate services and, above all, business services and services to industries are clearly underdeveloped. The Chamber of the Greater ABC region may represent a unique opportunity for the redirection of the area's development efforts towards a series of economic activities which, in combination with the surviving industry, might set the basis for the future prosperity of the whole metropolitan area of São Paulo.

Markusen (1996) has argued that, over the long run, public policy in Brazil has had little success in decentralising economic activity away from the São Paulo area to underdeveloped parts of Brazil. Recent events, as described in this paper, suggest that the rapid internationalisation of the Brazilian economy may have achieved what regional policy has failed to do—but at no small cost to the Greater ABC region: it has accelerated industrial decline in the core without generating greater equality elsewhere in Brazil, since local incentives have played a crucial role in the decentralisation of industry. Notwithstanding the powerful voices advocating the benefits of trade and investment liberalisation (see, for example, IMF, 1994; World Bank, 1993) and the gains made by some groups as a result of this, the recent experience of the Greater ABC region provides a powerful cautionary tale of the threats which globalisation can pose to some regions as far as manufacturing is concerned. Transnational companies have used their enhanced power to extract additional inducements from the national and state governments. Some states may count themselves as winners in so far as they have gained industrial employment, but typically they have achieved this by putting their budgets at risk and undercutting labour market conditions in the ABC region. The losers in this process include locally owned firms in the Greater ABC region and industrial workers who have been made redundant. Trade unions and municipalities in the Greater ABC region and in the São Paulo area have struggled to find a response to the forces of restructuring sweeping through the regional economy. In this respect, they share a dilemma with an increasing number of regions in both the developed and the developing worlds.

Postscript

The challenges facing the ABC region, and Brazil more generally, intensified in late 1997 as a result of the economic crisis which beset south-east Asia. The Asian tigers have frequently been held up as a paradigm to be emulated by countries such as Brazil. But it was the turmoil which swept over the Asia-Pacific region which placed strain on the relative economic stability which characterised Brazil after 1994. At the end of October 1997, the Brazilian Central Bank was forced to raise interest rates after dramatic falls on the São Paulo stock exchange. By the beginning of November 1997, Brazilian interest rates were, at 40 per cent, among the highest in the world as the authorities struggled to protect the value of the Real. By mid November, the Cardoso government introduced an emergency austerity budget—involving tax rises and public spending cuts—to reassure world markets and to ward off speculative attacks on the currency. At the same time Brazil—along with Argentina—raised import tariffs despite opposition from fellow Mercosur members Uruguay and Paraguay.

Although these measures were welcomed by the IMF, they had a devastating impact on the car market where 70 per cent of sales are financed by credit. Car sales fell by 40 per cent in the first half of November (*Financial Times*, 1997d). The main car producers were forced to slash production—VW reduced output at its São Paulo plant by almost a half. Each of the main manufacturers has introduced cuts in working hours. In these new straitened circumstances, the new inward investment into Brazil appears to have contributed to a large problem of overcapacity, although uncertainty surrounded the fate of proposed Mercosur investments by Hyundai and Kia.

These developments are likely to hasten further restructuring in the Brazilian car industry. Thus according to one analysis:

> The region's older and smaller factories might possibly be closed to make way for big new plants that can compete on world markets (*The Economist*, 1997, p. 86).

The ABC region car plants would appear to be particularly under threat in this scenario. Globalisation and the instability that is currently associated with it, are likely therefore to continue to have a profound effect on the ABC region.

Notes

1. Williamson, however, acknowledges that the move towards equality in peripheral areas observed in periods of globalisation "has not been universally true of the Latin American and East Asian countries" (Williamson, 1997, p. 131).
2. Economic competition among states and among firms in Latin America is, as Tandarico and Lungo (1995, p. 231) point out, intensifying on the basis of cheap labour and state subsidies, among other factors.
3. In 1979, the State of São Paulo accounted for 58 per cent of the total Brazilian industrial production, whereas in 1907, its share was only 16 per cent (Diniz, 1994).
4. Mercosur is a free-trade area set up in April 1991 comprising Argentina, Brazil, Paraguay and Uruguay. Its main objectives are to accelerate the economic development of these countries and to make them more efficient and competitive. Bolivia and Chile have recently become associate members.
5. A document entitled 'A Petrobrás e São

Paulo', published by the Brazilian oil monopoly Petrobrás in 1994, highlighted how large national companies perceived the dangers of the opening of the economy and of relinquishing state monopolies:

> The demise of the state [oil] monopoly will have negative consequences for São Paulo, where the bulk of the Petrobrás industrial complexes are concentrated (...). In fact, the only winners will be the international oligopolies, that, after taking 'Petrobrás' share of the market, will take abroad the R&D activities now developed here and will bring their managers from outside Brazil (Petrobrás, 1994, p. 4; authors' translation).

6. In 1996, the Greater ABC region had one of the highest rates of GDP per capita in Brazil (US$10 300 vs US$4754 for the whole of Brazil).
7. A further dimension of the pattern of recent FDI relates to the Mercosur effect. As well as adding new capacity in Brazil, the large multi-nationals have also established new plants in Argentina with the intention of supplying the Mercosur market. Complicated tariff agreements have been made between Brazil and Argentina which are designed to keep production in rough balance but which have stimulated cross-border production. For instance, while re-equipping its São Bernado plant to produce the Fiesta and Ka (see below), Ford has transferred production of the Escort to Argentina, although 75 per cent of this output is exported back to Brazil. Meanwhile, VW has concentrated production of the Polo in Argentina. Similar moves towards cross-border organisation of activities have occurred in the parts sector with Brazilian firms investing in Argentina and vice versa (Reid, 1996).
8. And the average monthly salary of the assembly-line worker in all the Greater ABC car plants is US$1 405 (DIEESE, 1997).
9. In 1995, VW, which still employs 20 000 in its car plant in São Paulo, invested US$250 million in a truck plant in Resende in Rio de Janeiro state to replace an existing plant in São Paulo. The state government and municipality offered tax breaks, free land and its own facilities at Sepetiba port. The port which is privately run has much lower costs than the public-sector-run port of Santos which serves São Paulo (*The Economist*, 1995a).
10. This section draws mainly on interviews with managers at the Ford, Scania, Rhodia and Petrobrás plants in the Greater ABC region; the interviews were conducted by the authors in May 1997.
11. Tariff levels on finished vehicles were raised in 1995 and 1997, largely in the face of pressure from domestic producers, although they remained low on parts and equipment imports.
12. The discussion in this section is based mainly on an interview with Carlos Alberto Grana and Luiz Marinho, secretary general and president respectively of the metalworkers' union of the Greater ABC region, conducted by the authors in May 1997.
13. This section is based on discussions conducted with Jeroen Klink, advisor to the mayor of Santo André — SP, and Celso Daniel, mayor of Santo André, held in May 1997.
14. The Greater ABC region contains the larger municipalities of Santo André, São Bernado do Campo, São Caetano and the smaller ones of Diadema, Mauá, Ribeirão Pires and Rio Grande da Serra (see Figure 1).

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