



40th European Congress
Barcelona 2000

STRATEGIES OF WASTE: BIDDING WARS IN THE BRAZILIAN AUTOMOBILE SECTOR

By

Andrés Rodríguez-Pose^a and Glauco Arbix^b

^a (A.Rodriguez-Pose@lse.ac.uk), Department of Geography and Environment, London School of Economics and Political Science, Houghton St, London WC2A 2AE, UK.

^b (garbix@usp.br), Department of Sociology, University of São Paulo, Av. Prof. Luciano Gualberto, 315, Cidade Universitária, 05508-900, São Paulo, Brazil.

Abstract: Since the mid-1990s Brazil has become one of the main recipients of foreign direct investment (FDI) in the automobile sector. As already happened in the late 1950s and early 1960s, world car manufacturers are investing heavily in the building of new car plants. The reasons behind the renewed interest of car companies in Brazil have been the huge and expanding internal market and the relatively stable macroeconomic panorama of the mid-1990s. However, and in contrast to what happened in the 1950s and 1960s, most new car plants are being located outside the São Paulo metropolitan area, the traditional hub of the Brazilian motor industry. Although some argue that, among other reasons, this is the result of lower labour costs elsewhere in Brazil and of improved infrastructure in the country, this article tries to demonstrate that the recent decentralization of the Brazilian motor industry is basically linked to perverse territorial competition among Brazilian states. This sort of territorial competition –known in Brazil as the ‘fiscal’ wars- represents a pure waste of resources, both for the states engaged in them, as well as for Brazil as a whole.

Keywords: Foreign direct investment, globalization, territorial competition, automobile industry, Brazil.

The authors thank FAPESP for providing support for this research and the Sloan School of Management (MIT) for its hospitality. Paul Cheshire, Gilles Duranton, John Tomaney, Patrick le Galès, two anonymous referees and the participants of seminars at CURDS (University of Newcastle upon Tyne) and the Department of International Relations at the London School of Economics made helpful comments on earlier versions of the paper. The usual disclaimer applies.

Introduction

The process of economic stabilization undertaken by Brazil since the arrival of Fernando Henrique Cardoso in 1994, first to the Ministry of Finance and later to the presidency, marked the start of a period of relative economic stability, which –despite periods of economic unrest as in late 1998 and early 1999- has lasted until the end of the century. After a decade of economic mayhem, dominated by external debt, hyperinflation and failed stabilization plans, the implementation of the Real plan accomplished greater internal and external stability, relatively low inflation, and moderate but relatively constant rates of growth during the period 1994-99¹. These economic conditions, together with the opening of key sectors of the Brazilian economy and greater regional economic integration in the framework of Mercosur, were at the root of the increasing interest of foreign investors in Brazil. Since 1994 Brazil has become an important target for foreign direct investment (FDI), in accordance with its status as not only the largest economy in Latin America and the eighth in the world, but also as a market with an enormous economic potential.

Car manufacturers were among the first to spot the opportunities offered by a more stable economy and invested heavily in Brazil. From the beginning of what is known as the ‘Novo Regime Automotivo’ (New Automotive Regime)² in December 1995 until September 1998, car manufacturers invested 10.683 billion US\$ in the restructuring of existing plants and/or the building of new ones. The Brazilian government expected the final amount to be of 12.298 billion US\$ by the end of 1999, when the ‘New Automotive Regime’ came to an end. 16 car manufacturers, 150 spare part companies and 29 companies from other sectors of production have taken advantage of the conditions provided by the ‘New Automotive Regime’ since early 1996 (MICT, 1998).

¹ Growth rates in Brazil suffered, however, a blow in the second half of 1998 as a result of the country’s financial crisis. The growth rate for 1998 was negative (-1.9%), although stability has returned in the second half of 1999.

² The ‘New Automotive Regime’ was born within the framework of the Real Plan as a means to consolidate and foster FDI in the automobile sector. Its main objectives were: (1) to keep the large manufacturing plants and the large spare parts companies already installed in the country; (2) to try to restructure existing Brazilian companies; (3) to attract new companies and to stimulate the construction of new car plants; (4) to try to consolidate Mercosur and to reinforce Brazil’s position as its key economic actor.

At first sight, the influx of foreign funds can be considered beneficial for the whole of the Brazilian economy, since it is expected to generate know-how and technology transfers and is creating direct employment. In this article, we will, however, argue that the expansion of FDI in the automobile sector in Brazil is producing perverse effects in the form of territorial competition among Brazilian states, which may ultimately jeopardize any long-term economic benefit resulting from the increase in FDI.

Our main aim is to study recent trends in FDI in the automobile sector and to identify the negative effects generated by the increase in territorial competition linked to the expansion of investment, that is by the race among Brazilian governors to attract new car plants to their respective states. The results of the analysis show how these pro-active 'development' strategies, both by the Federal and by state governments, degenerate into a predatory dispute involving states and municipalities with negative results for the public sector. In order to achieve this, we will first briefly review the theoretical implications of the process of globalization and institutional reaction in the form of territorial competition in developing countries, before analysing Brazil's economic evolution. These sections are followed by the study of FDI in the automobile sector in Brazil. The analysis of the emergence of territorial competition among Brazilian states in order to attract car plants to their respective territories comes next. In the final section, we identify the winners and losers of the process of territorial competition and try to detect the global impact this process may have on the future of economic activity in Brazil.

Globalization, federalism and territorial competition in developing countries

Although the effects of the process of economic globalization and the opening of markets for developing countries are by no means uncontroversial, the dominant view in the field of neoclassical and endogenous growth theories is that a greater integration of developing economies into the world economy entails more advantages than disadvantages. From these perspectives, it is considered that any increase in flows of trade and information between the developed and the developing worlds is likely to give rise to competitive and restructuring effects which in the medium-term may have a significant impact on the overall productivity of labour in developing countries (Grossman and Helpman, 1991). Hence, open economies -since trade is one of the few

factors that, according to Levine and Renelt (1992), is consistently robust in determining the growth outcome of any country - are generally regarded to have a greater capacity to grow than closed economies. Moreover, open economies are considered to be more likely to benefit from technological spillovers. Developing countries which increase their trade with technologically advanced countries are regarded as more capable of boosting their productivity by acquiring a level of know-how which would otherwise have been very costly to obtain using their own resources³ (Coe and Helpman, 1995; Coe, Helpman and Hoffmaister, 1997).

This dominant view has been verified empirically by Sachs and Warner (1995) and Sachs, Warner, and Hoffmeister (1997). These authors establish a relationship between the rate of growth of countries and their degree of openness. Their analysis of national growth rates across the world since the 1960s highlights a stronger degree of convergence of those developing economies which had remained relatively open during the period of analysis. These results contrast with the lack of economic convergence of closed economies. "Open economies might enjoy faster income convergence than closed economies, since international mobility of capital and technology can speed the transition to steady-state income" (Sachs and Warner, 1995: 187). Coe, Helpman and Hoffmeister (1997) report similar results in 77 developing countries regarding the impact of trade on technological spillovers and growth.

In addition, some authors have emphasized that greater economic integration of developing countries has not only positive effects in terms of economic efficiency, but also in terms of inter-territorial equality. The shift from import-substitution to export-oriented economies in many developing countries during the last decades has led to "raising demand for unskilled but literate labour, relative to more skilled workers" (Wood, 1994: 8). Since most of this skilled but literate labour is increasingly found in the periphery of developing countries, relatively lagging regions in these countries are likely to benefit more from the opening of the economies than core areas, thus reducing regional disparities within developing countries (Wood, 1994; Williamson, 1997; Duranton, 1999).

³ The importance of international trade in driving R&D spillovers has, however, been recently challenged by Keller (1998), who reports similar results to those obtained by Coe and Helpman (1995) and Coe, Helpman, and Hoffmaister (1997) with randomly created trade patterns instead of 'true' ones.

Hence, from this perspective, the shift from closed import-substitution economies to open economies yields positive results for developing countries, both in terms of economic efficiency and territorial equality. As a result, combining a reform of trade with an improvement of the quality of human resources are increasingly considered as the most adequate policies for economic progress in the developing world.

However, the emergence of subnational institutional actors and, in the case of Brazil, the revival of federalism, mediate the effects of globalization and foreign direct investment. Greater economic integration often goes hand in hand with centrifugal forces and greater demand for regional autonomy (Keating, 1998; Rodríguez-Pose, 1998), as well as with a relative demise of traditional top-down regional policies and a passing on of the responsibility for development to subnational governments (Markusen, 1996). The consequence of these processes is that many regions and localities which had grown accustomed to the relative protection of the state find that economic integration radically changes this situation and brings new development challenges and opportunities.

The relatively free movement of goods and capital in countries which have recently adopted the decision to open their borders generally results in an increase in foreign direct investment (FDI). However, and in contrast with previous waves of investment, current FDI is more footloose and less constrained by traditional locational factors. Infrastructure and human capital improvements allow FDI much greater mobility within developing countries than hitherto. And the prosperity of each region and locality is increasingly perceived to be dependent on the capacity of each place to pursue effective competitive strategies to attract increasingly 'footloose' FDI (Cox and Mair, 1988; Cheshire and Gordon, 1996; Budd, 1998).

Brazil is no exception. Brazilian federalism has in the past followed political cycles: authoritarian spells favoured a greater centralization of power, whereas decentralization has always been closely associated to devolution of power to the states (Souza, 1997). The advent of democracy in the late 1980s has thus been accompanied by an increase of the political power of state governors and local mayors. And since in Brazil the influence of governors and mayors is related to the size of the budget of their respective states and municipalities, the new inflow of FDI has opened up the possibilities to increase local revenues. The result is that states and municipalities are increasingly involved in designing and implementing territorially competitive strategies (Rodríguez-Pose, Tomaney and Klink, 2001). According to Cheshire and Gordon, territorial competition is

a “process, through which groups, acting on behalf of the regional or sub-regional economy, seek to promote it as a location for economic activity either implicitly or explicitly in competition with other areas” (1996: 385). The type of policies associated with territorial competition typically range from simple regional marketing to “locational incentives of various kinds, provision of sites or infrastructure or supply side capacity building “ (Cheshire and Gordon, 1996: 387). Since territorial competition is more concerned with issues of local economic efficiency than with inter-regional equality, the effects of territorial competition may offset any positive effects related to the process of economic integration. As Cheshire and Gordon (1998) underline, the impact of territorial competition may be growth enhancing, when these policies lead to an increase in the local and national economic welfare, but it may also be either zero-sum (when any increase in local welfare is achieved at the expense of the welfare of other areas) or even pure waste (when territorial competition simply represents a waste of resources). In this latter case, the effects of territorial competition in terms of long-term welfare improvement tend to be negligible at the local level and may lead to the unleashing of perverse economic effects elsewhere (Figure 1).

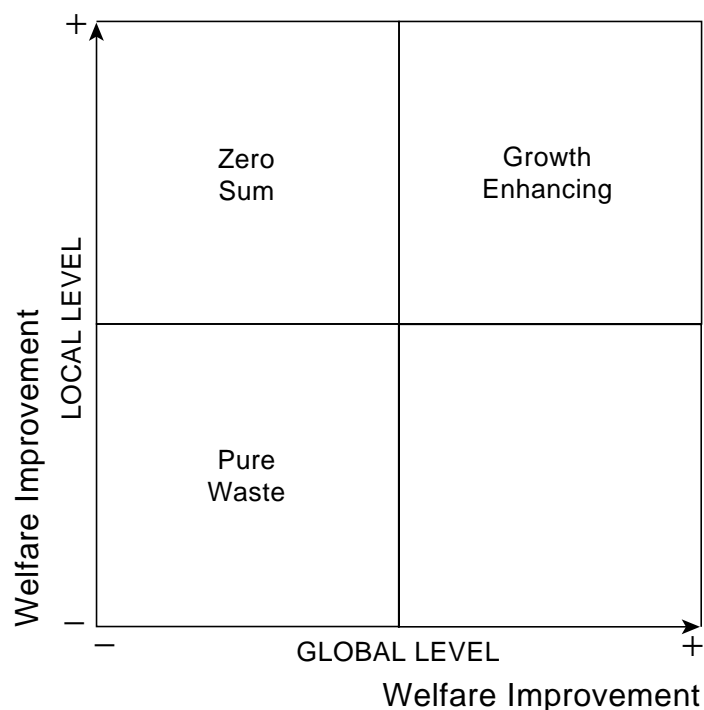


Figure 1 *The local and global outcomes of territorial competition*

In this article, we will argue that the opening of the Brazilian economy has triggered a process of territorial competition in the automobile sector among Brazilian states. The final outcome of these bidding wars is pure waste, since locally any possible increase in welfare is neutralized by the direct and indirect costs of attracting FDI; and globally territorial competition is leading to the closure of other plants -and hence to lower economic activity and greater unemployment- elsewhere in the country.

Economic stabilization in Brazil

In the 1980s the Brazilian economy reached a significant impasse. The processes of industrialization, which had been actively encouraged by the government since the 1930s, and of import-substitution, in place since the 1950s, and which led to the formation of the largest industrial base in the whole of Latin America, seemed to be exhausted. Large, mainly obsolete, and very often state controlled industrial complexes and companies were no longer capable of providing the type of dynamism needed in an increasingly globalized world. Overspending by the government resulted in a large external debt that Brazil could no longer service. In addition, high inflation became the norm during much of the 1980s and early 1990s. Inflation rates reached in some periods -as in early 1990- levels of 80% per month (Blumenschein, 1995). This overall situation had a serious impact on the Brazilian economy: growth rates became extremely volatile, alternating short periods of high growth with deep economic downturns. Social and regional inequality increased (Baer, 1983; Storper, 1991). Wage earners were hit by high inflation (Blumenschein, 1995), private and public investment fell, and "the apparent tendency toward 'relative' polarization reversal observed in the 1970s came to a halt in the early 1980s" (Storper, 1991: 63). The gap between the industrial core (the states of São Paulo, Rio de Janeiro, and Minas Gerais) and the rest of the country, which was shrinking since the beginning of the 1970s, started to increase again, mainly as a result of the demise of traditional development policies (Cano, 1993).

Successive national governments tried to combat this adverse economic situation with a series of macroeconomic plans. Such plans (Cruzado, Cruzado II, Bresser, Arroz-com-Feijão, Verão, Collor I, Collor II, Cardoso I, and Cardoso II) were designed and implemented between 1986 and 1995. In addition, seven different currencies (cruzado, cruzado novo, cruzeiro, cruzeiro real, URV, and real), five price and sixteen wage

policies were used and/or implemented. The main aim of the plans, and of the changes in currencies and wage policies associated to them, was to try to control prices and wages and to stabilize the Brazilian currency. Despite being in most cases able to curb inflation for a short period of time, all these plans failed to deliver a stable economic environment. The final result of the plans was always similar: return to high government expenditure and high inflation.

This economic panorama changed in the mid-1990s. With the arrival of Fernando Henrique Cardoso to the Ministry of Finance in 1994, a new macroeconomic plan -the Real Plan- was launched. It included many features from previous plans (some kind of wage and price controls, restrictive monetary policies, and the creation of a new currency -the Real- pegged to the US dollar), but it also introduced new measures. Apart from opening some state monopolies to market competition, from including privatisation packages of state-owned companies, and from greater regional economic integration with Argentina, Paraguay, and Uruguay in the framework of Mercosur, the Real Plan continued with the opening up of the Brazilian economy started earlier in the decade. It was, however, a partial opening of the economy, reflecting the mix between the old conception of the 'Estado desenvolvimentista', which still favoured intervention, and the new conception of a more open economy and a less interventionist state. Whereas tariff barriers were reduced in certain sectors, other sectors remained highly protected. The latter was the case of car manufacturing, where external tariffs remained high⁴. In contrast, the car component parts sector was liberalised and was among the first to experience the impact of foreign competition (Bedê, 1997). This partial opening linked to the Real Plan is a reflection of the different economic points of view within Cardoso's government. As a result, the Real Plan has in certain sectors -like car manufacturing- promoted a certain return to import-substitution policies. However, and in contrast with previous policies, the import-substitution process has been driven only by foreign investment, rather than by Brazilian capital: foreign car manufacturers -their export capacity limited by the maintenance of high entry barriers- chose to enter the Brazilian market *en masse* through FDI and the building of new car plants, rather than by imports.

⁴ Despite the fact that entry tariffs for imported cars have been decreasing in recent years, they are still relatively high. In 1996 the tariff for companies with plants in Brazil was 35% and for those without plants in the country 70%. These tariffs were expected to go down to levels of 20 and 35% respectively by 1999 (Posthuma, 1997: 405).

The reliance on foreign investment is a consequence of the lack of national R&D strategies in recent Brazilian industrial policy. Whereas in the 1950s and 1960s the Brazilian state encouraged technological transfer from multinational companies to infant Brazilian industries, in the 1990s there has been less concern with this issue.

In contrast to previous plans, the results of the Real Plan have been relatively long-lasting. Inflation went down from levels of more than 40% per month in 1994, to a mere 3% annually in 1998. The Brazilian real was for four years a stable currency pegged to the dollar. Economic growth attained annual rates ranging between 2 and 4% in the period 1994-1997. Despite these economic achievements, the Brazilian crisis of late 1998 and early 1999 highlighted some of the weaknesses of the system. Economic growth plummeted in the third quarter of 1998, and the Brazilian Real, which was considered to be overvalued 15-20% before the January 1999 crisis (The Economist, 1998b), fell to almost half its value with respect to the US dollar when it was allowed to float freely. High federal and state deficits limited the capacity of the Brazilian government to redress its economy and pay its debts, especially after several state governments declared themselves bankrupt in early 1999. The economic recovery of the second half of 1999 has brought greater stability back, but some of the problems which led to the crisis remain.

Foreign investment in the car industry

Although the aforementioned risks cast doubts about Brazil's future as a market for manufacturing products, the combination of relative economic stability, liberalization of capital flows, and still high protection in the car manufacturing sector have acted as a powerful magnet for FDI. Foreign car manufacturers seem to have suddenly realized that Brazil is a country which offers huge prospects for business, especially in a sector which can be considered mature in developed countries. Brazil offers a large market of about 160 million inhabitants with a very low level of car ownership in comparison with markets in North America, Europe and Japan (Table 1).

Differences between the investment announced by foreign car manufacturers and real investment make it difficult to calculate the exact volume of FDI in Brazil in the 1990s. The Economist Intelligence Unit has estimated the total investment to be at levels of 6 billion US\$ between 1990 and 1995 and more than 12 billion US\$ between 1996

and 2000 (The Economist, 1997b). Bedê (1997: 376-8) reckons the total investment announced for the period 1995-1999 to be around 11 billion US\$. And, as mentioned in the introduction, data provided by the Ministry of Industry, Trade and Tourism puts investment between December 1995 and September 1998 at levels of 10.6 billion US\$ and estimates the total to be of more than 14 billion by the end of 1999 (MICT, 1998).

Table 1
Car ownership (inhabitants per car)

	1980	1996
USA	1.4	1.3
Italy	3.0	1.7
Japan	3.1	1.8
Germany	2.5	1.9
France	2.5	1.9
Spain	4.2	2.2
Argentina	6.6	5.8
Brazil	11.8	9.4

Source: Anfavea, December 1998.

This surge in FDI has led the share of the car industry in Brazil's industrial GDP to rise from levels of 7.8% in 1990 to levels of 12.1% in 1997 (Anfavea, 1998) (Table 2).

Table 2
Share of the car manufacturing sector in industrial GDP (in %)

1990	7.8
1991	7.8
1992	10.0
1993	10.6
1994	12.0
1995	11.2
1996	11.5
1997	12.1

Source: Anfavea, 1998.

Almost all the main world car manufacturers have announced the building of new, or the restructuring of existing car plants in Brazil. Fiat, Ford, General Motors, and Volkswagen are increasing their already sizeable presence, whereas Mercedes and Renault plan huge new investments. Chrysler, Iveco, Scania, and Volvo are also targeting Brazil. And Asian companies are joining in: Toyota, Honda, Mitsubishi, Asia Motors, and Hyundai have announced considerable investments⁵ (Table 3).

⁵ Although in the case of Korean manufacturers, the announced investments may be at risk due to the impact of the Asian crisis on the *chaebol*.

Table 3*Planned FDI in new automobile assembly and motor plants, 1996-**2001*

Location	Company	Country of origin	Investment date	Minimum planned investment (in million US\$)	Planned annual capacity
São Paulo metropolitan area					
São Bernardo do Campo	BMW/L.Rover	Ger./UK	1998	150	15000
Rest of São Paulo state					
São Carlos	Volkswagen	Germany	in operation	250	300000*
Mogi das Cruzes	GM	USA	on hold	150	1600000*
Indaiatuba	Toyota	Japan	1999	150	15000
Sumaré	Honda	Japan	in operation	100	30000
Itu	Kia(1)	Korea	on hold	50	10000
Paraná					
São José Pinhais	Renault	France	1999	750	100000
São José Pinhais	VW/Audi	Germany	1999	600	120000
Campo Largo	Chrysler/BMW	USA/Ger.	2000	600	400000*
Campo Largo	Chrysler	USA	1998	315	12000
Minas Gerais					
Juiz de Fora	Mercedes	Germany	1999	820	70000
Betim	Fiat	Italy	1998	500	500000*
Sete Lagoas	Iveco	Italy	1998	250	20000
Belo Horizonte	Fiat	Italy	1999	200	100000
Rio Grande do Sul					
Gravataí	GM	USA	1999	600	120000
Guaíba	Ford(2)	USA	2001	500	100000
Caxias do Sul	Navistar	USA	1998	50	5000
Rio de Janeiro					
Porto Real	PSA-Peugeot	France	2000	600	100000
Resende	Volkswagen	Germany	in operation	250	50000
Bahia					
Camaçari	Asia(1)	Korea	on hold	500	60000
Aratu	Hyundai(1)	Korea	on hold	280	20000
Goiás					
Catalão	Mitsubishi	Japan	to be defined	35	80000

As of December 1998. Taking into account the volatility of planned investments and the nature of the data, the data on FDI is to be considered as an approximation and is likely to change.

(1) Korean investments are currently on hold as a result of the Asian crisis of 1997-98.

(2) Following a conflict with the newly elected government of Rio Grande do Sul during 1999, Ford decided to relocate its predicted investment to Camaçari (Bahia) where the state and federal incentive package are even more attractive for the company than that of Rio Grande do Sul. The new planned investment is of 1,3 billion US\$.

*Motor plants

Sources: MICT, Anfavea, Panorama Setorial.

Such a large expansion of the industry is only comparable in Brazilian economic history to what Shapiro (1997) calls the first migration of the car plants during the period between 1956 and 1970. In those years General Motors, Ford, Mercedes Benz, Toyota, Volkswagen, Fiat, and Scania established themselves in the country leading to the formation of the largest car industry agglomeration in Latin America and contributing to the development of a large and skilled workforce and of a dense network of part suppliers for the automobile industry.

There is, however, a significant difference in the territorial distribution of car plants between the first wave of the late 1950s and early 1960s and that of the 1990s. Whereas during the first expansion of the Brazilian automobile sector foreign investment was, with the exception of the Fiat plant in Betim (Minas Gerais), fundamentally concentrated in the São Paulo metropolitan region (and especially in the area known as the Greater ABC region, south of São Paulo), the recent expansion of the industry is not geographically concentrated. Although some of the investment has been geared towards the restructuring of existing car plants⁶, and some minor new investment (BMW-Land Rover's new plant in São Bernardo do Campo) is announced to go to the Greater São Paulo area, the bulk of new foreign direct investment is being developed in areas outside the heart of the Brazilian motor industry. Honda and Toyota have chosen to create new plants in greenfield sites in the interior of São Paulo state. Kia Motors has a similar strategy. Most car makers have, however, chosen locations outside the state of São Paulo, mainly in surrounding states. The main beneficiaries of the surge in FDI have been the states of Paraná, Minas Gerais, Rio Grande do Sul, and Rio de Janeiro (Figure 2). Renault, VW-Audi, and Chrysler have decided to build new plants in the state of Paraná; Rio Grande do Sul signed agreements for the construction of plants with General Motors and Ford; Minas Gerais with Daimler-Benz, Iveco, and Fiat, and Rio de Janeiro has been successful in attracting PSA-Peugeot to its territory. Only the Korean manufacturers Asia and Hyundai (Bahia) and the Japanese Mitsubishi (Goiás) have planned investments outside the relatively rich South, in some of the less developed Brazilian states of the

⁶ The Ford plant in São Bernardo do Campo, in the Greater ABC region, has been the main beneficiary of Ford's investment in Brazil. 1.4 billion US\$ have been invested in the modernization of the plant for the production of the Ford Fiesta and Ford Ka models (Fonseca Silva, 1997). A similar strategy, although with a lower level of robotization of the production line, has been followed by Fiat at its Betim (Minas Gerais) plant. 600 million US\$ have been invested there for the production of the Palio and Tipo models.

North East and Centre. Other, mainly Asian, companies intend to develop investments outside the South, but the future of most announced investments is still uncertain. Overall the North, North East, and the Centre West regions -with the exception of the state of Bahia, which has recently emerged as a strong player and is likely to attract 8.8% of the total investment in the sector (MICT, 1997)- still lag behind in terms of FDI (Figure 2).

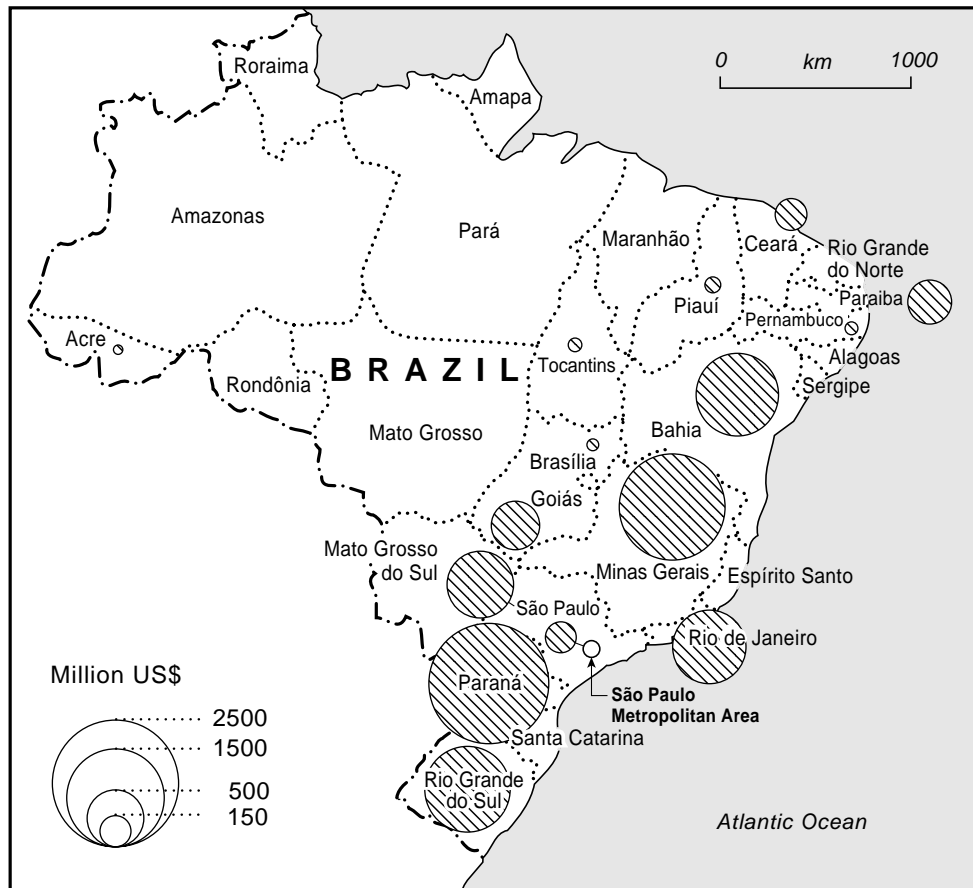


Figure 2 Territorial distribution of the planned FDI in new automobile plants (1996-2001), by state.

What are the reasons behind the current decentralization of the Brazilian car industry? Why are foreign car companies shunning the advantages offered by external economies, by the availability of skilled labour, and by an already existing network of suppliers in São Paulo and choosing to build their plants in greenfield locations outside the industrial core of the country? The push factors behind the territorial spread of foreign investment in the automobile sector during the 1990s are manifold.

First comes the question of labour costs in combination with what Wood (1994) considers to be the main force in North-South trade: skills. According to the Heckscher-

Ohlin theory of trade, the increase in trade leads developing countries with a large supply of literate but relatively unskilled labour to specialize in the production of manufactured and relatively undifferentiated goods (Wood, 1994). The automobile sector falls within this category and lower wages in countries like Brazil -together with the incentives of expanding markets- act as bait for car manufacturers. Wage differentials within Brazil and the reduction of the educational gap across the country in recent years have led car companies to look for locations with lower labour costs. In this sense, workers in the São Paulo metropolitan area are strongly disadvantaged with respect to those of the rest of the country: the hourly cost per worker in automobile plants in the Greater ABC region is, in most cases, almost double than that of other car factories in Brazil⁷.

Another handicap that São Paulo's motor industry has had to face is the perception of its workforce as conflict-prone with respect to labour in the rest of Brazil (Rodríguez-Pose and Tomaney, 1999). Car plants in the ABC region were the cradles of Brazil's trade union movement. Levels of trade union membership are much higher than elsewhere in Brazil and the main local trade unions are well-organized. The powerful *Sindicato dos Metalúrgicos* (Metalworker's Union) represents the interests of the workers in the car and the component parts sector. Local unions also have a reputation of being strike prone, mainly as a consequence of the strikes of the late 1970s and 1980s, which combined traditional workers' demands with protest movements against the military regime in power at the time. And this image is proving very hard to shake⁸,

⁷ According to data provided by Ford Brazil and by the statistical service of the *Sindicato dos Metalúrgicos* (Metalworkers' Union) the hourly cost per worker in the Ford plant at San Bernardo do Campo (Greater ABC region) was close to 14 US\$ (DIEESE, 1997; Fonseca Silva, 1997). Hourly wages, however, were lower than the hourly cost per worker, with huge gaps between those workers being paid by the hour (7.02 US\$ per hour on average) and the stable employees (17 US\$ per hour) (DIEESE, 1997). In contrast, the hourly cost per worker in car plants outside the São Paulo metropolitan area is lower. The Volkswagen plant in the interior of São Paulo State had hourly costs per worker of 6.80 US\$, whereas in the Fiat plant at Betim (Minas Gerais) the average cost was of 7.30 US\$ (Fonseca Silva, 1997). These data coincides with the costs reported in The Economist (1997a), where it was stated that the average wages at Fiat's plant were only around 60% of those at Ford's, despite claims from Fiat that, with the inclusion of other social benefits, the gap was significantly lower.

⁸ At a successive interviews held in early 1998 with the president (Luiz Marinho) and the secretary general (Carlos Alberto Grana) of the *Sindicato dos Metalúrgicos*, they both complained about the difficulties they found changing the conflictive image of the trade union, despite its past record of collaboration with the management of companies, their

especially among car manufacturers. This reputation is in stark contrast with that of the rest of the country as a less-unionized and almost conflict-free location. As Fiat managers at the Betim plant (Minas Gerais) boast, not as single hour had been lost to strikes in the last 14 years (The Economist, 1997a).

An additional push factor working against São Paulo is the demise of some of the conditions that facilitated the concentration of investment in the 1950s and 1960s. In that period poor road and rail infrastructure in Brazil and the concentration of the market and of skilled labour in the South East of the country contributed to the development of car plants in and around the São Paulo metropolitan region. The amelioration of road infrastructure in Brazil in the last three decades together with the need of targeting wider markets, both inside and outside the country, as well as technological advances in car manufacturing, give companies greater leeway when choosing the location of their plants.

The level of congestion and pollution -together with a series of administrative problems- in the metropolitan area of São Paulo also work against the establishment of new plants there and in favour of alternative locations. High land costs, a rundown road infrastructure, which has been clearly outgrown by the city and which tends to flood every time it rains, and the lack of co-ordination among municipalities⁹ and between the city of São Paulo and the surrounding councils are often cited as factors which increase the cost of directing industrial investment to São Paulo (The Economist, 1998a).

The labour cost differential between São Paulo and the rest of the country, in combination with all the other push factors, provide the economic rationale for the direction of FDI in the car industry away from the traditional industrial core towards other states, returning to the decentralization trend of the 1970s and early 1980s (Cano, 1993). In this sense, the process of globalization and the increasing internationalization of the Brazilian economy could be succeeding at what traditional regional policies failed: reducing regional inequalities in Brazil, since FDI is increasingly located outside the traditional core. This trend would come to support Wood's (1994) and Williamson's

low strike record in recent years, and their active participation in the signing of the car industry agreements of 1992 and 1993.

⁹ The Chamber of the Greater ABC -a forum which includes representatives from the municipalities of the automobile belt of São Paulo- is the only exception.

(1997) hypothesis of the beneficial effects of international trade and movement of capital in developing countries.

Territorial competition for foreign investment in the Brazilian car sector

The aforementioned push factors have been constantly brandished by car manufacturers in order to justify the establishment of new car plants in states such as Minas Gerais, Rio Grande do Sul, or Paraná. However, these push factors alone do not suffice to explain the current process of decentralization that the Brazilian car industry is witnessing. Higher labour costs, trade union membership and congestion are countered by important pull factors in the São Paulo metropolitan region in terms of accessibility to markets and economies of agglomeration. Being the largest single market in South America and having the largest agglomeration of industries and the largest pool of skilled labour still outweigh the push factors in the decisional location of companies. A recent survey of the factors behind the locational decisions of new plants in Brazil conducted by the Confederação Nacional da Indústria (National Industrial Confederation, CNI) confirmed this view. Proximity to markets and the specific advantages of each location were more important in determining the locational decisions of firms than labour costs, trade union membership and spatial congestion (Table 4).

Table 4

Factors behind the location of new plants in Brazil (%)

Proximity to markets	57.3
Tax breaks	57.3
Labour costs	41.5
Specific advantages of each location	39.0
Trade union membership	24.4
Spatial congestion	14.6

Source: CNI/CEPAL, 1997.

The locational behaviour of car manufacturers in the early 1990s seemed to conform to this pattern. São Paulo was the preferred location. Hyundai announced in 1995 that it was going to spend about 1 billion US\$ in the building of a car plant there. Ford also invested heavily in the restructuring of its assembly plant in São Bernardo do Campo, in the São Paulo metropolitan region. Only the burst into scene of the bidding wars and the

tax breaks and incentives associated to them has tilted the balance in favour of alternative locations. According to the survey by the Confederação Nacional da Indústria, tax breaks are as important as proximity to markets in determining the choice of location of new plants in Brazil (Table 4). If this factor is added to labour costs, trade union membership and spatial congestion, the factors pushing investment away from São Paulo become clearly more significant than any pull factor. As a result, since the advent of the bidding wars Hyundai is now likely to build its new plant in the state of Bahia, and Ford has shifted its announced investment from São Paulo to Rio Grande do Sul first, and later to Bahia. Only one of the latest twenty-two announcements of FDI in new automobile assembly and motor plants –that of BMW-Land Rover in São Bernardo do Campo- is to take place in the São Paulo metropolitan area.

The bidding wars for FDI among Brazilian states have been triggered by the progressive insertion of Brazil in the world economy. The massive influx of FDI and the apparent retreat of the Federal Government from the field of active regional policy have whetted the appetite of different Brazilian states. From Rio Grande do Sul to Amazonia, from Rondônia to Bahia, many Brazilian states are vying to attract greater foreign investment. This process, encouraged at first by the Brazilian government within the framework of the New Automotive Regime, quickly started to show its negative side. State politicians eager, on the one hand, to present themselves as generators of employment and modernizers, and fearing, on the other, losing out to neighbours, increasingly resorted to incentives, subsidies, and tax breaks as the main means to attract international car companies to their territories. Tax or bidding wars have become the norm in the motor industry. Motor companies wanting to set up new plants to service a growing Brazilian and South American market have taken advantage of the situation and approach different states simultaneously in order to reach the best possible deal for their interests.

Although negotiations between car companies and the states may adopt different forms, most deals are cut by the same cloth. In compensation for the establishment of a car plant within its territory, the state and the city where the plant is to be built provide a series of incentives which inevitably include the following points:

- a) The donation of the land or, at least, of a large percentage of it.

- b) The provision of the necessary infrastructure for the preparation of the site. This usually includes road infrastructure and utilities, but in some cases it goes as far as rail links and the development of port terminals.
- c) The provision of state and local tax breaks for periods which in no case are shorter than ten years, and which, in some cases, even include tax breaks on the import of car parts.
- d) The provision of loans by the state at fixed rates well below those of the Brazilian credit market¹⁰.
- e) A series of financial and legislative cautions and guarantees.
- f) A sundry set of additional benefits, which range from providing public transport for workers and nurseries for workers' children to various environmental measures.

Depending on the bargaining power of each individual company and each state the final conditions may vary, but the terms of the 'protocols'¹¹ or agreements inevitably favour the company. A brief review of some of these agreements confirms the difference in bargaining power between the motor companies and the Brazilian states.

One of the first states to actively engage in the bidding wars was Paraná. In March 1996 its government, together with the municipality of São José dos Pinhais and the Economic Development Fund, signed an agreement with Renault. The conditions of the agreement establish that Renault had to build a new car plant in São José dos Pinhais by the beginning of 1999, and that the plant should represent 60% of the total capital of Renault in Brazil. Renault agreed to create 1,500 direct jobs and to pay 50.5 million Reais if the plant were to be dismantled in less than twenty years after the beginning of operations. The state of Paraná and the municipality of São José dos Pinhais agreed, in turn, to donate 2.5 million square metres for the plant, to provide all the necessary infrastructure and utilities at the site, as well as all the main accesses, including a railway

¹⁰ It must be noted that in most agreements any credit given to the car makers is always repayable in local currency, whereas any debt incurred by the state with the car companies tends to be guaranteed in US dollars.

¹¹ The name used in Brazil to describe the agreements reached between the states and the car companies is 'Protocolos' (or 'protocols'). These protocols differ from normal contracts in the sense that the documents are, in general, not made public and are given a similar status to 'state secrets'.

access and an exclusive area in the port of Paranaguá. The supply of electricity at prices 25% below market value was another clause in the protocol. In addition, the agreement contains a series of financial clauses by which the state takes responsibility for 40% of the total capital invested, up to a maximum of 300 million Reais (300 million US\$ at the time of the agreement) and to give loans based on the level of production and the total level of investment. These loans, without interest or clause which may take into account the devaluation of the currency, are to be repaid after ten years of the beginning of operations. Finally, Renault enjoys a series of regional and local tax breaks for a period of ten years, with similar conditions for any Renault suppliers involved in the project (Protocol between Renault and the State of Paraná, 1996)¹².

The agreement between Renault and Paraná laid down the norm for successive protocols between states and car manufacturers. Mercedes-Benz was next in line. In exchange for an investment of a minimum of 400 million US\$ and the genesis of 1,500 direct jobs¹³ for the development of a new plant in Juiz de Fora (Minas Gerais), Mercedes-Benz secured from the state and the city an extensive list of prerogatives. These included a series of loans for the development of fixed and mobile investment which amounted to a total of almost 112 million reais (ca. 100 million US\$ at the time of signing the agreement, 16 December 1996), plus additional loans linked to the final volume of production; tax breaks from a series of state and local taxes for a period of 10 years; the donation of 2.8 million square metres for the development of the plant; several infrastructural developments, which included the urbanization of the banks of the Paraibuna river, the construction of the roads to access the plant, car parks, a test circuit, as well as a rail link to the plant, the development of utilities and sanitation (with lower water costs for ten years); and minor additional settlements concerning schools for the children of employees. In addition, Mercedes-Benz got from the state the establishment of tougher environmental regulations for the site, in order to prevent other companies from developing activities in the neighbourhood -including cancelling licences to extract

¹² The governor of the State of Paraná, Jaime Lerner, a political ally of president Cardoso, took responsibility for 40% of all investment by Renault, at a time when the Brazilian state is retreating from industrial investment. The main documents of the agreement between the state of Paraná and Renault are still not open to the public and we are not sure if there are additional clauses to the ones we have used in this paper.

sand from the nearby river and limiting the burning of wood- which are deemed to have a detrimental effect for production in the Mercedes plant (Protocol between Mercedes-Benz and the State of Minas Gerais, 1996).

The conditions of the agreement between General Motors Brazil and the state of Rio Grande do Sul for the establishment of a GM plant near its capital, Porto Alegre, are also extremely beneficial for the company. The protocol includes lending 335 million reais (ca. 310 million US\$ at the time of signing the agreement: March 1997) to GM at a rate of 6%, well below the usual Brazilian market rates (which fluctuated around 40% between 1997 and 1999). This loan is to be destined by GM to the purchase of the land and the development of the plant, and the state is to reimburse GM all investment in physical capital made for the plant at US\$ rates (albeit payments are to be made in Brazilian reais). The repayment of the loan is to start in the year 2002. Tax breaks expand for a period of 15 years. In addition, the locality and the state have to provide the necessary infrastructure including all utilities, sanitation, and links to the road system. Water, electricity, natural gas, telecommunications, and sewage disposal are to be subsidised (or, as stated in the protocol, "supplied at an internationally competitive cost"). However, the most stunning feature of the agreement is the development of additional infrastructure for the site. It was agreed that the state was to build private port facilities for GM and to dig out an access canal of a minimum depth of twenty feet, as well as to provide for the preparation of the site. Finally, the protocol also includes a series of measures destined to reinforce security at the site and provide public transport to the factory (Protocol between General Motors Brazil and the state of Rio Grande do Sul, 1997).

Ford signed a protocol with the state of Rio Grande do Sul a few months later which in many ways mirrored that of GM. In exchange for the construction of a car plant with a capacity of around 100,000 cars per calendar year and an minimum estimated investment of 500 million US\$ and a maximum of 1 billion, the state of Rio Grade do Sul agreed to grant the car maker a 700 million US\$ loan at the same low rate of 6% in order to finance the fixed investment, plus additional low rate loans to finance mobile investment. The protocol includes similar tax breaks to those granted to GM, plus the

¹³ In addition to a series of minor additional concessions and vague promises, such as to import all its vehicles through the plant at Juiz de Fora, to try to use local suppliers and to favour the development of co-operation with local research and development centres.

usual donation of the land (600 hectares), the construction of all road infrastructure, site preparation and the provision of utilities "at prices no higher than those charged to third parties". Ford will also be provided with a private sea and river port terminal (Protocol between Ford and the state of Rio Grande do Sul, 1997).

Even companies with relatively minor investments enjoy an enormous bargaining power *vis-à-vis* the Brazilian state executives. DDMB, a company linked to Chrysler, planning to invest 30 million reais (circa 25 million US\$ at the time of the agreement) in a diesel motor plant, managed to negotiate extremely advantageous conditions from the state of Paraná. The terms of the protocol are very similar to those of large car manufacturers: donation of the land, provision of the necessary infrastructure and telecommunications, tax breaks in all state taxes, including those on the import of spare parts, provided they enter Brazil via roads, port, or airports in the state of Paraná (Protocol between DDMB and the state of Paraná, 1997).

Justification and possible consequences of the bidding wars

Engaging in the bidding wars is justified by state authorities from various viewpoints. FDI is perceived as the panacea for the dynamization of local economies and for the generation of employment. The name of the programme which regulates fiscal incentives in the state of Paraná is revealing: 'Programme for More Employment (Paraná); Fiscal Incentives'. The main objective of such a programme is to attract foreign industrial investment to the state of Paraná, since it is thought that new industrial investment (and especially investment in the automotive sector) will trigger multiplier effects and dynamize the economy of the state by attracting part suppliers, stimulating technological progress and the development of new products, and generating new investment (Government of Paraná, 1995). The final result would be the creation of new direct and, above all, indirect jobs, which will ultimately lead to the development of the state.

The state of Rio Grande do Sul also puts employment at the core of the effort in territorial competition. In a document commissioned by the state government about the possible impact on employment of the establishment of GM in Rio Grande do Sul, the Federação da Indústria do estado do Rio Grande do Sul (FIERGS, the Rio Grande do

Sul Industrial Federation) highlighted the creation of direct employment¹⁴, the possible spillover effects, and the backward and forward linkages generated by the plant as the reasons justifying the incentives granted to GM (FIERGS, 1996). Rather optimistically, the document goes on to estimate the possible impact on the creation of employment. "Our (conservative) estimate about the generation of employment in the state and in all the car production chain is as follows: 201,000 jobs" (FIERGS, 1996: 4). That is about 150 indirect jobs per direct job created.

The success of the Fiat car plant in Betim (Minas Gerais), the only large plant established outside the São Paulo metropolitan region before the recent wave of new investments, also acts as a powerful incentive for state governments to engage in bidding wars. In the beginning of the 1970s the municipality of Betim and the state of Minas Gerais managed to attract a Fiat plant with an incentive package that included a participation by the state in the project which amounted to 50% of the initial investment, plus the provision of the necessary infrastructure for the state, as well as state and local tax abatements. Since the opening of the plant in 1976 the city of Betim has been thoroughly transformed. Its population has jumped from 37,815 inhabitants in 1970 to 310,000 in the late 1990s. The Fiat plant employs 12,000 workers and has attracted numerous suppliers, not just to the city of Betim, but also to the industrial belt of Belo Horizonte, the capital of Minas Gerais. In addition, Betim has also benefited from the location in the area of several oil refineries and oil distribution companies of the Petrobrás national oil monopoly. As a consequence Betim's contribution to the ICMS (the state tax on the circulation of goods and services) has increased from 0.28% in 1970 to 13.6% in 1996 (Fundação João Pinheiro, 1995)

Finally, a third justification for engaging in bidding wars is simply the fear of being left out. In a document elaborated by the Department of Development and International Affairs of the state of Rio Grande do Sul this reasoning is stated bluntly. First, and after acknowledging the massive influx of foreign investment that is taking place in the Brazilian automotive sector and which "is profoundly altering the spatial distribution of national development" (Government of Rio Grande do Sul, 1997: 2), it is pointed out that "the state of Rio Grande do Sul cannot remain aside from this whole process"

¹⁴ The documents underlines that "a car plant, being a labour intensive industry, tends to generate, a very high number of jobs, directly or indirectly in other sectors of the productive chain" (FIERGS, 1996: 2).

(Government of Rio Grande do Sul, 1997: 2). However, as the whole process is taking place in "an atmosphere of unremitting competition among Brazilian states", there is a need to offer the "potential investor powerful incentives, capable not only of exceeding offers from competitors, but also of compensating the structural disadvantage of our location at the Southernmost end of the country¹⁵" (Government of Rio Grande do Sul, 1997: 2).

Hence, from this point of view, it becomes obvious that no Brazilian state can afford to avoid this sort of competition, since this would imply losing out the development battle and almost irretrievably curtailing its development potential.

However, there is little evidence that participating in the bidding wars will bring the benefits outlined in the documents drafted by most states involved in the process. In fact, there are indications in the agreements that contradict the argument of the multiplier effects and spillovers linked to the construction of new car plants. First of all, the impact is likely to be felt at the level of the generation of direct jobs. New plants will certainly boost the low productivity in the Brazilian car industry. Whereas productivity in existing Brazilian plants is now at levels that in most cases barely exceed 20 cars per worker per annum, new plants are likely to increase overall productivity to 40 vehicles (Rodríguez-Pose and Tomaney, 1999). This will imply, at best, jobless growth and, at worst, a reduction in direct employment, since any increase in productivity will be the result of a combination of more advanced technology and better organizational structures.

The claim that new car plants will generate technological spillovers is also questionable since most plants are designed to operate as assembly plants and are devoid of R&D facilities. New technologies will therefore be in most cases developed elsewhere in the world and applied later in Brazil. Only the possible development of new models included in some of the agreements offers some ray of hope about the possibility of technological spillovers. The world launch in Brazil of the Fiat Palio may be an early indication in this sense. However, most of the protocols only include general references to the development of R&D facilities by car manufacturers and vague considerations about the co-operation between the car makers and Brazilian R&D centres.

¹⁵ This factor is called in the document "Custo Rio Grande do Sul" (or Rio Grande do Sul Cost). This supposed cost is present throughout the document, conveniently ignoring the fact that Rio Grande do Sul enjoys a very attractive location in the Mercosur area, being equidistant from its two main markets: São Paulo and Buenos Aires.

But even more unlikely is the possible impact these plants will have on the genesis of indirect jobs. In contrast with the clearly over-optimistic analyses used by state governments to justify the deals with car makers, several of the clauses included in the agreements may work in the opposite direction, not only not creating a large amount of indirect jobs, but also destroying some of the existing ones. The building of direct rail and road links to the plants, as well as of canals and private port terminals (as in the case of the agreements signed by the state of Rio Grande do Sul), facilitates the export of cars to other parts of Brazil, South America, and the World. But it also simplifies the whole process of importing car component parts. All that, in combination with the substantial tax breaks for the import of parts, is likely to work against the emergence of local suppliers and to put in increasing difficulty the powerful but struggling Brazilian component parts industry. However, the rise in unemployment is unlikely to occur in the states attracting the plants, as a result of their lack of tradition in the car industry. The impact will be felt in the greater São Paulo metropolitan area, where most of the existing component parts companies are located. It is true that, for the most part, these companies are uncompetitive and need restructuring¹⁶ (Ó hUallacháin and Wasserman, 1999), but the increasing direct link between Brazilian car makers and outside suppliers is likely to curtail any chance of restructuring, especially taking into account that Brazil lacks the specialised institutions and targeted policies, as well as the governance structures, which would help local industries through the process of restructuring (Meyer-Stamer, 1997).

Moreover, the chances that the success of the Fiat plant in Betim may be repeated are small. First, because the establishment of Fiat took place under an authoritarian regime which kept territorial competition tightly under control. Second, the Fiat agreement was a one-off case, whereas incentive packages for foreign car manufacturers are now the norm. Third, the establishment of suppliers around the Betim plant in the 1970s and 1980s occurred in a context in which the import of component parts was heavily regulated. Most recent protocols, as we have seen, included tax exemptions or abatements for the import of component parts.

¹⁶ According to Ó hUallacháin and Wasserman, “import restrictions were a boon to the local parts makers. They guaranteed high profits, provided few incentives to cut costs or improve quality, and encouraged opportunistic price gouging of assemblers during peak demand periods” (1999: 26).

If all these factors are taken into consideration, the bidding wars among Brazilian states become not even a zero-sum form of territorial competition, but more a pure waste from a national perspective. States vying to attract car companies are in fact financing a large percentage of the establishment and running of plants which would in any case have chosen Brazil as their location, mainly because of the growth potential of the Brazilian and South American car markets. This in itself is nothing new. Efforts to bring in foreign capital in the automobile sector and the bidding wars related to them are not limited to Brazil. Countries in Europe, but specially the Southern states in the US have resorted massively to these strategies in the last few decades. Deals such as those of Toyota in Kentucky, BMW in South Carolina and Daimler-Benz in Alabama (Donahue, 1997: 97-101) or hints by companies such as BMW to relocate its Longbridge (UK) Rover plant or by Ford to do the same with its Almusafes (Spain) plant do not make the situation in the US and Europe radically different from that of Brazil. This issue has even raised in the US important discussions about the convenience and the possible economic and political implications of the so-called “race to the bottom” (Schram, 1999). However and despite the similar nature of the deals, there are several factors which, in our opinion, tilt the balance in favour of large car manufacturers in Brazil more than in Europe or the US. First and foremost, the lack of strong regulating bodies such as the European Commission -and of its Competition Commissioner, in particular, with its power to scrutinise state aids to business and to impose sanctions if necessary- represents a serious handicap. The Conselho Nacional de Política Fazendária (National Fiscal Policy Council, Confaz), which on paper should fulfil a similar role to the European Competition Commissioner on those matters, is an ineffectual and demoralised institution. It is made up of the Secretaries of the Treasury of all Brazilian states and any decision should be unanimous. The unanimity rule renders the Confaz incapable of intervening in the bidding wars, since any state involved in a deal with a foreign car manufacturer would have the right to veto any decision.

Second, the Brazilian states are less prepared than European nations or North American states to negotiate on a par with large transnational companies. After years of implementing policies -especially during authoritarian periods- which were subordinated to federal government directives and which left little room for manoeuvre, states, regions and municipalities find themselves often unprepared to construct the new policies that the new economic and political conditions require. For the most part, states and

municipalities adopt the same instruments they inherited directly from the 'national-developmental' state. From this perspective, the bidding wars are often conducted using the old authoritarian political style at the state level (Arbix and Zilbovicius, 1997).

Finally, factors such as the relative weakness of Brazil's civil society (especially in comparison to Western Europe or North America), the volatility of the Brazilian political panorama, a scarcely developed system of checks and balances, the lack of interest of large sections of the population in Brazilian political life, together with the fact that the stability of Cardoso's government has depended on the support of regional barons, have contributed to the development of these bidding wars and to render their results relatively opaque.

Conclusions

The development of territorial competition among Brazilian states vying to attract FDI in the automobile sector to their territories since 1995 is risking any possible long-term benefits associated with the attraction of greater FDI in this sector. The bidding wars, presented by state governments as their main –and almost only- development strategy, are a pure waste since they do not lead to a significant increase in welfare neither at the local, nor at the Brazilian level.

At the local level, Brazilian states governments are jeopardizing state budgets in order to fulfil what are no more than short-term political interests. With the excuse that they generate, on the most favourable assumptions, several thousands direct and indirect jobs and bring advanced technology, state governments are granting multinational car companies a series of subsidies and incentives that the car companies simply cannot refuse. Indeed, in view of the advantages they may obtain from the bidding wars, car companies encourage such competition and play Brazilian states against one another in order to achieve the best possible deal. The net result is that in many cases the conditions granted by the states to car manufacturers setting up plants in their territory are putting an enormous strain on the limited budgets of the different Brazilian states, which are in general largely devoted to the payment of wages. The consequence is that the limited resources that could be used for the implementation of public policies are being re-routed to subsidies and incentives in order to attract car plants. In addition, states are going into debt. Many of the loans granted to the car manufacturers will only start to be repaid well

into the twenty-first century and almost certainly in a currency that will be worth much less than what it was at the time of the loan. It, therefore, comes as no surprise that in January 1999 seven state governments declared themselves bankrupt, contributing to trigger with their action an economic crisis that led to almost the halving of the value of the Brazilian Real against the Dollar. Among the governments declaring themselves insolvent were several of the most active in the bidding wars: Minas Gerais (whose newly elected governor, former president Itamar Franco, started the whole process), Rio Grande do Sul, and Rio de Janeiro.

Yet, all the effort put by local governments in the bidding wars is likely to yield little or no economic benefit. Apart from the direct jobs created at a huge cost for the local economy, there is little evidence or guarantee that, once established, the plants will bring further direct investment in terms of suppliers, that they will rely on local component parts companies, or that they will develop R&D facilities in the area leading to the genesis of technological spillovers. Incentives such as the construction of direct infrastructural links to the plant and tax breaks on the import of spare parts are likely to operate in the opposite direction, with R&D and most component parts increasingly generated and/or produced elsewhere and the majority of the plants remaining just as assembly plants.

At the Brazilian level, the outbreak of the bidding wars is also unlikely to increase welfare. States are bidding for FDI that, in most cases, was already announced to go to Brazil at the time of the signing of the New Automotive Regime. And the conditions the states are granting car companies are already having a negative impact on the whole of the Brazilian manufacturing sector, and especially in the car component parts sector. What was the largest (albeit rather inefficient) component parts sector in the whole of Latin America is being quickly dismantled despite the huge increase in car production (Rodríguez-Pose and Tomaney, 1999). Those few companies that were considered profitable have been bought by foreign companies and most of the rest are closing. The São Paulo metropolitan region is bearing the brunt of the crisis. Manufacturing employment has almost halved over the last ten years (DIEESE, 1997).

Another negative outcome of the bidding wars has been increasing conflict among state governments, and especially between those who adopt different options in the courtship of capital (Donahue, 1997: 105-119): on the one hand, the states which have decided to play and are aggressively involved in the bidding wars (mainly Paraná, Minas

Gerais, Rio Grande do Sul and, more recently Bahia), and, on the other, those which refuse to play. The main economic actor in Brazil -the state of São Paulo- is championing this latter position, but just hints of the possibility of a change in this attitude by the governor of the state, Mario Covas, were enough to provoke a lively debate about the implications of the bidding wars. Any involvement of São Paulo state in the process – such as the retaliation measures recently approved by its government, taxing manufactured products which have benefited from incentives- will inevitably cause greater conflict.

What has been the role of the Brazilian state in all this process? At the beginning incentives and subsidies as a means of attracting companies were encouraged in the New Automotive Regime. Later the federal government tolerated or even approved this sort of practice, which was made possible by the hybrid and partial opening of the economy. When finally the bidding wars got out of hand, the Brazilian state failed to set up the adequate institutions that would have prevented the development perverse forms of territorial competition. The fact that any type of restriction in the power of states to give incentives has to be presented and approved by the Parliament also did not help the government to limit the effects of the bidding wars. The fragmentation of the Brazilian political spectrum and the precarious and volatile majority of Cardoso's government made it almost impossible for the Brazilian government to intervene in the short-run.

In sum, it could be said that the bidding wars in the automobile sector represent a Faustian pact for the Brazilian state. The partial and haphazard opening of the economy, the weakness of the Brazilian state to control global processes and the populism of most Brazilian governors have contributed to unleash the most perverse effects of globalization; effects that, despite triggering short-term and geographically localized spells of economic growth, are likely to lead, in the medium and long-run, towards greater dependency, greater instability, greater disparities, and probably greater poverty.

Yet not all indications are negative. There are encouraging signs in Brazil that the civil society is starting to realize the pernicious impact of the bidding wars and to mobilize against them. A clear sign of change occurred in the state elections of late 1998. Several of the governors who had more aggressively bid to attract car plants lost to their rivals. That was, for example, the case of the governors of Minas Gerais and Rio Grande do Sul. In the case of the latter, the agreements signed by the regional government with General Motors and Ford became one of the key issues in the electoral campaign, and

the new Governor -Olívio Dutra of the Workers Party- asked for a re-egotiation of the agreements signed by the former government with GM and Ford. This is a first step in what may be a change in the attitude of the Brazilian society towards the incentives and subsidies given to companies. However, in order to avoid further negative impacts, Brazil needs to build a new relationship between the public and the private sector and to design policies which will prevent the Brazilian state from becoming hostage to the specific interests of both multinational companies and local politicians.

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