Competition Policy and Foreign Direct Investment: Possible Relationships and Aspects from the Recent Brazilian Experience

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In the past two decades there has been a widespread policy shift towards liberalization of the national economies. It has entailed the lowering of tariff barriers, elimination of discriminatory treatment of foreign capital and privatization. These changes have contributed to an increase in foreign direct investment and greater demand for competition legislation. The number of countries with competition laws has increased from less than forty in the 1980s to more than eighty in the late 1990s<sup>3</sup>.

These trends raise three questions:

- i) What is the impact of competition policy on the foreign direct investment? Does competition policy deter or attract foreign direct investment?
- ii) Can foreign direct investment have an anticompetitive effect? Is competition policy and merger control in particular– necessary?
- iii) Does the acquisition of domestic firms by foreign firms rise particular competition concerns?

Section 1 discusses the first question using a sample of 66 countries. Sections 2 and 3 tackle the second and third questions, respectively, using the set of transactions reviewed in 1999 by *Conselho Administrativo de Defesa Econômica* (CADE), the Brazilian competition commission

## 1. Institutional Development of Competition Policy and Foreign Direct Investment

There are two opposing views regarding the relationship between competition policy and foreign direct investment. On one hand, one could argue that developing countries should not prioritize competition policy because it would discourage foreign direct investment by creating additional regulatory barriers and risks for the investor. The argument is analogous to the notion sometimes implicitly suggested that developing countries could accept lower environmental standards to avoid deterring potential investments. On the other hand, it could be argued that competition policy attracts foreign investment because it provides a level playing field for fair competition among firms and a sound institutional environment.

If either of these opposing views is correct, one should be able to identify a correlation between the degree of implementation of competition policy and foreign direct investment. A negative correlation would suggest that competition policy possibly deters foreign direct investment, while a positive correlation would suggest that competition policy possibly attracts foreign direct investment. In order to explore this relationship we will consider the correlation between

foreign direct investment inflows over the period 1992-97 and the level of institutional development of the competition institutions in a sample of 66 countries.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> See Oliveira (1998a) and Oliveira (1998b).

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<sup>&</sup>lt;sup>4</sup> Data on FDI come from UNCTAD (1998) and UNCTAD (1999); other macro indicators are from WORLD BANK (1999).

# 1.1 Level of Institutional Development of Competition Policy

Assessing the degree of institutional development of competition policy of a particular country is not a trivial matter. We adopt the evolutionary view of competition policy implementation proposed in Oliveira (1998a, 1998b) and inspired by the work of Khemani and Dutz (1995) and Khemani (1997). Competition policy is assumed to be implemented gradually, in a process containing several stages. This gradual implementation process results from the circumstances usually faced by competition authorities.

On the one hand, it is urgent to adopt competition policy in the liberalization process in order to promote a competitive economy. If competition policy is not adopted at an early stage, the risk of anti-competitive structures is large and *ex post* solutions tend to be will be more costly. On the other hand, newly established competition institutions do not have the experience, personnel and financial resources to implement all aspects of competition policy at once. Thus the agency must focus its efforts on a few tasks and gradually expand the scope of its action as it becomes equipped to encompass those dimensions of competition policy which require more resources relative to its impact on social welfare.

This gradual growth in the scope of the competition policy can be expressed as a sequence of stages of institutional development. The stages are determined according to the degree of difficulty in evaluating if the benefits of a particular task of the competition institution can more than compensate the costs of its implementation. The early stages will therefore focus primarily on combating firm behavior that is unequivocally damaging to the market. Advanced stages would then include more complex tasks which require less trivial analysis to determine its net welfare impacts. The stages adopted in this study are presented in Table 1 and described briefly in the subsequent paragraphs. The tasks are cumulative, each stage including the tasks listed in the previous stages.

Table 1

STAGE 1	STAGE 2	STAGE 2	STAGE 4	STAGE 5	STAGE 6	STAGE 7
Competition Law	(1) Competition	(4) Vertical	(4) Vertical	(6) Agreements	(6) Agreements	(8) Second
is nonexistent or in	Advocacy	Agreements	Agreements	with Regulatory	with Regulatory	Generation
process of				Agencies	Agencies	International
implementation	(2) Repression of	(5) Merger	(5) Merger Control			Agreements
	Horizontal	Control in	fully implemented	(7) International	(7) International	
	Agreements	process of		Cooperation	Cooperation	(9) Pro-active
		implementation		Agreements in	Agreements fully	Competiiton
	(3) Technical	r		process of	implemented	Advocacy
	Assistance			implementation	_	

<u>Stage 1</u> includes countries which have no competition law or which have only recently begun its process of implementation.

In <u>Stage 2</u> the competition authority focuses on three main tasks: the dissemination of the competitive paradigm, the repression of horizontal agreements and the effort to obtain technical

assistance from multilateral organizations and other jurisdictions. Competition advocacy seeks to promote competition culture. This task is particularly important in countries in which the economy was largely state controlled in the past, such as those in Eastern Europe and Latin America. The repression of anticompetitive behavior refers to

the prosecution of those practices that are clearly anticompetitive such as price agreements among competitors.

<u>Stage 3</u> is characterized by the addition of initial steps in examining vertical agreements and merger control. Both require careful analysis of the net impact on social welfare.

In <u>Stage 4</u> merger control and monitoring of vertical agreements have been fully implemented.

In <u>Stage 5</u> the initial steps of institutional agreements are taken. In the domestic arena, cooperation with regulatory agencies is needed to enforce competition policy in industries characterized by temporary natural monopolies. In the international arena cooperation is sought with other jurisdictions to better enforce competition policy in regard to cross-border practices and transactions. This goes beyond the technical assistance mentioned in Stage 2; it entails further technical exchange and standardization of the criteria and procedures.

In <u>Stage 6</u> the cooperation agreements with regulatory agencies and foreign competition institutions are established and operational.

Finally in <u>Stage 7</u>, institutional maturity is obtained. In this stage 'second-generation agreements' among competition institutions of different countries are established in order to rule on mergers outside the particular competition institution but with significant ramifications in the local economy. The competition authority also takes on a pro-active stance in competition advocacy, participating in the analysis of new legislation that may have an impact on competition.

# **1.2 Foreign Direct Investment Inflows**

In order to compare the attraction of foreign direct investment among countries it is necessary to control for the relative size of each country. Two ways of adjusting for the relative size of countries are examined: foreign direct investment *per capita* and foreign direct investment per gross domestic product.

Theoretically, when comparing developing and developed countries it may be more appropriate to make the adjustment based on population because the share of foreign direct investment in total investment in developing countries should be larger than in developed countries due to the higher marginal productivity of capital in the latter. Adjusting foreign direct investment by gross domestic product would therefore understate the level of foreign direct investment

inflows to developed countries. In any case, we present the results using both forms of adjustment. The data are presented in Tables 1A and 2A of the Appendix.

#### 1.3 The Results

The correlation between the level of institutional development of the competition institutions and foreign direct investment per gross domestic product is -0.080880 while the correlation using foreign direct investment per capita is +0.280047. Tables 2 and 3 present the scatter diagrams for the level of institutional development and foreign direct investment adjusted for population and gross domestic product, respectively.

Table 2
Correlation between FDI and Competition Policy using Population<sup>5</sup>

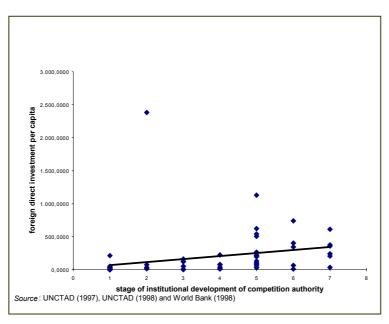
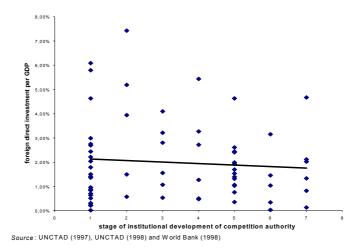


Table 3
Correlation between FDI and competition policy using GDP

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The outlier in the first graph represents Singapore. In line with the arguments of the delegates of this country in various international fora, one could argue that Singapore and other states may have an advanced competition regime though they do not have a competition law. This argument has been refuted in Oliveira (1998). In any event, if it were excluded from the sample the correlations would tend to be more positive.



The simple correlation is not the most appropriate indicator because the level of institutional development of the competition institutions used in this study is only a qualitative indicator. It is only used to establish an ordinal ranking of the countries' competition institutions, not a cardinal ranking. A more appropriate way to examine the relationship between the

institutional development of the competition institutions and foreign direct investment inflow is the Spearman correlation of the rankings by the two variables.<sup>6</sup>

The Spearman correlation indicates that there is a small, significant and positive correlation between the two variables, as presented in Table 4. The Spearman correlation is positive and significant at a 95% confidence interval when foreign direct investment *per capita* is used, and positive and significant at a 90% confidence interval when foreign direct investment per gross domestic product is used.

Table 4 suggests that there is no evidence that the institutional development of competition institutions hampers foreign direct investment. On the contrary, there appears to be small but positive relationship between the two variables, which suggests that institutional development of competition institutions may be associated with more foreign direct investment inflows.

Table 4
Correlation between FDI and level of institutional development of competition policy

Among others, see ANDERSON, D., SWEENEY, D. AND WILLIAMS, T. (1990). The ranking of the institutional development of competition institutions within each of the stages was made in decreasing order of the foreign direct investment inflows per gross domestic product.

	INVESTMENT PER CAPITA	INVESTMENT PER GDP
CORRELATION	+0.280047	-0.080880
SPEARMAN CORRELATION	+0.7670	+0.1978
T-TEST FOR SPEARMAN CORRELATION	9.5615**	1.16145*

<sup>\*</sup> Significant at the 90% confidence interval.

#### 2. Merger Control and Foreign Direct Investment: Evidence from Brazil

The second question focuses on the need of competition policy and in particular merger control when regarding foreign direct investment. Even if competition policy does not hamper foreign direct investment inflows, the application of competition policy with respect to foreign investment is sometimes questioned because one could argue that foreign direct investment would always have a positive effect on competition.

However, when FDI occurs through mergers and acquisitions, one could argue that productive capacity is not increased and there may be an increase in market concentration. In fact, an increasing share of FDI represents mergers and acquisitions as opposed to

greenfield investment. According to the most recent data of UNCTAD, the ratio between M&As and FDI in developing countries has risen from 15% in 1991-95 to 35% in 1996-99.7 This section will focus on the verification of the validity of this argument based on the examination of mergers and acquisitions involving foreign capital in Brazil.

An examination of all mergers and acquisitions reviewed by CADE in 1999 suggests that much of the foreign direct investment in Brazil may have a potential effect on competition and thus merits scrutiny by CADE. Recent studies of the Brazilian economy using sectoral data have shown that FDI has provoked impacts upon the market structure<sup>8</sup>. Instead of sectoral data which may not depict the antitrust concept of relevant market, we use the set of mergers and acquisitions involving foreign capital analyzed by CADE in 1999. The sample was divided into four categories:

- 1. foreign firms which effectively participated the Brazilian market through exports prior to the merger or acquisition;
- 2. foreign firms which effectively participated in the Brazilian market with subsidiaries operating in Brazil prior to the merger or acquisition;
- 3. foreign firms which were potential competitors in the Brazilian market prior to the merger or acquisition;<sup>9</sup>

<sup>8</sup> MOREIRA (1999).

<sup>\*\*</sup> Significant at the 95% confidence interval.

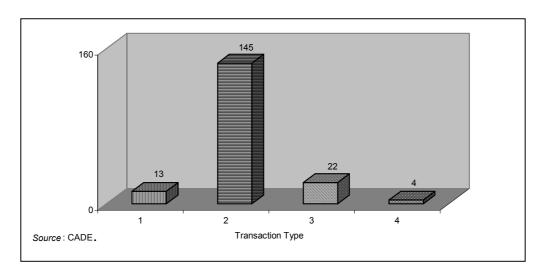
<sup>&</sup>lt;sup>7</sup> UNCTAD (2000)

<sup>&</sup>lt;sup>9</sup> This third category represents firms that did not actively participate in the Brazilian market either in Brazil or through exports but were already active in the same (or close) relevant markets in other countries. For an

4. foreign firms which were not potential competitors in the Brazilian market prior to the merger or acquisition.

The first three types represent mergers or acquisitions which may have potential effects on competition in the spirit of the *caput* of Article 54 of the Brazilian competition law. Only for the fourth transaction type, one could say that there would not exist potential negative impacts upon competition.

Table 5
Cases involving direct investment analysed by CADE in 1999
discriminated by type of transaction



The evidence from Brazil is summarized in Table 5. Only 4 of the 192 cases analyzed by CADE in 1999 involved the entry of new competitors in the market without possible anti-competitive effects. Thus, most mergers and acquisitions involving foreign direct investment do pose a potential effect upon competition, thus justifying merger control.

# 3. Globalization, *Denationalization* and Competition Policy

We have also examined if the mergers and acquisitions were national or global transactions, that is, if the motivating factor for the mergers and acquisitions were predominantly domestic

or international restructuring. Again we consider the merger and acquisitions data reviewed by CADE in 1999. The data indicate that roughly a quarter of mergers and acquisitions involving foreign investment are the result of global transactions, as shown in Table 6.

#### Table 6

example of a case considering potential competitors see the Brahma-Miller joint venture judged by CADE in 1997.

# Ratio of cases which resulted from global operations in total of cases analysed by CADE involving foreign direct investment in 1999

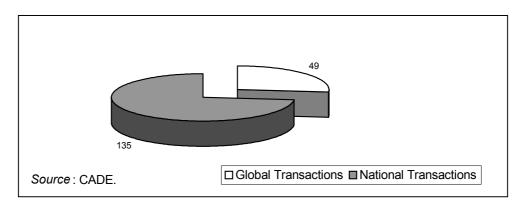
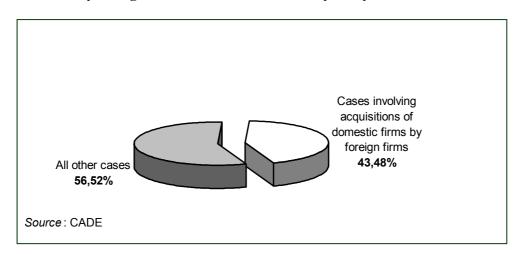


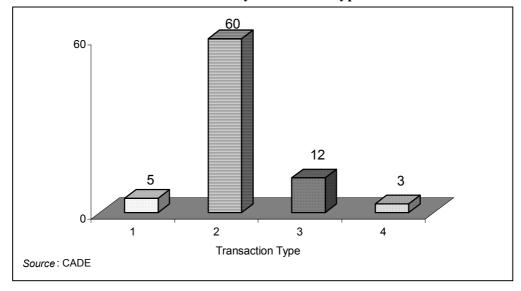
Table 7
Ratio of cases invilving foreign direct investment in wich domestic firms were acquired by foreign firms of total of cases analyses by CADE in 1999



We also identify the share of mergers and acquisitions that result in *denationalization* of a Brazilian firm. There seems to be a growing concern in Brazil with respect to the origin of the control of the firms. Among other presumably negative effects, it is frequently argued that the outflow of profits and dividends could pose balance-of-payments problems. Here we are concerned with possible peculiarities of the cases involving denationalization as far as competition policy is concerned.

In 1999 over a third of the cases involved foreign acquisition of control of a national firm. There is no evidence, however, that those transactions should raise more concern than others as far as competition aspects are concerned.

Table 8
Domestic firms acquired by foreign firms analyses by CADE discriminated by transaction type



Indeed, as Table 8 shows, the share of transactions with no potential to negatively affect competition in 1999 was larger in cases which involved foreign acquisition of control of a national firm than in all other cases: 3 in 80 versus 1 in 104.

#### 3. Conclusion

In summary, this study has provided evidence to answer the three questions proposed in the Introduction:

- i) there appears to be no evidence that the development of competition policy deters foreign direct investment inflows.
- ii) Brazil's experience suggests that mergers and acquisitions involving foreign capital merit scrutiny by the competition agency because they do present potential effects on competition. Furthermore, cooperation among competition authorities of different
- iii) jurisdictions is shown to be important due to the share of mergers and acquisitions that are of global scope.
- iv) there is a significant level of *denationalization* of Brazilian firms reflected in the sample chosen, but the phenomenon does not seem to present specific competition problems that would justify a differential treatment such as a possible change in the notification requirements for foreign firms.

The above conclusions should obviously be qualified by the general nature of the information used. Further research would be helpful specially using a case-study approach.

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# 5. Appendix

Table 1A

		Table 1A			
COUNTRY	STAGE	FDI PER CAPITA	ORDERING BY STAGE	ORDERING BY FDI PER CAPITA	SQUARED DISPERSION
Singapore	2	2,383.7778	38	1	1.369
Belgium	5	1,129.8333	12	2	100
Sweden	6	741.8333	7	3	16
Norway	5	624.5000	17	4	169
New Zealand	7	613.0000	1	5	16
Netherlands	5	540.5938	14	6	64
Denmark	5	507.2667	18	7	121
Switzerland	6	401.5952	9	8	1
Australia	7	373.7632	2	9	49
United Kingdom	7	356.7090	3	10	49
France	6	345.7006 265.7778	8 16	11	9 16
Israel Canada	5 7		4	12 13	81
	4	241.6056 224.6000	4 26	14	144
Hungry Finland	5	218.8333	23	15	64
Malaysia	1	214.9921	44	16	784
Spain	5	209.3590	19	17	4
United States of America	7	207.3924	5	18	169
Austria	5	195.8542	24	19	25
Chile	3	160.6111	32	20	144
Portugal	5	129.7167	20	21	1
Czech Republic	3	128.6833	33	22	121
Argentina	3	119.9815	35	23	144
Greece	5	101.7121	21	24	9
Mexico	5	86.9316	13	25	144
Panama Peru	4 2	78.1111 76.7067	27 40	26 27	1 169
Poland	4	74.4658	28	28	0
Venezuela	5	69.0217	15	29	196
Italy	6	65.1316	10	30	400
Uruguay	1	50.6667	56	31	625
Colombia	3	50.1798	34	32	4
Brazil	5	38.6037	22	33	121
Dominican Republic	1	37.7708	47	34	169
Slovak Republic	4	37.6333	29	35	36
Ecuador	1	37.1111	48	36	144
Bolivia	1 2	35.9167	45 41	37	64
Thailand Paraguay	1	35.8197 34.5667	50	38 39	9 121
Germany	7	34.2947	6	40	1.156
Republic of Korea	5	31.0362	25	41	256
China	2	26.4068	39	42	9
Turkmenistan	1	21.4500	49	43	36
Indonesia	1	18.1517	51	44	49
South Africa	4	16.3289	30	45	225
Philippines	1	15.6415	52	46	36
Morocco Vietnam	1 1	15.2798 15.1645	55 43	47 48	64 25
Russia	2	14.4093	43 42	46 49	49
Egypt	1	11.8778	53	50	9
Nicaragua	1	11.3667	46	51	25
Turkey	4	11.2005	31	52	441
Japan	6	9.7183	11	53	1.764
Guatemala	1	8.8485	59	54	25
Honduras	1	8.4167	54	55	1
Moldavia	1	8.1250	57	56 57	1
Zimbabwe Jordan	3 1	6.2424 4.5417	36 62	57 58	441 16
El Salvador	1	4.3889	63	56 59	16
Senegal	1	3.5926	60	60	0
Mongolia	1	2.1667	58	61	9
India	3	1.6285	37	62	625
Cameroon	1	1.3333	65	63	4
Malawi	1	0.8833	61	64	9
Nepal	1	0.3986	64	65	1
Nigeria	1	0.3800	66	66	0

Source: UNCTAD (1997), UNCTAD (1998) and WORLD BANK (1998).

Table 2A

COUNTRY	STAGE	FDI PER CAPITA	ORDERING BY STAGE	ORDERING BY FDI PER CAPITA	SQUARED DISPERSION
Singapore	2	7,42%	38	1	1.369
Vietnam	1	6,09%	43	2	1.681
Malaysia	1	5,79%	44	3	1.681
Hungry	4	5,44%	26	4	484
China	2	5,19%	39	5	1.156
New Zealand	7	4,67%	1	6	25
Bolivia	1_	4,63%	45	7	1.444
Belgium	5	4,63%	12	8	16
Chile	3	4,10%	32	9	529
Peru	2	3,95%	40	10	900
Panama	4	3,27%	27	11	256
Czech Republic	3	3,21%	33	12	441
Sweden	6	3,15%	7	13	36
Nicaragua	1	2,99%	46	14	1.024
Colombia	3	2,80%	34	15	361
Dominican Republic	1	2,75%	47	16	961
Poland	4	2,72%	28	17	121
Ecuador	1_	2,70%	48	18	900
Mexico	5	2,61%	13	19	36
Netherlands	5	2,44%	14	20	36
Turkmenistan	1	2,44%	49	21	784
Venezuela	5	2,41%	15	22	49
Paraguay	1	2,21%	50	23	729
Australia	7	2,11%	2	24	484
Indonesia	1	2,03%	51	25	676
United Kingdom	7	2,02%	3	26	529
Israel	5	1,99%	16	27	121
Norway	5	1,92%	17	28	121
Philippines	1	1,79%	52	29	529
Denmark	5	1,70%	18	30	144
Argentina	3	1,56%	35	31	16
Spain	5	1,53%	19	32	169
Egypt	1	1,50%	53	33	400
Thailand	2	1,49%	41	34	49
France	6	1,46%	8	35	729
Honduras	1	1,41%	54	36	324
Portugal	5	1,40%	20	37	289
Morocco	1	1,37%	55	38	289
Canada	7	1,33%	4	39	1.225
Greece	5	1,31%	21	40	361
Slovak Republic	4	1,27%	29	41	144
Zimbabwe	3	1,07%	36	42	36
Brazil	5	1,06%	22	43	441
Switzerland	6	1,04%	9	44	1.225
Finland	5	1,03%	23	45	484
Uruguay	1	0,96%	56	46	100
Moldavia	1	0,88%	57	47	100
Mongolia	1_	0,84%	58	48	100
United States of America	7	0,82%	5	49	1.936
Austria	5	0,76%	24	50	676
Guatemala	1	0,70%	59	51	64
Senegal	1	0,64%	60	52	64
Russia	2	0,58%	42	53	121
India	3	0,53%	37	54	289
Malawi	1	0,51%	61	55	36
South Africa	4	0,51%	30	56	676
Turkey	4	0,47%	31	57	676
Republic of Korea	5	0,35%	25	58	1.089
Italy	6	0,34%	10	59	2.401
Jordan	1	0,31%	62	60	4
El Salvador	1	0,31%	63	61	4
Nepal	1	0,23%	64	62	4
Cameroon	1_	0,21%	65	63	4
Germany	7	0,13%	6	64	3.364
Japan	6	0,03%	11	65	2.916
Nigeria	1	0,01%	66	66	0

Nigeria 1 1 0,0176 1 00 1 Source: UNCTAD (1997), UNCTAD (1998) and WORLD BANK (1998).

Notes on Brazil's merger and acquisitions data for 1999

The number of merger and acquisition cases involving foreign companies judged by CADE in 1999 adds up to 184. In the paper the following cases were excluded for the following reasons:

- 1. *Ato de Concentração* (concentration act) AC nº 08012.008619/98-86 did not involve foreign direct investment into Brazil; it consisted of a merger between two firms which exported to Brazil.
- 2. AC no 180/97 involved a bankruptcy proceeding, in which the failed firm was bought by several firms (including a foreign firm).
- 3. AC n° 08012.005232/98-50 involved the purchase of a foreign firm by another foreign firm, thus it only consisted of a substitution of foreign capital.
- 4. AC nº 08012.005234/98-85 was the consequence of another acquisition case already included in the sample in AC 08012.007154/97-38.
- 5. AC nº 63/95 was a joint venture involving several domestic firms and an international firm, thus not a case of foreign direct investment.
- 6. AC nº 08012.005760/98-18 was excluded because the transaction was a consequence of an acquisition already considered in AC nº 08012.009887/98-61.

Although Concentration Act n ° 08012.007682/98-87 was a joint-venture between a national and an international firms, it was included in the sample because it will involve foreign direct investment in a market in which 78% of the supply is currently through imports.

Concentration Act n  $^{\circ}$  08012.009729/98-10 was also included inspite of the fact that it consisted of an internal rearrangement of the control group of the company.

The sample also included the following cases involving State telecommunication firms that were privatized in 1999: Embratel Participações S.A., Telesp Participações S.A., Tele Sudeste Celular Participações S.A., Tele Centro Oeste Celular Participações S.A., Tele Nordeste Celular Participações S.A., Telemig Celular Participações S.A., Tele Norte Celular Participações S.A. e Tele Celular Sul Participações S.A.

The joint-venture examined in Concentration Act no 08012.007682/98-87 was also included in the sample because it involved several foreign firms which will gradually enter the Brazilian market, even though initially only through exports.

The four categories used in the analysis are based on three simplifying assumptions:

- 1. Only one relevant geographic market is considered in each case;
- 2. only one relevant product market is considered in each case,
- 3. firms belonging to the same product market but different geographic markets have a positive effect on competition in the relevant geographic market by increasing contestability.

The above simplifying assumptions were necessary in order to deal with a large number of transactions. A case-study appraoch would permit the analysis of all the relevant markets in each case.