

# Contestability and Economic Integration in the Western Hemisphere

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## Abstract

*This paper discusses the harmonization of competition policies in the Western Hemisphere. Using the theory of contestable markets, it presents an analytical framework that shows the requirements for achieving coherence among the different policies that affect the competition process. According to that theory, the normative parameters for monitoring the conduct of the business community should be subordinated to some special characteristics of each industry, namely, the ratio transaction costs/production costs, the nature of entry barriers, and the interplay between existing technologies and the market size. This approach would allow the immediate involvement of all 34 OAS member countries in the effort toward the convergence of competition policies in the Western Hemisphere, regardless of the status of national antitrust laws. Indeed, the only requirement for participating in that effort is a reliable data base that would describe the current conditions of competition in each economy.*

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## 1. Introduction

In the Western Hemisphere, competition policy is an issue in which both the disparities and the scope for convergence are momentarily vast. In contrast with the centennial experiences in Canada and in the United States, that started with the 1889 Canadian Combines Investigation Act and the 1890 US Sherman Act, the historical record on the enforcement of such policies in Latin American and Caribbean countries is virtually blank. Although some countries, such as Argentina and Mexico, have had antitrust laws since the beginning of this century, it was only after the wave of economic reforms that spread throughout the continent in the 1980s that the implementation of competition rules became a relevant issue in the region. Meanwhile, in the US and Canada, the conventional views on antitrust were being challenged. Under the influence of the Chicago

School, several amendments have been introduced in the American legislation, such as the 1984 National Cooperative Research Act, the new procedures for the evaluation of mergers and the 1995 Telecommunications Act. The Canadian Competition Act of 1986 enacted new guidelines for surveilling monopolies and oligopolies and reinforced the sanctions on restrictive practices such as price fixing, bid rigging, price discrimination and predatory pricing. Moreover, in the 1990s, the American and Canadian governments have been active in the current discussions on the convergence of competition policies among OECD countries. Thus, despite the contrasting historical heritages, competition policy is, nowadays, an important topic on the agenda of many governments in the Western Hemisphere, and this constitutes a promising starting point for multilateral cooperation and institutional innovation.

The project of a hemispheric free trade area generates pressures for the convergence of competition policies among the member countries and for greater consistency of these policies with other government actions in regard to trade, industry and macroeconomic stabilization. This task can only be accomplished in the long run, but may, perhaps, not be feasible under certain macroeconomic conditions. For example, the reduction of entry barriers is a major instrument for improving competition and, among the different types of artificial entry barriers, import protection is the most conspicuous. However, in oligopolies with high demand elasticity, such as automobiles and other durable consumer goods, trade liberalization can provoke a surge of imports which may impair the macroeconomic objectives of balancing the trade account and controlling inflation. Although transitory, this type of conflict is likely to appear in those inflationary economies which had remained closed for a long period.

The tension in regard to industrial policy is more enduring and widespread. In large countries, like the US, Canada and Brazil, governments are constantly pressed to take actions toward the promotion of high-technology industries and the restructuring of declining industries; while, in the smaller countries, the establishment of new industrial activities continues to be an attractive way to face the challenge of economic development. According to Boner and Krueger, the tension between antitrust policy and industrial policy is natural: "since antitrust policies are designed fundamentally to protect the buyers in a market, whereas industrial policies are generally designed to protect the sellers." (Boner and Krueger, 1991, pp.100-101) In practice, however, this distinction does not always hold, because both policies can be captured by interest groups and become the object of rent seeking activities, as several authors have argued (see Bork, 1978; Baumol and Ordover, 1985; McChesney and Shughart, 1995; Rodriguez and Williams, 1995).

Another potential source of pressures for the convergence of competition policies in the Western Hemisphere stems from the multilateral trade agenda to be debated at the World Trade Organization (WTO), which is expected to become the main forum for regulating the interplay among trade, industrial and competition policies. This interplay includes the following relevant issues: (a) domestic barriers to entry may distort trade flows; (b) transnational corporations may be able to circumvent national antitrust legislation; and (c) antidumping, safeguards, intellectual property rights and other protection mechanisms allowed by the WTO can supersede the rules enacted by antitrust law (see Hoekman and Mavroidis, 1994; Feketekuty and

Rogowsky, 1996 ).

Despite the magnitude of the challenges to be faced, both the experiences of the OECD countries, in their recent efforts toward the harmonization of competition policies, and those of the European Union, in reconciling industrial promotion with economic integration, demonstrate that similar projects would be feasible in the Western Hemisphere. Thus, the aim of this paper is twofold: First, to present an analytical framework that shows the requirements for achieving coherence among the different policies that affect the competition process; second, to address the peculiarities of a possible convergence of competition policies in the Western Hemisphere. The argument is organized as follows: Section 2 introduces the theory of contestable markets, discusses the normative prescriptions that can be derived from that theory and indicates the links between competition policy and industrial policy. In section 3, these concepts are applied to search the instruments that would allow the convergence of competition policies in the Western Hemisphere. Finally, some concluding remarks are made in section 4.

## **2. Contestable markets and competition policy**

"The interest of the dealers," said Adam Smith, "in any particular branch of trade or manufactures, is always in some respects different from, and even opposite to, that of the public. To widen the market and to narrow the competition, is always the interest of the dealers. To widen the market may frequently be agreeable enough to the interest of the public; but to narrow the competition must always be against it, and can serve only to enable the dealers, by raising their profits above what they naturally would be, to levy, for their own benefit, an absurd tax upon the rest of their fellow-citizens." (Smith, 1776, p.278)

This famous statement created a mainstream approach to competition policy that lasted for two hundred years. In this approach, the normative guidelines are derived from the model of perfect competition and, consequently, the main target to be watched is the large firm, whose putative behavior is always ready to harm the public interest. So, the government must be prepared to punish every action detrimental to a competitive economic environment and promote whenever possible the decentralization of markets.

This approach has an interesting peculiarity. Despite the overwhelming intellectual prestige it has enjoyed throughout the history of industrial capitalism, it was never fully implemented. In the United States, for instance, the Sherman Antitrust Act of 1890 was passed under the influence of a strong national movement against "big business". However, as McCraw observed, during the first 40 years of antitrust enforcement, the main targets were not the large firms, but, by far, the associations of small firms: "As best I can determine by a preliminary count, about 6 out of every 7 of the 300-odd antitrust cases instituted in the years before the New Deal were brought against small companies or their associations. Perennial targets of antitrust enforcers included companies located in such decentralized industries as lumber and wood, agricultural production, building materials, and retail trade." (McCraw, 1986, pp. 44-45)

Thus, although intuitively, antitrust enforcers did not follow the mainstream economic viewpoint and allowed

the development of all types of industry configurations that resulted naturally from the interplay between technology and market size. In general, when the cost functions implied that the most efficient configuration would be an oligopoly, neither the Justice Department, nor the Federal Trade Commission, was willing to stimulate an artificial decentralization of the industry. However, in naturally decentralized industries, the law was duly applied against every collusion, cartelization and other attempt toward market dominance.

These attitudes were finally reconciled with economic theory in 1982, when Baumol, Panzar and Willig presented their theory on contestable markets, which argues that industry structure is determined endogenously and simultaneously with the vectors of industry outputs and prices. This theory is focused on the connections among three classes of factors: the characteristics of the current technologies, the market size and the potential competition. For every available set of production techniques, there is only one industry configuration which is the most efficient arrangement for supplying the output vector which is consistent with the size of the market being served. Once the efficient configuration is identified (i.e., the number and size distribution of incumbent firms, and their respective output vectors and market shares), the competition pattern of that industry will result not only from the strategies adopted by the incumbent firms, but also from the power of the potential competitors which may eventually enter the market.

In the 1990s, the notion of contestable markets became widely accepted as the ultimate goal of competition policy (see, *inter alia*, Hoekman and Mavroidis 1994; Lawrence, 1995; Sauvé and Zampetti, 1995.). The OECD documents constitute a good illustration of this trend: "The promotion of greater contestability of markets has thus become a new theme which can be expected to permeate much of future policy- and rule-making at the international level." (OECD, 1995a, p.3) "International trade liberalization and competition policy share the common objective of promoting open ("contestable") markets and undistorted competition." (OECD, 1994a, p.3) "Maintaining a domestic market internationally contestable is ultimately in the interest of the domestic community and thus falls in the purview of domestic public policy and in particular of competition law and policy." (OECD, 1995b, p.4)

The expression *promoting contestability* is often used just as a synonym for *reducing entry barriers*. It has, however, another far-reaching implication: the provision of an accurate framework for dealing with the interface between industrial policy and competition policy. This interface is briefly discussed in the following sections.

## 2.1. The analytical framework

A market is perfectly contestable when there are no sunk costs and no entry barriers in Stigler's sense. "Sunk costs are that portion of entry investment that would be lost if the entrant had to exit the market before its investment was fully depreciated." (Ordover, 1990) According to Stigler, there is freedom of entry when potential competitors have the same long run average costs as those borne by incumbent firms (see Stigler, 1968, ch. 6). In other words, there are no technological secrets in perfectly contestable markets and firms that

compete therein can easily leave at any moment.

The utility of this concept does not rely on its empirical relevance. As Baumol observed, in real life, perfect contestability is as rare as perfect competition, but is more general: "a perfectly competitive market is necessarily perfectly contestable, but not *vice versa*." (Baumol, 1982, p.4) However, the notion of contestability neither includes the usual assumptions in regard to market atomicity, product homogeneity and independence among the competitors' decision-making processes, nor implies any straight relationship between cost efficiency and the number of firms serving the market. In fact, this theory suggests that monopolies and oligopolies not only tend to be frequent in contemporary capitalism, but they also are, in most cases, the best solutions from a welfare point of view.

For an industry structure to be efficient, its configuration should be *feasible* and *sustainable*. The notion of feasibility is trivial: it means that the available technologies allow the incumbent firms to serve the market demand at current prices, without incurring losses. The notion of sustainability is more restrictive: it imposes that, under the current prices, no potential competitor could earn profits by entering that market. More precisely, these concepts can be stated as follows. Let an industry configuration be described by the vector  $(n, y_1, \dots, y_n, p)$ , where  $n$  is the number of incumbent firms,  $y_i$  the output vector produced by firm  $i$ ,  $p$  the price vector;  $D(p)$  is the market demand function, and  $c(y_i)$  the cost function borne by firm  $i$ . This configuration is feasible if

$$\text{for } i = 1, \dots, n;$$

and it will be sustainable if, besides satisfying these conditions, the current prices were such that

Thus, a perfectly contestable market is in equilibrium when its configuration is sustainable.

Sustainable configurations can be highly transient, since technical progress, economic growth and public policies are constantly redefining the sustainability parameters. The role played by technical progress encompasses three main mechanisms: economies of scale, economies of scope and the ratio transaction costs/production costs. There are scale economies to be explored whenever the ratio average cost/marginal cost is greater than unity; and there are economies of scope whenever it is cheaper to combine two or more production lines in a single firm than to distribute that output vector among specialized producers. The joint effects of scale and scope economies determine the relationship between transaction costs and production costs, i.e., the firm's input/output linkages. As is well known, this last definition was already made by Coase in his classic 1937 paper on the nature of the firm and has recently been restated by him in the following terms: "although production could be carried out in a completely decentralized way by means of contracts between

individuals, the fact that it costs something to enter into these transactions means that firms will emerge to organize what would otherwise be market transactions whenever their costs were less than the costs of carrying out the transactions through the market. The limit to the size of the firm is set where its costs of organizing a transaction become equal to the cost of carrying it out through the market. This determines what the firm buys, produces and sells." (Coase, 1988, p.7)

## 2.2. Normative prescriptions

The analytical framework outlined in the preceding section contains a clear normative message: *The promotion of contestability goes beyond the simple removal of entry barriers and implies, fundamentally, the establishment of sustainable industry configurations.* In fact, the importance of entry barriers as a competition policy instrument was already emphasized by Bain, four decades ago. "Since the condition of entry is a dimension of market structure that may have a distinct impact on the character and workability of competition, it seems reasonable that an antitrust policy, under either existing legislation or new law, might give more systematic attention than it has previously to revisions of the condition of entry which would favor more effective competition, and to the prevention of changes in the condition of entry which would adversely affect the workability of competition." (Bain, 1956, p.205)

By adding the notion of sustainability to Bain's analysis, the theory of contestable markets has created a unified goal for competition policy and industrial policy. If a national government adopts the guidelines provided by this theory, the permanent industrial policy target to be pursued in that country would be to ensure conditions of sustainability for all sectors of the economy. An alternative statement for this target would be to maximize the aggregate competitiveness of the industrial system, which is a direct function of the number of sustainable configurations operating therein. When a local industry has such a configuration, the incumbent firms do not need tariffs, subsidies, administrative controls, or any other form of governmental support in order to face foreign competition in the home economy. Thus, sustainability is a form of structural protection of the domestic market, which is more efficient than conventional protectionism, since it does not absorb public resources, generate rent seeking, or distort prices.

Another normative prescription is that the contestable markets theory does not support the view that trade liberalization is a prerequisite for the international harmonization of competition policies. Hoekman and Mavroids, for instance, argued that "negotiations must first center on attaining the necessary conditions - free or at least substantially freer market access -before pursuit of harmonization of antitrust becomes a realistic proposition." (Hoekman & Mavroidis, 1994, p.129) There is indeed little, if any, contestability in closed economies, but the promotion of sustainable configurations will dismiss the domestic resistance against trade liberalization. Hence, in those situations that do not allow attaining both objectives simultaneously, it is, in fact, more realistic to start by the harmonization of competition policies and advance the trade reform when the government becomes better prepared to face the protectionist lobbies. As Guasch and Rajapatirana (1994) have pointed out, competition policy is always a positive complement to commercial policy, even under

restricted trade conditions.

Since the 1970s, the Chicago School authors have been insisting that competition policy should be focused on promoting consumer welfare and productive efficiency. However, as Easterbrook observed, "the hallmark of the Chicago approach to antitrust is skepticism. Doubt that we know the optimal organization of industries and markets. Doubt that government could use that knowledge, if it existed, to improve things, given the ubiquitous private adjustments that so often defeat public plans, so that by the time knowledge had been put to use the world has moved on." (Easterbrook, 1992, p.119) The contestable markets theory offers a less pessimistic view. According to the concepts discussed in section 2.1, clear normative guidelines for monitoring the conduct of the business community can be obtained through an approach in two stages. First, we examine the sustainability conditions that emerge from the interplay between market size and the ratio transaction costs/production costs and compare the outcome with the current design of the industry structure being analyzed. Second, we consider the existing entry barriers and differentiate government regulations from those barriers created by the incumbent firms' innovative performance.

Besides the ideal case of sustainable and contestable markets, this exercise may lead to four relevant situations:

**1. Unsustainable and incontestable configurations** that run under conditions granted by long-lasting entry barriers originated either from certain regulations, such as those related to public health and environment, which the government will not be willing to repeal, or from geographic factors. This is the typical situation where the old doubts raised by Posner remain valid, due to "the failure of the courts and the enforcement agencies, and ultimately of the antitrust lawyers and economists, academic and practicing, to develop tools for determining when a group of sellers is maintaining a price that is above the competitive level." (Posner, 1976, p.166) In the same vein, Ordover recently observed that "the core problem of competition policy from the vantage point of economics is, to my mind, the appropriate identification of salient exceptions and the design of workable, simple rules that would enable the fact-finder and the decision-maker to strike a reasonable balance between the twin goals of encouraging and maintaining competition and ensuring efficient allocation of scarce economic resources." (Ordover, 1990, p.11)

Under this awkward circumstance, the government can take at least three actions. The first is to calculate the price elasticity of demand, whose inverse ( $1/e$ ) is called the *Lerner Index* of market power, i.e., the faculty held by incumbent firms to raise prices above competitive levels without facing new competitors.<sup>2</sup> Empirical estimates of price elasticities are never accurate, but they provide a sign of the potential damages incumbent firms may impose on the public interest. The second is to set limits for the firms' pricing strategies, as suggested by Baumol and Sidak (1994). From the current industry's cost figures, it is possible to state the price ceiling that would prevail on a long run sustainable configuration and the price floor that would protect potential entrants from predatory pricing by incumbents. The third, and perhaps most important, action to be taken is to promote R&D investments that may generate new production techniques which could lead to a

sustainable configuration. As Areeda said, "sometimes technological change makes competition possible where once it was not." (Areeda, 1992, p.31)

**2. Unsustainable configurations created by protectionist policies.** This situation differs from the preceding case in just one aspect: the entry barriers are, in principle, temporary. The policy recommendations would be the same, with one minor amendment. The government should issue periodic reports with complete information on the distribution of rents among the protected industries and on the corresponding distribution of costs among the rest of the economy. These reports should include: (a) a sectoral assessment of the anti-exporting bias created by the current trade policy measures; (b) a comparative performance of current instruments, i.e., whether a different mix of subsidies, tariffs and regulations would grant similar protection levels at lower domestic costs; and (c) the costs of coping with the conflicts between the current trade policy and the maintenance of a competitive environment. Besides improving transparency of public policies, these reports would provide the proper focus for the national debate on foreign trade issues.

**3. Sustainable but incontestable configurations.** This is frequent in industries with high rates of endogenous innovation, where the best available technologies have been invented by incumbent firms. In these industries, market shares of innovating firms depend largely upon their reputation, which constitutes a spontaneous, albeit partial, mechanism for preserving consumer welfare and productive efficiency. The antitrust authority has a limited role here, besides promoting transparency through periodic reports on the performance of those industries, analyzing their R&D expenditures, relative prices, profit margins and macroeconomic impact. Since intellectual property rights can create an additional, yet superfluous, entry barrier, government support to R&D may be a better way to deal with the externalities generated by technical progress, as Ostry and Nelson (1995) suggested.

**4. Contestable but unsustainable configurations.** Ironically, this case is recurrent in those decentralized industries in which freedom of entry simulates the ideal of perfect competition. The basic problem with this type of industry is the lack of respect for consumers. As Rashid pointed out, "if the industry is composed of a large number of transients, why should they care about how the consumers regard the quality of their product?" (Rashid, 1988, p.245) Obviously, the immediate policy to curb such an attitude is the strong enforcement of consumers' rights legislation. But, in the long run, the support to R&D may eventually generate new production patterns that would include reputation as a mandatory competition strategy.

Every antitrust policy advice derived from the contestable markets theory is accompanied by a complementary suggestion on promoting R&D expenditures that could lead to sustainable configurations. Thus, antitrust is just a temporary substitute for market mechanisms which are expected in the long run, resulting from industrial policy. R&D is the preferred mechanism because, unlike import tariffs, quotas, subsidies, government procurement and other industrial policy instruments, it does not create trade barriers and, consequently, does not elevate the ratio transaction costs/production costs. When this ratio is artificially raised, there is an unnecessary trend toward economic concentration, which, in turn, leads to unsustainable

industry configurations.

### 3. The convergence of competition policies in the Western Hemisphere

Since 1946, Sweden has had a singular history of antitrust enforcement. In that year, a new law was enacted with surprising provisions: the government was responsible for investigating restrictive practices and for publishing the findings, but had no castigating authority. As Bourdet commented: "No fines could be imposed on firms involved in restrictive practices with harmful effects and no legislative provision existed that gave competition authorities the power to force firms to terminate restrictive practices agreements. Making information about these firms and their behavior public was considered sufficient to convince them to respect the legislation and to adopt the competitive straitjacket." (Bourdet, 1992, p.301)

Afterwards, that law was amended in 1953, 1956 and 1982 and certain enforcing rules were gradually introduced. But, as the antitrust authorities remained peaceful, very few cases have been taken to court. According to Bourdet, this reflects the government's view "that a more conciliatory policy of negotiating with firms who have violated the restrictive practices legislation will bring more positive effects for society than would court proceedings." (Bourdet, 1992, p.314)

The Swedish experience is a compelling illustration of the role of transparency as a competition policy instrument. The recent efforts toward the convergence of such policies among OECD countries have been, to a certain extent, inspired by that experience. As is well known, the OECD goal is not uniformity of antitrust laws, but to enhance the conditions of international competition through a continuous sharing among governments of information, experiences and analytical approaches. As the Competition Committee stated: "Competition policy must reflect the institutional and policy framework of each Member country. The Committee is working on a convergence process which preserves flexibility and scope for innovation." (OECD, 1994b, p.4) This cooperation has already produced a striking improvement of transparency during the last ten years through the regular OECD publications on industrial and competition policies, which provide accurate information about the current governmental plans, actions, procedures and their respective consequences over the member countries.

For the Western Hemisphere, the Swedish case can be even more inspiring. Presently, only 10 Latin American and Caribbean countries have antitrust laws (Argentina, Brazil, Chile, Colombia, Costa Rica, Jamaica, Mexico, Panama, Peru and Venezuela), while three are expected to enact new legislation soon (Bolivia, Dominican Republic and El Salvador).<sup>3</sup> Moreover, nearly all countries in the region have yet to conclude the economic reforms initiated in the 1980s and a major remaining task to be accomplished is, precisely, strengthening the institutional framework that regulates competition. Considering these circumstances, Rodriguez and Williams have questioned whether traditional antitrust policies are appropriate for the region: "Once the liberalization is completed, political pressures from interest groups may shift, but they do not disappear. As both foreign and domestic competition threaten a previously-protected industry's monopoly rents, the industry's interest groups (both owners and workers) will lobby their political patrons in an

attempt to impede liberalization. Thus, the elimination of tariffs will not automatically result in free trade. In fact, there are potentially a countless number of ways by which government can interfere with the flow of trade without resorting to changing tariff policies. (...) Rent-seeking will reduce many prospective benefits of reform and, in fact, the overall economic welfare of a society may decrease with liberalization." (Rodriguez and Williams, 1995, p.6)

In a context of unfinished reforms, with few mechanisms to check the accountability of public policies, passing a new antitrust law may just imply new opportunities for rent-seeking activities. Thus, instead of the traditional approach, Rodriguez and Williams (1994, 1995) have been arguing that, at least during a transition period, priority should be given to *competition advocacy* that would challenge government-generated entry barriers and would enhance coherence among public policies. According to the taxonomy used in section 2.2, competition advocacy means, essentially, identifying those industries running under situation no. 2 (unsustainable configurations created by protectionist policies) and applying the corresponding policy recommendations. Additionally, an assessment of the regulations affecting situations no. 1 and no. 3 should be made. This may eventually be useful to check the efficacy of current policies in the areas of public health, environment and intellectual property rights. The competition advocacy approach would also allow the immediate involvement of all 34 OAS member countries in the effort toward the convergence of competition policies in the Western Hemisphere, regardless of the status of national antitrust laws. Indeed, the only requirement for participating in that effort is a reliable data base that would describe the present conditions of competition in each economy, as indicated in box 1. The information can be organized into nine groups of time series reporting the evolution of national industries, as defined by four-digit codes of the international standard industrial classification (ISIC).<sup>4</sup> Applying the concepts discussed in section 2, it is possible to draw from that data base a profile of every national industrial structure, according to its conditions of sustainability and contestability.

Group A of the time series indicates the industry's size and the importance of its transactions with the rest of the economy, as defined by the Cella method for measuring forward and backward input/output linkages (see Cella, 1984). Group B reports some conventional indicators of international competitiveness: the presence of imported goods in the domestic market, the exporting performance of the domestic industry and the country's revealed comparative *advantage*.<sup>5</sup> Group C contains additional indicators of competitiveness: domestic prices, productivity indexes, profitability and wages. Group D deals with capital formation, capacity utilization and employment. Group E shows the industry's technological performance in terms of R&D investments and patented innovations. Groups F and G display the usual indicators of industry structure: number of firms, their life expectancy and size distribution, and market concentration indexes. Groups H and I present the cost structures and demand elasticities that are needed for discussing contestability and sustainability. All time series should be updated annually, except linkage indexes, which would be available only for those economies which compile input-output tables, and groups H and I, which would be based on special surveys to be carried out, perhaps, every five years.

Most OAS member countries have the necessary technical capabilities for assembling this data base and start implementing the Swedish approach to antitrust policy, i.e, using transparency, both domestically and internationally, as an instrument to ensure fair competition conditions in the Western Hemisphere. Some countries may need initial technical assistance to reach this stage, that could be easily provided by other countries' antitrust authorities, multilateral organizations or consulting firms. Like the OECD process, the convergence of competition policies in the Western Hemisphere should be based on regular publications on this subject, with the possible innovation of describing national industries according to the taxonomy suggested in section 2.2.

**Box 1:**

**Time Series on Industrial Statistics:  
34 OAS Countries, Four-digit Industry Groups (ISIC)**

- A. Domestic production, forward and backward linkages.
- B. Import penetration, export share and revealed comparative advantage.
- C. Prices, productivity indexes (total factor, labor and capital), profit rates and profit margins, wage differentials.
- D. Investment (domestic; foreign: inward and outward), capacity utilization and employment.
- E. R&D expenditures and patents.
- F. Number of firms and market shares.
- G. Life expectancy and size distribution of incumbent firms.
- H. Sunk costs and Lerner indexes.
- I. Economies of scale and scope.

**4. Final remarks**

The creation of a free trade area in the Western Hemisphere depends upon two fundamental assumptions: that the large countries in the region will be able to keep inside their national borders the costs generated by their industrial policies; and that Latin American and Caribbean countries will be able to conclude the policy

reforms initiated in the 1980s. This paper has suggested an approach to competition policy that is beneficial to both assumptions. As we have seen, the normative parameters for monitoring the conduct of the business community should be subordinated to some special characteristics of each industry, namely, the ratio transaction costs/production costs, the nature of entry barriers, and the interplay between existing technologies and the market size. However, in many cases, the ultimate goals of productive efficiency and consumer welfare will only be achievable in the long run, after technical progress has provided the conditions for sustainable configurations. So, according to the contestable markets theory, antitrust and industrial policies share, in principle, mutually reinforcing objectives, under the proviso that trade restrictions be excluded from the set of policy options.

For the large countries, this interface implies an attractive challenge. Governments in those countries are constantly pressed to adopt industrial policies, not only for the reasons discussed here, but also because, given the presence of oligopolies, small incentives can generate large effects on the patterns of production and trade, as pointed out by the literature on strategic trade policy (see Brander, 1995). Fortunately, as I have argued elsewhere, the Uruguay Round of Multilateral Negotiations has sanctioned several forms of protection that do not undermine the maintenance of an open trading system (see Tavares de Araujo, 1995). Although this issue may be relevant also for small countries, the most important benefits they can extract from the approach suggested in the preceding sections are the possibility of measuring the gains they might get from the international harmonization of antitrust policies; and the identification of the required measures to be taken domestically for securing those gains.

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2 For a discussion on the methodological limitations of the Lerner Index, see Ordober (1990).

3 For a discussion on antitrust policies in Latin America, see Coate, Bustamante and Rodriguez (1992).

4 Although highly detailed, the ISIC's four-digit code does not always match real markets. For instance, a capital goods producer may compete in a market that includes several groups of Division 38 (Metal Products, Machinery and Equipment), while the relevant market for a firm that only produces computer printers is just a fraction of Group 3825 (Manufacture of Office, Computing and Accounting Machinery). Besides, in large countries, an industry may be decentralized at the national level, but operate as regionally-segmented oligopolies.

5 Revealed comparative advantage is measured by the share of the industry's exports in the country's total exports divided by the equivalent share for the world economy.