

Competition Policy in the Context of Economy-Wide Reform*

Bernard Hoekman
World Bank and CEPR

September 1998

DRAFT

* The views expressed in this paper are personal and should not be attributed to the World Bank.

Introduction

A major policy issue for many developing countries is to foster further integration into the world economy. This note discusses the role competition policy can play in the context of efforts to promote the restructuring the economy, focusing in particular on the relationship with industrial and trade policy and on the potential role of international agreements and cooperation (both multilateral and regional).

The paper is structured as follows. Section I defines terms and discusses the relationship between trade, competition and industrial policies. Section II provides an overview of the “basics” of competition policy, drawing some implications for “best practice” from cross - country experience. Section III discusses the role a competition authority can play in the process of economic transformation, emphasizing its potential as an instrument to promote transparency and assist policymakers and civil society in assessing the effects of government policy. Section IV discusses one particularly important dimension of the interface between trade and competition policy—ensuring that the competitive effects of instruments of contingent protection of the type allowed by the WTO are considered by policymakers. Section V briefly reviews options for international cooperation in the area of competition policy. Section VI concludes. An appendix provides a illustration of the types of indicators that might be compiled to monitor developments in the “state of competition” in the economy, using data for Slovakia for concreteness.

I. Defining Terms

National competition *law* can be defined as the set of rules and disciplines maintained by governments relating either to agreements between firms that restrict competition or to the abuse of a dominant position (including attempts to create a dominant position through merger). The underlying objective of competition law in most jurisdictions tends to be efficient resource allocation, and thereby the maximization of national welfare. Most competition laws attempt to attain this objective by prohibiting the abuse of dominant positions (either through prohibition or through regulation), and forbidding various kinds of competition-restricting agreements between competitors. The focus of competition laws is on competition, reflecting the belief—extensively supported by empirical evidence—that vigorous competition is an effective way to foster economic efficiency. Many jurisdictions recognize that specific agreements between firms that may reduce competition could be efficiency enhancing, and make allowance for such agreements. However, the burden of proof in such instances is usually upon the participants in such arrangements.

Competition *policy* spans the much broader set of measures and instruments that may be pursued by governments to enhance the contestability of markets. In this view antitrust (competition law) is a component of competition policy. Other components might be actions to privatize state-owned enterprises, deregulate activities, cut firm-specific subsidy programs, and reduce the extent of policies that discriminate against foreign products or producers. A key distinction in this connection is that competition policy disciplines constrain both private and government actions, whereas antitrust rules pertain to the behavior of private entities (firms).

The objectives of trade and industrial policies contrast starkly with those of competition policy. Governments pursue trade and industrial policies for a variety of reasons, including as a means to raise revenue (via tariffs), to protect specific industries, encourage participation by minorities or small and medium-sized enterprises, promote regional development, to shift the terms of trade, to attain certain foreign policy or security goals, or to restrict the consumption of specific goods for environmental or moral reasons. Whatever the underlying objective, such policies redistribute income between segments of the population by assisting specific industries, factors of production or activities. Often they do so in an inefficient manner. This is almost invariably the case with trade policy, which is consequently often inconsistent with the objectives underlying competition policy. The way this inconsistency is frequently put is that competition law aims at protecting *competition* (and thus economic efficiency), while trade and industrial policy aims at assisting *competitors* (or factors of production). The latter is socially costly as consumers pay higher prices. Economists Alan Deardorff and Robert Stern have noted that trade policy is like doing acupuncture with a two-pronged fork: you may hit the right spot with one of the prongs, but the other will only do harm.

The more restrictive the trade and industrial policy regime in terms of restraining entry and exit, the more important it is to have information on and analysis of the relative costs and benefits of these policies. The absence of competition may have serious negative welfare consequences. One option in this connection is to use competition policy to attempt to offset some of the competitive distortions created by an active trade and industrial policy. This, however, is at best an exercise in the second best. A preferable policy is to minimize the extent to which trade and industrial policy reduces the contestability of markets in the first place.

A liberal trade and investment policy stance is the cheapest and most effective competition policy instrument available to a government. Competition from imports is a very important source of discipline upon the behavior of firms operating in a market.¹ This is the case in particular for countries with highly concentrated industrial structures inherited from the past—the resulting monopoly rents are often a major drag on the economy. The magnitude of trade and investment restrictions in most developing countries far exceeds those that are applied by high income nations. In developing countries the major challenge remains the reduction of traditional trade and investment barriers, and conventional economic wisdom is that priority be given to reducing these (Hoekman 1997; Khemani and Dutz, 1996). However, while a free trade stance greatly reduces the scope of the task facing competition authorities, it does not imply that the need for competition rules disappear. Many products are non-tradable (e.g., many services), or, even if tradable, competition may be limited to local markets for other reasons.² Free trade must therefore be complemented by the freedom of entry, including the possibility to contest markets through foreign direct investment. Even then, certain products

¹ This is one of the basic principles of international trade theory, one that applies to both the traditional setting of competitive markets and in the more recent literature that allows for imperfect competition. For empirical studies confirming the role of import competition as a source of market discipline in imperfectly competitive markets (reducing price-cost margins), see Roberts and Tybout (1997).

² Retail distribution is an often mentioned example in this connection.

may be produced by (natural) monopolies, by firms with global market power, or by firms where natural or 'unnatural' (government-made) barriers to entry restrict contestability. And, the more open are markets to foreign products, the greater the potential vulnerability to anti-competitive practices of foreign monopolists or cartels. In all such cases competition rules should apply.

Industrial policies are in principle a more efficient form of intervention than trade policy as they can be targeted more carefully and thus can give rise to fewer distortions. Much depends here on the objectives being pursued and the choice of instrument employed. At one extreme, if the policy instrument is public ownership and monopoly provision, the policy may be very costly. Even if designed to be targeted, industrial policies are difficult to control. The key questions to be asked are: (i) where is the market failure that is being addressed; and (ii) what is the most efficient, feasible instrument that can be used to offset the source of market failure. In general, "horizontal" policies such as subsidies for education or infrastructure are to be preferred to industry- or firm-specific assistance policies.

II. Competition Policy: Implementing Institutions, Criteria and Procedures

As noted above, competition policy is best defined broadly to encompass all actions governments may take to promote competition, including trade liberalization, measures to facilitate domestic entry into industry and services, de-monopolization of sectors, and imposition of hard budget constraints on public enterprises. Privatization and encouragement of foreign direct investment are additional important dimensions of competition policy. The key principle underlying an active competition policy stance is to rely on market forces to determine the allocation of productive resources, subject to the constraint of ensuring that social equity objectives are realized as efficiently as possible, and that mechanisms exist through which attempts to create monopolies and exploitation of market power can be addressed.

Competition policy can play an important role in the process of structural reform by helping to ensure that reforms are pro-competitive. It can do so directly through intervention of the competition authorities, or indirectly through the provision of analysis and information of the competitive costs to the economy of a particular proposed line of action. For example, in the context of privatization or FDI inflows, state divestitures or take-overs of domestic firms may be competition reducing.³ The task of a competition authority should be to prevent excessive concentration in privatized industries. For example, in the early 1990s the Polish Antimonopoly Office supported substantial reductions in import tariffs for industries that were highly concentrated (monopolized). Sometimes governments are driven by industrial policy concerns to accept (or ignore) requests (demands) by foreign investors to maintain policies that generate rents. The Czech government is reported to have guaranteed Volkswagen (which acquired a large stake in Skoda—the major national car producer) that import tariffs on cars would remain at 19 percent (but only 15 percent for vehicles of EU origin) for at least 4 years.⁴ The

³ What follows draws on Hoekman and Mavroidis (1995).

⁴ *East-west*, No. 555, September 2, 1993, p. 6.

Czechoslovak antitrust office was "absolutely opposed" to the imposition of higher import tariffs on cars, and succeeded in lowering the tariff that came to be applied (Flassik, 1993).

The presumption underlying an active competition policy is that vigorous competition between firms in an industry will foster efficiency and thus economic welfare. However, competition *per se* will not necessarily ensure efficient outcomes, nor is it necessarily the case that agreements between firms in an industry that reduce competition between them are welfare reducing. Certain types of agreements between firms may be welfare enhancing for the nation as a whole. Thus, agreements to form an export cartel may allow a domestic industry to raise prices on export markets and improve the country's economic welfare by ameliorating the terms of trade (albeit at the expense of other countries). Cooperation between firms may lead to dynamic benefits, e.g., research joint ventures or agreements on the development/use of common standards allowing positive network externalities to be realized. Because of these possibilities, most competition laws recognize that some agreements between competitors that appear to be competition-reducing may in fact not reduce competition, or, even if limiting competition, may be welfare increasing. This recognition is reflected in the distinction that is generally made between *per se* rules and *conditional prohibitions*. The former unconditionally prohibit certain forms of behavior (agreements). The latter prohibit certain types of cooperation (collusion) in principle, but may permit their existence if the firm(s) involved can convince the competition authorities that the agreement is welfare enhancing. Space constraints prohibit any detailed discussion of competition law theory and principles.⁵ What follows is limited to a number of issues that are of particular significance for countries that confront major adjustment challenges.

A first issue is to determine what types of agreements/behavior should be subject to *per se* rules. There are only a limited number of competition-reducing agreements between firms that can be rejected on an *a priori* basis (assuming the objective is efficiency), of which price fixing and agreements with similar effects are the most important.⁶ Theory suggests these types of arrangements should be subject to *per se* prohibition, and in most jurisdictions they are. The majority of countries with active antitrust enforcement identify three types of practices that *may* be prohibited: competition-reducing practices or arrangements between firms; the abuse of a dominant position; and the establishment of a dominant position. Important in this context are not so much the specific legislated rules, but the criteria that apply when implementing the law. For example, in the context of an investigation into abuse of a dominant position, the criteria include those for defining the product and geographical scope of the market, the threshold of necessary market power, and the methods used to determine the feasibility of entry. Experience reveals that the effect and operation of competition laws very much depends on the

⁵ The literature on competition policy, both economic and legal, is huge. See Viscusi et al. (1995) for a survey of current economic thinking; Boner and Krueger (1991) for a summary of the practices of ten countries as well as the EU.

⁶ Examples of the latter include production (output) sharing, market allocation, exclusionary practices and the exchange of information between competitors on variables such as costs and output.

implementing rules that are applied. A final issue relates to the design of the institutional mechanisms for enforcing competition rules. This includes the allocation of responsibility for enforcing competition law to an entity, its relationship to the government and legislature, its powers of investigation and sanction, its financing and staffing, and the mechanisms to ensure transparency and consistency, including the availability of an oversight or appeals body (the courts or a tribunal).

National approaches towards competition law and policy are quite diverse, reflecting in part differences in economic philosophy, and in part differences in size and openness. Notwithstanding this diversity, a number of lessons can be drawn from both economic theory and experience:

- The focus of the rules and enforcement efforts should be on all sectors, including services, and should center on the *effects* of agreements between firms, not on their form. The basis for intervening should be market power, i.e., the ability to raise prices profitably, not dominance (as measured, e.g., by market shares). A key criterion in investigating whether an arrangement between firms or an action of a firm violates competition rules should be the ease of entry into, and exit from, the industry. Contestability is what matters.
- Efforts should be made to specify clearly what practices are prohibited on a *per se* basis, thereby publicly announcing what restraints (and those economic effects or results) that are considered to be most pernicious. A clear distinction should be made between vertical and horizontal restraints.
- The number of *per se* prohibitions should be small and focus on horizontal, price-fixing arrangements. Disciplines on vertical restraints should be subject to a well-defined contestability constraint, i.e., a necessary condition for pursuing vertical restraints is significant entry barriers.
- Competition rules should provide *ex post* disciplines on trade or industrial policy-created or supported abuse of market power, ideally including a mandate for competition authorities to recommend the removal of policies or the use of alternative, more efficient, instruments and to have a voice in the policy formation process.
- The criteria that are used in investigations should be spelled out clearly in guidelines. *De minimis* rules should be included, with relatively high thresholds. Firms should face as little uncertainty regarding potential liability as is possible. Detailed reports of investigations should be published, including not just the findings but also the reasoning and analysis used. Procedures should be transparent.
- Civil parties should be able to sue persons (natural and legal) deemed to engage in behavior violating the competition rules. Enforcement authorities should have the power to levy substantial fines and award damages.
- Both investigating procedures and substantive reasoning should be subject to review by an appeals body that is independent of the enforcement authority.
- During the transition to a new regime, firms and consumers that are negatively affected by restrictive business practices may be unwilling to bring cases given their dependence on existing relationships. Competition authorities should therefore have and be prepared to exercise a mandate to self-initiate investigations.

III. Transparency and Voice

The foregoing focused mostly on activities of competition authorities—the institutions that are given the mandate to enforce competition laws. A number of countries have also created bodies that are responsible for assessing the effects of government policies. A well known example is the Industries Commission in Australia (formerly the Industries Assistance Commission). Such bodies can play a vital role in providing information on the consequences of government policies and regulations on the economy as a whole and on specific segments of the population (the poor, the unskilled, individual industries, regions, etc.). To be credible and useful, analysis provided by such bodies must be analytically sound and rigorous. To be able to play their role effectively, management and staff of “transparency institutions” must be seen as impartial and capable. Necessary conditions for this to occur is that the bodies involved are financially independent of the government (e.g., have a separate budget line in the budget), have the ability to self-initiate investigations and respond to requests from civil society, and attract high caliber and well trained staff.

In principle, a competition authority can undertake a transparency function as well. Indeed, if a broad approach is taken to competition policy, the competition office must have the analytical capacity to undertake studies in a wide variety of cases. In national jurisdictions there is a good case for allowing competition agencies to monitor the competitive impact of government policies as well as enforce competition laws (Khemani and Dutz, 1995). A number of developing countries and economies in transition have granted their competition agencies the right to comment on or oppose government policies that restrict competition (Boner, 1995).⁷

An important dimension of such efforts is data collection and dissemination. A litmus test for the potential existence of anticompetitive practices (be they purely private--e.g., a cartel) or government supported (e.g., trade barriers) are profit opportunities that are not competed away through entry of the threat of entry. Necessary conditions for such a situation is that prices exceed marginal costs substantially for a significant period of time; that there is no or very little entry (or exit) in such industries; and that the domestic industry is highly concentrated. These are not sufficient conditions, of course. High concentration ratios in a domestic industry or above average growth in producer prices of an industry may not reflect a lack of competition. Nor is a low import penetration ratio necessarily indicative of success on the part of domestic incumbents to protect (foreclose) their markets. High concentration may reflect the existence of economies of scale. A pattern of above average growth in prices may reflect robust demand or quality upgrading rather than the exploitation of market power. And low (or declining) import penetration may reflect a competitive domestic industry that is capable of withstanding competition from imports. Further complicating matters is that the relationship between these various indicators is unclear a priori. High concentration in a domestic industry may be accompanied by either low or high import penetration. In industries with increasing returns to

⁷ The motivation for this is that in economies that have a history of government intervention and where industry is often highly concentrated, enforcement of competition *law* will need to be supplemented by competition *policies* that support the objectives of the law. In addition, there will often be a need for “educating” enterprises, legislators and officials regarding the objectives and application of competition legislation.

scale and high entry costs, domestic concentration may rise after trade liberalization as the least efficient are forced to exit and survivors become more productive as greater output leads to lower unit costs. In other industries concentration may fall, perhaps significantly.⁸ This is quite likely to occur in economies where the status quo ante was characterized by large conglomerates or public monopolies. Insofar as these firms were “too” large, entry by more efficient new firms, and the break-up of existing firms into more rational components will reduce concentration rates.

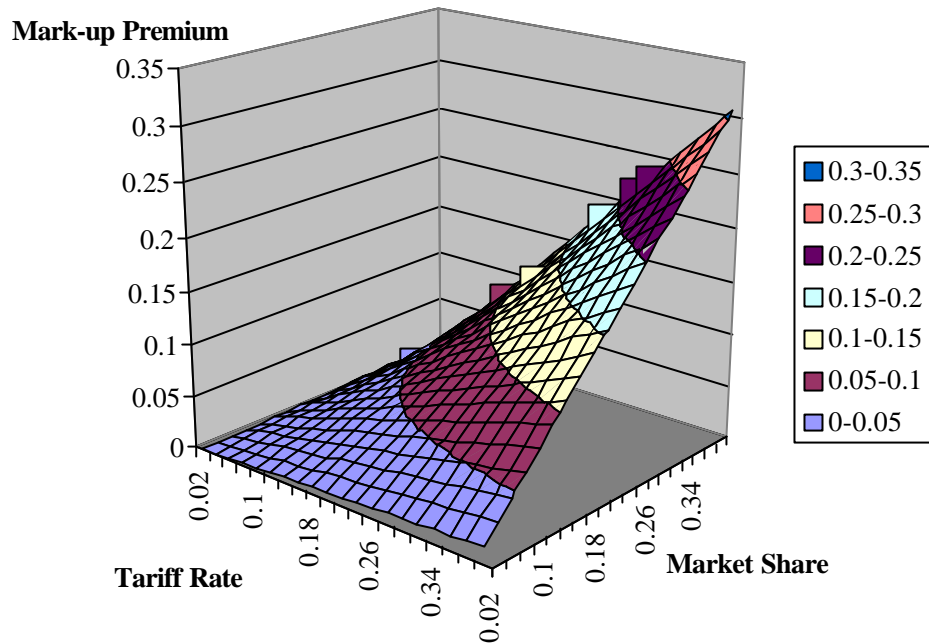
Nonetheless, regular compilation and analysis of data on indicators such as import penetration ratios, changes in market structure and the size distribution of firms, measures of entry and exit over a given period, domestic industry concentration ratios, and data on trends in price-cost margins provide information on the effect of all of the competition policies pursued by a government (or the absence thereof). They have the virtue of being easy to calculate and do not require the use of models that require (political) acceptance of a set of underlying assumptions. For concreteness, the Appendix summarizes what such measures reveal in the case of Slovakia, a country that has undergone significant economic reforms and industrial restructuring in the last 5 years.

It is also important that analyses be undertaken of the effects of competition policies broadly defined in order to help build and sustain support for an open economy. The international experience indicates that reductions in trade barriers reduce price-cost mark-ups, especially among large firms, and are thus welfare improving (Figure 1).⁹ Plant sizes tend to decline, but the effect on scale efficiency is generally modest because most of the adjustment in total domestic output comes from large firms that were operating on the flat portion of their average cost curves. Industrial policies and trade protection measures are often motivated on the basis that technological mastery of an industry takes practice. Thus, producers or countries with experience are likely to be the most efficient, and without assistance, latecomers may not be able to catch up with them. However, if technology can be easily acquired through conscious imitation, or if it diffuses through other channels, latecomers may be able to exploit the fruits of others’ learning without bearing comparable costs. Although in principle the effects of trade liberalization on productivity growth is ambiguous (as it may reduce the amount of learning by doing in import-competing sectors) in practice import-competing firms tend to be more capital intensive and learning by doing and knowledge spillovers are likely to be as important in agriculture and services, which tend to be exportable and non-tradable, respectively.

⁸ Roberts and Tybout (1996) brings together a series of papers that study evidence from developing countries.

⁹ What follows is based on Tybout (1998).

Tariffs, Market Share and Mark-ups



Source: Grether (1997), using data for Mexico during 1985-90.

Trade acts as a conduit for knowledge transmission, and protection may choke off a necessary ingredient. Similarly, access to foreign intermediate and capital goods is important to final goods producers. There is extensive evidence that exporting to knowledgeable buyers in has helped developing country firms acquire global best practices: buyers transmit blueprints and teach quality control; help organize the shop floor; transmit information about better inputs available abroad. Econometric studies confirm that exporters are more efficient, on average (Roberts and Tybout, 1997). Similarly, technology also transfers through imports of intermediates, capital-goods, and through de-engineering of imports. Good micro evidence on these channels is hard to come by, but a large number of studies have demonstrated there is a positive relationship between openness and economic growth. An important role for a “transparency” body is to determine and inform citizens of the effects of government policies to open the economy to competition and remove policies that distort resource allocation.

IV. Competition Policy and Trade Policy

Abstracting from instances where a government is confronted with foreign firms with significant market power, trade policy will generally reduce competition by driving a wedge between world market prices and domestic prices. The first best policy for a country that cannot affect its terms

of trade is well known: free trade (or, if there is a fiscal constraint, a low and uniform tariff). If such a trade policy stance is not pursued, competition authorities should be sensitive to the anti-competitive impacts of trade policy. Much can be done in this connection through appropriate wording of criteria and implementation guidelines within the framework of competition legislation. For example, trade policy considerations can be linked to the definition of the relevant antitrust market.¹⁰ In principle, the more an industry is protected, the narrower could be the definition of the relevant market, thereby reducing the expected profitability of seeking protection, and thus the incentive to lobby for it. In a similar vein, GATT illegal or 'gray-area' measures such as voluntary export restraint and import expansion agreements should be publicly stated to be unenforceable, and subject to competition policy enforcement. *De minimis* provisions can also be related to the trade policy stance that affects an industry. The more liberal are market access conditions for foreign firms/products, the higher can be the threshold that is applied.

Policies that excessively harm competition on the domestic market should be opposed. This approach has been actively pursued by a number of the Central and East European competition offices that were created after the demise of central planning. By commenting on or opposing suggested or existing trade policies, the competition offices ensure that the economy-wide implications of sectoral policies/lobbying are recognized and discussed. As, if not more important, however, is the threat of *ex post* action. Active enforcement, with guidelines that clearly specify that trade policy will be an important consideration in the implementing competition laws, will help bolster the effectiveness of *ex ante* opposition to policy proposals that restrict access to markets.

Of particular importance is contingent protection, especially antidumping. Many defenders of antidumping regard it as *the* example of a trade policy that is consistent with the objectives of competition law. While it may have been true at the time antidumping laws were first written (late 19th and early 20th century), it is certainly not the case anymore. The original theoretical rationale for antidumping law was developed by Viner (1923). He argued that antidumping may be needed to protect domestic consumers from predatory (monopolizing) dumping.¹¹ Most economists agree that predatory dumping is the exception, not the rule. Proponents of antidumping are concerned, implicitly if not explicitly, with the continued existence of national firms that produce a good. The fact that competition from other outside sources will in most realistic circumstances prevent the formation of a monopoly is considered irrelevant. What matters is protection of a domestic industry.

¹⁰ Authorities have substantial latitude in this connection, as the relevant market is not clearly defined in any of the laws. In most jurisdictions the concept is defined through case law and administrative practice.

¹¹ Viner distinguished three forms of dumping: sporadic, short run, and long run. Only the second form justifies a reaction in his view, as only this form of dumping can be construed as anti-competitive. In the first case injury to firms is transitory, while the gains to consumers outweigh the losses to domestic producers in the last case.

In addition to the 'predation' or monopolization argument, advocates of antidumping policies also argue that antidumping is a justifiable attempt by importing country governments to offset the conditions existing in an exporting firm's home country that underlie the ability of such firms to dump. These may include closed home markets of exporters, anti-competitive practices in the exporting country market which permit export sales below cost, or government subsidization. Antidumping is an inferior instrument to address foreign market closure as it does not deal directly with the source of the problem, i.e., the *government* policies which *artificially* segment markets, or allow this to occur. Indeed, current antidumping enforcement takes no account of whether price discrimination or selling below cost is due to market access restrictions.¹² At the same time, antidumping creates many distortions, inducing rent-seeking behavior on the part of import-competing firms, and leading exporting firms to alter allocation decisions in ways that reduce welfare (see Finger, 1993). Many economists that have studied the problem of antidumping have concluded that the welfare costs associated with the use of this instrument could be reduced if account was taken of its economy-wide impact. Ideally, no contingent protection should be granted by a government if this would have a substantially negative impact on competition (e.g., strengthen market power).

Options for Integration Competition and Trade Policies

(i) *Public interest clause.*¹³ Some countries have adopted so-called public interest clauses in their antidumping legislation. Although they differ across jurisdictions, public interest clauses generally require that before duties are imposed, investigating authorities examine the impact this would have on the users of the alleged dumped import and the final consumers of goods that embody the imports concerned. For a public interest clause to be effective, it is important that it allows potentially negatively affected parties to defend their interests by giving them the opportunity to present their arguments to investigators, and have the legal standing to do so. They should have access to the information presented by the industry or other interest groups seeking assistance in making their case.

The foregoing simply gives users and consumers of the imported products a voice. A step further in the context of antidumping would be to redefine the concept of injury used in investigations. Dumping should then be found to have a negative impact on competition, not just on competitors (Wood, 1989). In practice, the best way to ensure that this is done is to use the same tests that the competition authorities would use to determine whether price discrimination or selling below cost is anticompetitive and violates the competition law. Indeed, the competition authorities could be given the mandate to undertake such an investigation. Alternatively, competition authorities could be given a veto right, having to approve an antidumping duty before it is put into effect. At a minimum, competition offices should have the

¹² Of course, there need be no uniform relationship between market closure and dumping, as this will depend on a lot of other variables. What matters is that market closure is held to be a justification for antidumping, i.e., is a source of 'unfairness', without being shown to exist.

¹³ What follows draws on Hoekman and Mavroidis (1996).

mandate to determine whether antidumping duties--and, indeed, trade policies in general--have led to an excessive reduction in competition on the domestic market.

More generally, antidumping could be made subject to appeal on the basis of competition concerns. An interesting case decided by the European Court of Justice in 1992 provides an example. Pechiney and Extramet are the only processors of calcium metal in the EC. Pechiney is also the sole EC producer of the metal. At a given stage, Pechiney refused to supply calcium metal to Extramet, leading the latter to bring charges against the former for abuse of dominant position. At the same time, Extramet shifted to greater imports of calcium metal from China and the former Soviet Union. This in turn gave rise to an antidumping petition by Pechiney. The Commission investigated, and imposed antidumping duties. Extramet responded with a request to the ECJ to annul the antidumping order because the Commission had not investigated the possibility that other factors were damaging the EC industry. Specifically, Extramet argued that if Pechiney had supplied Extramet, imports would have been much lower, perhaps even below *de minimis*. The ECJ found in Extramet's favor, annulling the antidumping order on the grounds that anticompetitive practices relevant to this context were not addressed before recourse was made to antidumping duties.¹⁴

(ii) *Defining de minimis requirements.* According to the WTO Antidumping Agreement, investigating authorities are not supposed to take any action against insignificant increases in dumped imports or insignificant underselling. However, allowance is made for the imposition of duties if the cumulation of a number of such insignificant exporters causes injury. Governments interested in reducing the anticompetitive effects of antidumping can introduce much higher *de minimis* standards than those required in the WTO Agreement. A necessary condition for the imposition of duties should be that an exporter accused of dumping have a significant market share. Concepts developed and employed in the antitrust area can again be useful. Thus, a dominant position by a foreign firm or group of firms (e.g., a cartel) could be made a necessary condition for taking action. Dominance has been defined in various ways in national laws: some states opt for a 30% threshold, others for 40%, etc. Some also employ three- or five-firm concentration criteria/indices. Whatever the criteria, clearly the thresholds used by competition authorities are much higher than the market shares required under the WTO Antidumping Agreement. The concept of national treatment is relevant in this connection. Foreign firms should in principle be treated identically to their domestic competitors. If the latter are subject to competition disciplines that define dominance in a specific way, this should also be the criterion applied to foreign competition.

(iii) *Determination of the relevant market.* Under the WTO Agreement "the term 'domestic industry' shall be interpreted as referring to the domestic producers...of the like product". The key therefore, to defining 'domestic industry' is the definition of the like product.

¹⁴ Extramet Industry S.A. versus Council of the European Communities, (No. C-358/89), Decision of 11 June 1992, pp. I-3813-3850. Although this was a positive development, the matter did not end there. A few months after the ECJ decision, "without any formal re-initiation of the case, the Commission re-opened the file and quickly ended it with dumping margins six times higher than those assessed in the initial case--despite the strong anecdotal evidence that the anti-competitive behavior of Pechiney was still going on" (Messerlin, 1995, p.13).

If 'like product' is defined in too strict a way, it might lead at least to overestimation of the effects of dumping and consequently to impositions of duties in cases where it should not. In general, there is a need to apply economic analysis and concepts, including basic factors such as cross price demand elasticities. If on the contrary, the relevant market is defined in too broad a way, duties will not be applied when they should be. A proper definition of the relevant market in accordance with economic considerations should be the starting point of antidumping investigations.

V. Regional and Multilateral Models and Options

International cooperation can help countries pursue reform by creating focal points for best practices and expanding the set of interests that will support (and enforce) policy reforms. In the area of competition policy there are only two regions that have made significant progress in agreeing to common disciplines and cooperation—Europe and Australia and New Zealand. A WTO Working Group is presently engaged in investigating the relationship between trade and competition policies, and negotiations on this subject may be launched in the future.

The European Union

The EU is among the RIAs with greatest set of disciplines on member states regarding regulatory policies that may act to impede the realization of a single market. Art. 85 of the European Community Treaty (ECT) prohibits agreements and concerted practices that restrict or distort competition in the common market and affect intra-EU trade; Art. 86 prohibits abuse of a dominant position. Public undertakings and entities granted special or exclusive rights are subject to the competition principles and rules of the ECT as long as this does not impede the realization of their assigned tasks (Article 90).¹⁵ State-aids are considered to be incompatible with the common market if they affect trade flows (Art. 92), although generally available subsidies are permitted in principle, as is aid targeted at disadvantaged regions (Article 92.3a). In short, common disciplines are imposed on Member states with respect to state aids (subsidies), monopolies, government procurement practices, and antitrust. These are complemented by detailed European legislation relating to the achievement of the Internal Market.

A noteworthy feature of the EC regime is that no efforts were made to harmonize national antitrust regimes, which differed very substantially across countries. Indeed, some members states did not even have antitrust legislation; Italy adopted a comprehensive antitrust statute only in 1990 (Siragusa and Scassellati-Sforzolini, 1992). Over time, however, greater attention centered on the adoption of effective national antitrust legislation. For example, in 1983 Portugal drafted and adopted its antitrust legislation in part with a view to its future accession to the EC (Barros and Mata, 1996), and a number of member states have amended their statutes to conform more closely to the letter and spirit of EU rules. To some extent this has been driven by the EU Merger Regulation, which requires that national bodies review mergers or

¹⁵ State monopolies of a commercial character must also ensure nondiscrimination regarding the conditions under which goods are procured and marketed between EC nationals (Article 37 ECT).

acquisitions if these are referred to them by the European Commission, and by a more general concern to implement the principle of subsidiarity (in the process reducing the burden of enforcement incurred by the Commission and the Court).¹⁶

One consequence of the far-reaching liberalization/integration of markets and adoption of common competition policies was the explicit recognition that antidumping actions did not have a place in the common market. Article 91 ECT provides for the imposition of antidumping measures on internal trade only during the twelve-year transition period leading up to full implementation of the Treaty. Article 91:2 requires that as of the entry into force of the Treaty, products originating in one Member state and exported to another be free of duties, quotas and measures with similar effect if they are re-imported. That is, during the transitional period, efforts were required to ensure that arbitrage between markets was possible, thus reducing the scope for dumping.

Free Trade Agreements Involving the EU

Starting in the early 1990s, the EC initiated a process of negotiating Association Agreements with Central and East European and Mediterranean countries.¹⁷ These free trade agreements (FTAs) commit signatories to eliminate trade barriers on a reciprocal basis, usually over a transition period ranging from 10 to 12 years. Partner countries commit themselves to adopt the EC's rules relating to agreements between firms restricting competition, abuse of dominant position, the behavior of public undertakings (state-owned firms) and competition-distorting state aids that have an effect on trade (Articles 85, 86, 90 and 92 ECT). Public undertakings and undertakings with exclusive rights become subject to the principles of Articles 37 and 90 ECT three to five years after the entry into force of the agreement. State-aid, compatible with EC rules for disadvantaged regions (Article 92.3a ECT), may be applied to the entire territories of the associated states during the first five years. The low level of per capita incomes in most partner countries in comparison to those of EC states should ensure that non-industry-specific state aids will remain unconstrained for some time thereafter.

In addition to agreeing to EC competition disciplines analogous to those found in the EU treaty, the Eastern European FTAs require signatories to adopt national competition legislation that is consistent with EC rules. There are provisions setting out procedures and requirements for the exchange of information and consultations, but no binding dispute settlement procedures. Notwithstanding the agreement to adopt EC-compatible competition disciplines, and despite the fact that free trade and freedom of investment in both goods and services is to be achieved within ten years, there is no provision in the FTAs specifying that antidumping will be phased out or eliminated. This situation has been justified by the Commission on the basis that antidumping and similar instruments must remain applicable to trade flows until partner countries have completed the transition to a market economy. At the December 1994 Essen Summit, the European Council declared that the Union "should be ready

¹⁶ See Neven, Nuttall and Seabright (1993) for an analysis of the EC's Merger Regulation.

¹⁷ What follows draws on Hoekman (1998).

to consider refraining from using commercial defense instruments for industrial products” conditional upon the “satisfactory implementation of competition policy and control of state aids ... together with the wider application of other parts Community law linked to the internal market, providing a guarantee against unfair competition comparable to that existing inside the internal market.” Clearly there is no firm commitment here to eliminate antidumping. Note that the EC insists that application of competition laws and principles are not enough; what is necessary (but not sufficient) is that all of the Single Market directives are applied as well.¹⁸ Mediterranean countries have less comprehensive competition regimes than Central and East European countries; indeed, some do not have antitrust legislation. Accession to the EU and adoption of the *acquis* are also not on the agenda. Consequently, the probability of eliminating instruments of contingent protection is significantly lower.¹⁹

The RIAs involving the EU as a partner illustrate that a commitment to apply common disciplines in areas such as antitrust, state aids, and state monopolies is a central dimension of the agreement. Increasingly, what appears to be required by the EU is the full adoption of the EC’s internal market rules and the adoption of *national* legislation that is consistent with EC norms (independent of any “trade” effects considerations). Enforcement of competition rules is largely left to national bodies, and dispute settlement provisions are largely political in nature. Association Councils may make recommendations in instances where disputes arise, but these are not binding. There is no presumption that adoption of the EC *acquis* in the competition area will lead to the elimination of trade policy on intra-regional trade. Indeed, the EC illustrates that antidumping can co-exist with a customs union. Thus, in the customs union with Turkey, European firms may continue to petition for antidumping actions to be imposed on Turkish exports.²⁰

Australia-New Zealand Closer Economic Relations Trade Agreement (ANZCERTA)

ANZCERTA (or CER) is a free trade agreement between Australia and New Zealand established in 1983. Art. 12 of the CER requires the two countries to: “examine the scope for taking action to harmonize requirements relating to ...restrictive trade practices.” At the time CER was negotiated (1983), competition regimes in the two countries differed significantly. Australian antitrust laws followed the US model, whereas New Zealand’s legislation was much more modeled on that of the UK. In 1986, New Zealand’s Parliament enacted new competition legislation which was much more similar to the Australian system.²¹ In a review of CER in 1988 a Protocol on Acceleration of Free Trade on Goods was appended to the Agreement. This

¹⁸ Indeed, as noted by Holmes (1996, p.5), in practice the EC is requiring its partners (future members) to adapt national competition rules to the EC’s standards in a much more rigorous fashion than has been done by existing member states. A recent survey by Pittman (1997) documents that the CEE countries have already gone far down the harmonization road.

¹⁹ See Galal and Hoekman (1997) for assessments of the content and economic effects of the Euro-Med agreements.

²⁰ See Togan (1997) for a description and analysis of the customs union agreement with Turkey.

²¹ Ahdar (1991, p. 332).

stipulated that nationals of one state could be made the subject of an investigation by the competition authorities of the other state and be required to respond to requests for information. Australian (New Zealand) antitrust legislation was amended to extend its scope to the behavior Australian and/or New Zealand firms with market power on either one of the national markets or the combined Australia/New Zealand market; Courts were empowered to sit in the other country; orders may be served in the other country; and judgments of Courts or authorities of one country are enforceable in the other country. In 1994 the competition authorities of the two countries concluded a bilateral Cooperation and Coordination Agreement to reduce the possibility for inconsistencies in the application of legislation in instances where this is not required by statutory provisions. In contrast to the EU, the application of antitrust remedies remains strictly national.²²

CER also includes disciplines on subsidies that are stronger than those contained in the WTO. A 1988 Protocol states that “bounties and subsidies providing long term support can no longer be regarded as a viable instrument of industry policy” (Lloyd, 1991, p. 24). Thus, industry-specific subsidies are banned. The agreement already prohibited export subsidies, which were eliminated by 1987. Although investment (capital flows) are not covered by CER, Australia and New Zealand maintain liberal investment regimes, and significant cross-investment flows have occurred. ANZCERTA also unifies the labor market of the two countries (there is free mobility of labor), and contains relatively far-reaching commitments to liberalize trade in services. It therefore goes much beyond the adoption of common antitrust legislation. As in the EC, elimination of antidumping was (implicitly) linked to the transition path for the realization of free trade (July 1990). There was no effort to gradually increase the “competition-consistency” of antidumping. In contrast to the EC, the application of antitrust remedies remains strictly national.

The regional integration experience demonstrates that international agreements on antitrust are feasible, even between countries with initially quite different domestic antitrust policies (or no such policies at all). It also shows that there are wide differences across agreements in terms of whether and how competition policy and antitrust issues are addressed. The extent of “harmonization” of competition regimes that is required depends greatly on the concerns and preferences of the parties to each agreement, suggesting a wide range of choice for multilateral agreements. Most of the regional agreements that have eliminated contingent protection—or are moving in that direction—also go beyond the WTO in some important respects by including disciplines on the scope to pursue industrial policy and provisions to facilitate the movement of factors of production. Most have also pursued some degree of “harmonization” of antitrust. The available evidence therefore suggests that eliminating contingent protection may involve the adoption of common antitrust and competition policy disciplines. However, given the small number of regional agreements that have moved down this path, this should be regarded as no more than suggestive. A recent FTA between Canada

²² Although there has been substantial convergence, competition laws are not identical. For example, in Australia use is made of a market power test in assessing the effects of a proposed merger, while in New Zealand the focus is on dominance, a much broader concept (Tavares, 1998).

and Chile FTA illustrates that abolition of antidumping can be achieved without adoption of common antitrust rules (Hoekman, 1998).

The WTO

A tentative start has been made in the WTO context to initiate discussions on the subject of competition policy.²³ A working group has been established with the mandate to explore the relationship between trade and competition policies. The work program for this group has been heavily contested, as was its terms of initial reference. Strong opposition exists on the part of import competing industries in a number of countries against any effort to discipline the reach of trade policy, especially contingent protection, through the introduction of linkages to antitrust principles.²⁴ Conversely, some competition authorities are opposed to the introduction of antitrust into WTO because of a worry that antitrust enforcement might become affected by trade policy considerations.

Different rationales have been suggested for launching multilateral negotiations. They include a view that antitrust disciplines are required to enhance WTO market access commitments; a perception that antitrust rules are necessary to constrain the use of antidumping; a belief that the (potential for) exercise of market power by global multinationals requires a global competition code; and the possibility that governments may be able to use antitrust laws as an instrument to circumvent WTO obligations. Many suggestions have been made regarding what should be sought, ranging from a global competition code (harmonization of substantive rules—see Scherer, 1994) to doing nothing (competition between competition regimes).

Three criteria are useful in evaluating the desirability of alternative options: (i) the extent to which they enhance market access opportunities for foreign firms; (ii) their likely impact on national welfare (economic efficiency) of WTO members; and (iii) whether they strengthen the multilateral trading system (WTO). The market access yardstick is one that is used by many proponents of putting antitrust on the WTO agenda. They argue that inadequate antitrust enforcement allows incumbent firms to block or attenuate foreign competition.²⁵ Great care must be taken to ensure that a focus on market access is welfare improving. Suppose negotiators agree that foreign takeovers of domestic firms should not be constrained (a market access commitment). Suppose further that a large foreign firm that previously contested the market through exports takes over a large domestic competitor. An antitrust authority may have good

²³ What follows draws on Hoekman (1997).

²⁴ This was illustrated in the Singapore Ministerial meeting of the WTO in December 1996 where the United States and the EU jointly agreed on a statement “clarifying” that the Ministerial declaration establishing a working group on trade and competition policy “is specifically directed at a work plan addressing antitrust issues and will not affect domestic antidumping standards and provisions.” Statement on Competition Policy, USTR press release 96-95, 13 December 1996. Or, to cite the business view expressed in a 1996 ACTPN report on competition policy: “As long as exporters may engage in dumping, there will be a need for national antidumping laws” (<http://www.ustr.gov/reports/actpn/policy.html>).

²⁵ The recent nonviolation case brought by the US government on behalf of Kodak is illustrative, as the claim is that Kodak’s market share has been constrained by actions by Fuji that induce distributors not to carry Kodak.

reasons to block such foreign direct investment because of the associated reduction in competition. If it is constrained in this, domestic consumers may suffer the consequences. The basic tension that arises is that while competition policy is “nationality blind,” market access-based negotiations and agreements are not.

Table 1: Assessing the Options

Option	Market Access	Welfare	Systemic Impact
1. Minimum standards for antitrust law	0	+ / —	+ / —
2. Introduce antitrust criteria in antidumping	+	+	+
3. Competition advocacy role for WTO	+ / 0	+ / 0	+ / 0
4. Rules on antitrust exemptions for “cartels”	+ / 0	+ / —	+ / 0
5. Sector-specific disciplines	+	+ / —	+ / 0
6. Keep antitrust off agenda	0	0	0 / —

Note: + indicates positive impact, — a negative impact, and 0 no impact. More than one symbol indicates a range of outcomes is possible.

An attempt to summarize the possible impacts of the major options is made in Table 1, with a + sign indicating a positive impact, a — sign a negative impact, and a 0 no impact. Not surprisingly, in many cases a range of outcomes is possible. Disciplining antidumping, prohibiting antitrust exemptions for export cartels and issue/sector-specific agreements may enhance both market access conditions and strengthen the WTO. However, in terms of domestic welfare (efficiency) only the antidumping option (a subset of the issue-specific approach) appears unambiguously beneficial. The likelihood of this occurring is not high, to say the least.

Given the nascent nature of competition law in many developing countries, the implications of a WTO negotiation are potentially greater than for industrialized ones with well developed antitrust regimes. However, from a developing country perspective the possible downside risk attached to the competition agenda seems limited. The option that in principle has the greatest potential for reducing welfare—harmonization of substantive competition rules—will in all probability be limited at most to a prohibition on certain horizontal restrictions (e.g., cartels). Although even this is uncertain given that it will do little in market access terms, there are few if any efficiency rationales for tolerating horizontal restrictions on the domestic market. Thus, there should not be a major concern regarding an agreement that includes this. However, the detailed content and substance of the specific rules and criteria of antitrust law are best left for sovereign states to pursue independent of the multilateral trading system. In this connection the most that can be said for minimum standards is if agreement pertains to “procedural” norms for the implementation and enforcement of competition laws (transparency, “due process”). Although many developing countries have antitrust legislation, enforcement may be uncertain or inconsistent. Allowing for “procedural” dispute settlement cases under

which panels would restrict themselves to determining whether national law was applied correctly may help ensure consistency and diffuse tensions.

The conclusion drawn by James Rahl almost 20 years ago regarding the significance of private cartels in international trade applies as well to the more general topic of introducing antitrust into the WTO: “no one should believe that private cartels, though they can be extremely damaging, represent the most serious kind of interference with free trade today. The various governmentally created restraints, including tariffs, quotas, miscellaneous other trade barriers, commodity agreements, orderly marketing arrangements, antidumping orders, subsidies, national preference requirements in buying, pervasive regulation of some industries, and state trading monopolies, surely add up to far more restraint of international competition than do cartels” (Rahl, 1981, p. 242). This has certainly been the perception of governments engaged in multilateral trade negotiations, and it is reflected in the Uruguay Round agreements that deal with many of these topics. But very much still remains to be done in these “traditional” areas of governmental restraints on trade.

A good case can be made that antitrust and trade policy should remain independent. Antitrust is a policy that is (should be) aimed at achieving efficient outcomes by protecting the competitive process, unconstrained by market access (nationality) considerations. Efforts to liberalize access to markets—the *raison d’être* of the WTO system—will complement and affect antitrust enforcement, but only in rare circumstances will antitrust enforcement be the optimal instrument to deal with market access “problems.” Trade and investment liberalization should therefore be continued to be pursued on a priority basis. Of particular importance in this connection is liberalization of services, including sectors such as distribution and transport. Commitments made by WTO members on services are quite limited, with developing countries in particular fully opening up only a small set of service activities to foreign competition. Liberalization of trade in services in particular could help to diffuse pressures for “action” in the antitrust area (e.g., with respect to distribution-related disputes).

Strengthening the WTO’s competition advocacy mandate—e.g., through the Trade Policies Review Mechanism—could also be very beneficial. This would generate information on the economic effects of government policies and provide incentives for the establishment of domestic counterpart institutions. The latter is particularly important for developing countries. Domestic “transparency institutions” and competition agencies have long been promoted by trade policy and competition analysts who argue that public information on the costs and benefits of government policies is required in order to countervail rent-seeking activities (see e.g., Finger, 1982). A multilateral competition advocacy role may help to support the creation and operations of such institutions. Even if countries give antitrust offices a mandate to scrutinize government policy, including privatization and trade policies, for their impact on competition, a problem that arises for any agency that pursues such a mandate is that it may confront opposition by interests that benefit from a particular situation. This may result in attempts to constrain the agencies mandate directly, or in efforts to reduce its budget. A multilateral competition agreement could help to sustain the work of such entities.

VI. Conclusions

Competition policy has an important role to play in the context of an economy wide reform program, both in promoting a competitive environment and in building and sustaining public support for a pro-competitive policy stance by the government. Even if a government pursues a liberal trade policy and limits industrial policies to carefully targeted intervention, experience has illustrated there is a clear role for competition law enforcement. In many sectors of the economy (the threat of) competition from imports is limited, and there is need to ensure that firms do not behave collusively and that market power is not exploited.

Competition policy is best defined broadly, with competition authorities having the mandate to scrutinize the competitive effects of government trade and industrial policies. In addition to directly contesting the effects of restrictive business practices, competition authorities should play an active role in educating civil society regarding the net benefits of competition and policies that act to reduce competition. Transparency and information should play an important role in the policy formation process. To the extent that an active trade policy is pursued, especially in the area of contingent protection, it is also important that the competitive implications of trade barriers are considered. The competition authorities can play a role in this connection by ensuring that decision making take into consideration the costs of intervention for the economy as a whole.

International cooperation in the area of competition policy would appear to be most useful in through the associated multilateral surveillance and scrutiny of domestic policy, thereby mandating domestic “transparency” activities centering on the state of competition in the economy. One of the major potential benefits from both an efficiency and market access perspective of putting competition law on the international negotiating agenda—replacing antidumping with national antitrust legislation—is unlikely to be politically feasible.

References

- Ahdar, Rex. 1991. "The Role of Antitrust Policy in the Development of Australian - New Zealand Free Trade," *Northwestern Journal of International Law & Business*, 12:317-334.
- Barros, Pedro and Jose Mata. 1996. "Competition Policy in Portugal," presented at the CEPR/European University Institute workshop on Recent Developments in the Design and Implementation of Competition Policy, Florence, 29-30 November.
- Boner, Roger Alan. 1995. "Competition Policy and Institutions in Reforming Economies," in C. Frischtak (ed.) *Regulatory Policies and Reform: A Comparative Analysis*. Washington D.C.: The World Bank.
- Boner, Roger and Reinald Krueger. 1991. *The Basics of Antitrust Policy: A Review of Ten Nations and the European Communities*. Washington D.C.: World Bank Technical Working Paper No. 160.
- Davidow, Joel. 1981. "The Seeking of a World Competition Code: Quixotic Quest?," in O. Schachter and R. Hellawell (eds.), *Competition in International Business: Law and Policy in Restrictive Practices*. New York: Columbia University Press.
- Djankov, Simeon and Bernard Hoekman. 1998. "Conditions of Competition and Multilateral Surveillance," *The World Economy*, forthcoming.
- Finger, J. Michael. 1982. "Incorporating the Gains from Trade into Policy," *The World Economy*, 5:367-77.
- Finger, J. Michael. 1993. *Antidumping*. Ann Arbor: University of Michigan Press.
- Flassik, Imrich. 1993. "Priorities of the Czechoslovak Antitrust Office," in C. Saunders (ed.), *The Role of Competition in Economic Transition*. New York: St. Martin's Press.
- Galal, Ahmed and Bernard Hoekman (eds.) 1997. *Regional Partners in Global Markets: Limits and Possibilities of the Euro-Med Agreements*. London: CEPR.
- Grether, Jean-Marie. 1997. "Mexico, 1985-90: Trade Liberalization, Market Structure, and Manufacturing Performance," in M. Roberts and J. Tybout, eds., *Industrial Evolution in Developing Countries*. Oxford: Oxford U. Press.
- Hoekman, Bernard. 1997. "Competition Policy and the Global Trading System," *The World Economy*, 20: 383-406.

Hoekman, Bernard. 1998. "Competition Policy and Preferential Trade Agreements," in Robert Lawrence (ed.), *Private Practices and Trade Policy*. Washington DC: Brookings, forthcoming.

Hoekman, Bernard and Petros C. Mavroidis. 1995. "Linking Trade and Competition Policies in Central and Eastern Europe," in L. Alan Winters (ed.), *Foundations of an Open Economy: Trade Laws and Institutions for Eastern Europe*. London: Center for Economic Policy Research.

Hoekman, Bernard and Petros C. Mavroidis. 1996. "Dumping, Antidumping and Antitrust," *Journal of World Trade*, 30:27-52.

Holmes, Peter. 1996. "Competition Policy and Integration: Leveling or Tilting the Playing Field," Global Economic Institutions Working Paper Series No. 21.

Khemani, R. Shyam and Mark Dutz. 1995. "The Instruments of Competition Policy and Their Relevance for Economic Development," in C. Frischtak (ed.) *Regulatory Policies and Reform: A Comparative Analysis*. Washington D.C.: The World Bank.

Lloyd, Peter. 1991. "The Future of CER: A Single Market for Australia and New Zealand," Committee for Economic Development of Australia. Monograph No. 96. Wellington: Victoria University Press.

Messerlin, Patrick. 1994. "Should Antidumping Rules be Replaced by National or International Competition Rules?," *Aussenwirtschaft*, 49:351-74.

Neven, David, Robin Nuttall and Paul Seabright. 1993. *Merger in Daylight: The Economics and Politics of European Merger Control*. London: CEPR.

Pittman, Russell. 1997. "Competition Law in Central and Eastern Europe: Five Years Later," *The Antitrust Bulletin*, forthcoming.

Rahl, James. 1981. "International Cartels and Their Regulation," in O. Schachter and R. Hellawell (eds.), *Competition in International Business*. New York: Columbia University Press.

Roberts, Mark and James Tybout (eds.). 1997. *Industrial Evolution in Developing Countries*. Oxford: Oxford University Press.

Scherer, F. M. 1995. *Competition Policies for an Integrated World Economy*. Washington D.C.: Brookings Institution.

Siragusa, Mario and Giuseppe Scassellati-Sforzolini. 1992. "Italian and EC Competition Law: A New Relationship," *Common Market Law Review*, 29:93-131.

Togan, Subidey. 1997. "Opening Up the Turkish Economy in the Context of the Customs Union with EU," *Journal of Economic Integration*, 12:157-179.

Viscusi, W. Kip, J. Vernon and J. Harrington. 1995. *Economics of Regulation and Antitrust*. Cambridge: MIT Press.

Wood, Diane. 1989. "'Unfair' Trade Injury: A Competition-based Approach," *Stanford Law Review*, 41:1153-80.

Appendix: Competition policy in Slovakia

Slovakia pursued a multidimensional competition policy after 1989.²⁶ While still part of Czechoslovakia (until 1992), the major pillars of competition policy comprised (mass) privatization, liberalization of entry/exit, imposition of hard budget constraints on enterprises, a very liberal trade regime, and adoption of an antitrust law. Such policies were maintained after the federation with the Czech Republic was dissolved.

Competition policies Competition legislation in Slovakia differs from that found in many industrialized economies in the mandate given to the office to scrutinize legislation, regulations and the behavior of government agencies from a competition perspective. The office also has the mandate to vet privatization proposals to ensure that former state-owned companies with market power are not converted into privately owned de facto monopolies. In 1995, the office issued over 200 comments on proposed and existing legislation and decrees; initiated 37 cases against government agencies (mostly provincial and municipal); reviewed 230 privatization deals; and investigated 141 cases dealing with potential anticompetitive practices. Of the latter, 39 dealt with horizontal practices (collusion, cartels, etc.), 77 involved allegations of the abuse of a dominant position, and 25 focused on proposed mergers. Most of these cases centered on the behavior of (public) utilities. Another industry that has figured in the activities of the Slovak competition authorities are foodstuffs.

Trade policy Tariffs on industrial products are generally low and bound in the WTO. The average (unweighted) statutory nominal tariff is 6.5 percent in 1996, including agricultural items which often have significantly higher tariffs than manufactures. The effective tariff burden is even lower: total tariff revenue in 1996 was equivalent to 3 percent of the total value of imports.

Privatization The Slovak Republic was in the vanguard of transition countries in terms of the speed and depth of its privatization program. The sell-off of state assets started in 1991 (in then-Czechoslovakia) when the majority of shares in some 700 enterprises were distributed through a voucher-based mass-privatization scheme. The assets of the retail sector were mostly sold through auctions. A second mass-privatization round commenced with the distribution of shares in 1994, but was halted in July 1995. In 1996, privatization resumed through direct sales, and in particular management buy-outs. By end-1997, around 95% of all manufacturing enterprises were in private hands. The state continues to retain ownership of 29 enterprises (mostly utilities and defense-related). It also maintains a “golden share” in another two dozen companies in the chemical, mining, engineering, and construction sectors.

Notwithstanding the problems of interpretation discussed above, simple indicators such as import penetration, entry/exit (turnover rates), concentration ratios and price-cost margins can be helpful in assessing the net effect of all of a government’s competition policies, especially following significant policy changes.

²⁶ What follows draws on Djankov and Hoekman (1998).

Table 1: Price-Cost Margin Indices

Industry	Price-Cost Margin (1993=100)				Profit rate (% of sales)	
	1993	1994	1995	1996	1993	1996
Meat products	100.0	102.3	100.3	99.8	1.6	0.9
Processed vegetables and fruit	100.0	91.2	92.6	94.2	5.6	0.3
Dairy products	100.0	98.6	92.4	90.1	12.1	2.1
Animal Feed	100.0	101.2	121.6	123.7	1.2	17.3
Bread and Pastry	100.0	101.5	95.4	87.8	9.6	1.1
Sugar and confectionery	100.0	105.2	101.2	92.4	9.8	1.1
Brewery	100.0	109.5	105.4	103.8	5.2	8.5
Soft drinks and mineral water	100.0	93.4	94.5	96.2	6.8	4.9
Tobacco products	100.0	102.5	104.3	100.2	10.8	14.4
Textiles and Apparel	100.0	97.6	96.4	97.3	11.7	10.2
Manufacture of leather clothes	100.0	99.6	99.4	98.2	10.3	6.9
Tanning and dressing of leather	100.0	99.5	97.6	95.3	11.0	8.6
Wood Processing	100.0	98.6	99.3	99.8	15.2	14.3
Pulp Products	100.0	107.4	106.4	103.2	10.1	15.4
Printing and Publishing	100.0	97.8	98.6	93.2	11.2	7.0
Chemicals	100.0	103.2	101.4	99.2	9.4	8.8
Paints	100.0	101.6	99.6	99.8	9.6	9.4
Rubber Products	100.0	96.8	98.8	100.6	13.2	8.7
Manufacture of flat glass	100.0	100.1	102.2	104.3	9.2	13.0
Iron and Steel	100.0	94.5	96.8	94.0	13.1	12.1
Metal Structures	100.0	102.4	97.8	94.4	14.7	11.4
Engines and Turbines	100.0	96.6	95.9	95.3	13.6	8.3
Office Machinery	100.0	105.2	99.8	91.2	14.2	12.4
Electric Motors and Generators	100.0	101.3	100.5	102.6	3.7	7.6
Electronics	100.0	103.5	103.9	101.6	3.9	6.5
Optical Equipment	100.0	97.4	93.4	95.6	11.4	8.6
Motor Vehicles	100.0	99.7	99.7	91.8	11.2	5.7
Ship-building	100.0	98.6	96.3	86.7	16.9	3.9
Other manufacturing, N.E.C.	100.0	81.3	81.5	79.8	18.7	5.9
All Sectors	100.0	100.4	100.2	99.7	10.6	9.6

Source: Own calculations, based on the Slovak Statistical Yearbook and the 1997 (unpublished) census of manufacturing (raw data provided by the Slovak Statistical Office)

Evolution of Measures of Competition

As mentioned previously, from a competition perspective a matter for concern is the ability of industries to raise prices above costs to an extent that would have been impossible if markets were contestable. Data on price cost margins suggest that on average such margins remained constant between 1993-96. In only one sector is there a significant increase in price-cost margins: animal feed (up 23 percent). In some industries where prices increased the most (cars, shipbuilding), price cost margins actually fell significantly. Some of the others, however, have above average increases in price-cost margins (pulp and rubber). Note that the use of price indices conveys little information on the level of price cost margins, i.e., the extent to which price exceeds average costs. (This is a pervasive problem as industry price data series are difficult to obtain. As do most countries, the Slovak statistical office only reports indices for the various sectors.) An imperfect proxy for the degree to which prices exceed costs are firm-level profit rates, defined as revenue net of total average costs (wages, materials, and overhead). Such data can be obtained much more easily than data on

prices. Calculations reveal that the average profit rate in Slovakia is around 10 percent, with 15 percent rarely being reached. Among the most profitable sectors are animal feed (where profits rose from close to zero in 1993 to 17 percent in 1996), and wood, pulp, and flat glass.

Table 2: Concentration of Domestic Activity in Slovakia (5-Firm concentration ratio)

Industry	Slovak Republic				Belgium
	1993	1994	1995	1996	1996
Meat products	32.5	25.3	17.8	14.5	18.2
Processed vegetables and fruit	47.2	42.3	39.2	36.9	31.2
Dairy products	26.8	23.5	20.8	18.9	32.1
Animal Feed	72.6	57.8	42.2	34.2	38.1
Bread and Pastry	14.2	13.3	12.4	11.2	21.3
Sugar and confectionery	47.8	40.5	34.2	31.2	26.9
Brewery	92.1	86.5	74.4	62.3	86.2
Soft drinks and mineral water	62.3	56.6	45.2	42.3	74.2
Tobacco products	95.2	85.6	75.2	72.3	92.1
Textiles and Apparel	30.2	27.2	24.4	20.9	36.2
Manufacture of leather clothes	45.9	41.1	38.5	31.8	20.5
Tanning and dressing of leather	41.2	36.8	27.8	24.7	15.4
Wood Processing	24.5	22.7	20.8	19.6	16.9
Pulp Products	53.6	48.9	42.3	41.9	28.9
Printing and Publishing	61.2	44.6	37.7	32.5	24.3
Chemicals	65.8	66.9	70.2	73.6	76.1
Paints	78.2	72.5	67.7	64.5	27.4
Rubber Products	82.6	77.9	73.3	68.9	29.3
Manufacture of flat glass	84.2	78.7	66.8	61.2	47.5
Iron and Steel	72.3	70.2	69.3	68.7	62.1
Metal Structures	46.9	41.2	36.5	32.5	36.8
Engines and Turbines	72.3	59.8	47.7	42.3	36.7
Office Machinery	65.9	61.2	48.5	42.9	42.6
Electric Motors and Generators	86.9	78.7	65.2	51.6	47.2
Electronics	78.5	61.2	53.2	45.8	51.2
Optical Equipment	88.9	81.2	68.9	64.2	72.3
Motor Vehicles	95.4	88.3	82.1	76.5	76.3
Ship-building	95.6	86.3	77.2	73.6	67.2
Other manufacturing, N.E.C.	42.5	36.4	32.3	27.8	28.6

Source: Own calculations, based on the Slovak Statistical Yearbook and the 1997 (unpublished) census of manufacturing (raw data provided by the Slovak Statistical Office).

Consider next changes in domestic concentration as measured by the share of the largest five producers in total production for home use. Such concentration ratios have fallen significantly (Table 2). Between 1993 and 1996, the five firm concentration ratio for most industries fell by at least 10 percentage points; for many the decline was 20 points or more. The number firms engaged in manufacturing activities has increased by some 200 percent, rising from 1,900 to almost 8,000 (Table 3).

Table 3: Structure of the Slovak Manufacturing Sector (by number of employees)

	1990	1991	1992	1993	1994	1995	1996
Number of Firms	1,924	2,762	4,037	4,873	6,052	7,184	7,871
with							
1-10	1,421	1,875	2,584	3,049	3,798	4,328	4,382
11-24	113	287	422	533	800	1,133	1,332
25-100	42	120	265	452	547	894	1,364
101-250	63	185	370	444	530	513	487
251-500	47	89	147	178	168	164	157
501-1000	90	84	106	102	101	69	72
1001-2500	95	82	91	73	71	63	58
2501-5000	41	31	38	31	27	17	16
5000+ employees	12	9	14	11	10	3	3
Average number of employees in 25+ enterprises	1,283	751	578	419	354	227	186
Average Number of employees in all firms	250	162	149	116	94	67	64

Source: Slovak Statistical Yearbook, 1997

One result has been that the size distribution of manufacturing firms has shifted towards smaller enterprises. These developments have been driven by entry by small and medium sized firms and by the exit of the very large conglomerates employing more than 5,000 persons. In many industries concentration ratios are now similar to or below those found in small industrialized countries such as Belgium (Table 2). This is quite remarkable, given that Czechoslovakia had one of the most concentrated industrial structures in Central Europe.

The average level of tariff protection for industries with above average concentration ratios are in the 5 to 10 percent range. Only in the case of pulp and flat glass is the statutory tariff significantly above the manufacturing average, suggesting that these are industries that have been able to petition the government for greater protection against imports. The degree to which imports satisfy domestic consumption provides a complementary measure of foreign competition. Import penetration ratios generally followed an upward trend for the majority of industries in Slovakia during 1993-96, although the average across all sectors remained constant (Table 4). They fell for nine manufacturing (non-foodstuff) sectors, including chemicals, paint, iron&steel, glass. For many "suspect" sectors (pulp, rubber products, chemicals, glass and iron/steel) import penetration ratios are much lower than the manufacturing average. In these sectors imports satisfy only 15-25 of apparent consumption, as compared to 70-80 percent in other manufacturing industries producing machinery and equipment. They are also sectors where import penetration is significantly less than in our "comparator" Belgium.

A possible explanation for a combination of high concentration and low import penetration is that this reflects Slovakia's pattern of comparative advantage. Slovakia has traditionally exported iron and steel products, pulp, chemicals, and transport equipment. Iron and steel is the most important commodity exported, accounting for 16 percent of total exports in 1996. It is also the item with a high revealed comparative advantage (RCA) index (around 5).²⁷ Chemicals account for another 10 percent of total exports.

²⁷ The RCA is a useful measure of export specialization and is defined as the share of a commodity in a country's total exports relative to the average share of that product in world trade.

They have an RCA that is significantly lower than iron/steel and was declining over time, but remains above the critical value of one, indicating a revealed comparative advantage (Table 5). Flat glass, rubber, and pulp are also sectors with an RCA > 1. Rubber and glass are important export items that grew robustly. These are sectors where the low import penetration may reflect the competitiveness of the industry. This is less likely to be true for pulp or paint, where export growth has been low and/or the sector does not have a revealed comparative advantage.

Table 4: Import Penetration Ratios

Industry	Slovakia				Belgium
	1993	1994	1995	1996	1994
Meat products	0.332	0.317	0.281	0.264	0.315
Processed vegetables and fruit	0.345	0.316	0.271	0.278	0.452
Dairy products	0.241	0.212	0.236	0.228	0.367
Animal Feed	0.625	0.652	0.634	0.584	0.425
Bread and Pastry	0.174	0.154	0.162	0.159	0.218
Sugar and confectionery	0.398	0.356	0.325	0.338	0.459
Brewery	0.224	0.184	0.254	0.247	0.521
Soft drinks and mineral water	0.685	0.645	0.612	0.574	0.425
Tobacco products	0.415	0.459	0.498	0.534	0.627
Textiles and Apparel	0.268	0.317	0.332	0.342	0.839
Manufacture of leather clothes	0.365	0.389	0.425	0.418	0.785
Tanning and dressing of leather	0.385	0.442	0.498	0.562	0.864
Wood Processing	0.095	0.112	0.135	0.168	0.405
Pulp Products	0.286	0.258	0.235	0.289	0.456
Printing and Publishing	0.348	0.327	0.368	0.387	0.527
Chemicals	0.452	0.405	0.365	0.285	0.812
Paints	0.537	0.513	0.485	0.452	0.627
Rubber Products	0.205	0.186	0.248	0.224	0.682
Manufacture of flat glass	0.187	0.162	0.152	0.158	0.457
Iron and Steel	0.365	0.333	0.298	0.241	0.572
Metal Structures	0.429	0.409	0.385	0.364	0.618
Engines and Turbines	0.826	0.802	0.758	0.714	0.662
Office Machinery	0.849	0.828	0.724	0.785	0.524
Electric Motors and Generators	0.728	0.702	0.685	0.624	0.598
Electronics	0.642	0.619	0.587	0.584	0.615
Optical Equipment	0.584	0.611	0.675	0.745	0.578
Motor Vehicles	0.685	0.712	0.742	0.867	0.732
Ship-building	0.357	0.471	0.568	0.648	0.457
Other manufacturing, N.E.C.	0.428	0.390	0.478	0.418	0.452
All Sectors	0.444	0.438	0.442	0.446	0.557

Source: Own calculations, based on the Slovak Statistical Yearbook and the 1997 (unpublished) census of manufacturing (raw data provided by the Slovak Statistical Office). Belgian data are from the AMADEUS CD-Rom on European manufacturing, Rev 3/98 (Brussels).

Table 5: Composition of Exports

Industry	Share in Total (%)		Growth (%) 1993-96	Revealed Comparative Advantage	
	1993	1996		1993	1996
Meat products	0.3	0.1	-49.1	0.256	0.101
Processed vegetables and fruit	1.2	0.7	-14.9	0.786	0.491
Dairy products	0.6	0.5	41.8	0.752	0.825
Animal Feed	0.2	0.2	123.4	0.312	0.505
Bread and Pastry	0.9	0.8	25.2	0.729	0.636
Sugar and confectionery	0.3	0.2	-13.3	0.832	0.521
Brewery	0.5	0.4	10.4	0.787	0.611
Soft drinks and mineral water	0.5	0.4	7.1	1.030	0.696
Tobacco products	0.4	0.3	-4.3	0.783	0.543
Textiles and Apparel	5.1	3.6	2.0	1.388	1.017
Manufacture of leather clothes	0.3	0.2	5.7	0.991	0.698
Tanning and dressing of leather	5.5	4.8	28.3	1.162	1.195
Wood Processing	5.5	4.9	31.7	2.291	2.149
Pulp Products	0.6	0.4	5.0	1.715	1.166
Printing and Publishing	3.4	4.2	78.4	1.915	2.221
Chemicals	12.5	10.5	23.8	1.458	1.173
Paints	0.4	0.3	21.7	0.608	0.521
Rubber Products	2.8	2.4	23.6	3.456	2.882
Manufacture of flat glass	4.1	3.6	28.4	1.900	1.761
Iron and Steel	17.0	16.2	39.1	6.022	5.860
Metal Structures	3.6	3.6	47.9	1.619	1.616
Engines and Turbines	5.8	6.1	55.0	0.697	0.716
Office Machinery	0.4	0.1	-47.1	0.078	0.025
Electric Motors and Generators	1.8	1.9	53.9	0.699	0.772
Electronics	1.0	0.9	27.9	0.282	0.246
Optical Equipment	3.5	3.9	64.9	0.483	0.463
Motor Vehicles	4.4	7.7	156.3	0.443	0.809
Ship-building	2.2	2.0	30.0	0.727	0.796
Other manufacturing, N.E.C.	3.4	3.0	30.2	0.829	0.797
All Sectors			46.5		

Source: Own calculations; data from the United Nations Comtrade database (New York).

Conclusions

Changes in indicators of the type discussed in this paper may reflect varying underlying causal factors. However, taken together and evaluated over time, they provide useful information on trends in the conditions of competition, and are relevant to an assessment of the overall competition policy stance of a government. They also lend themselves to ready comparisons across countries. Slovakia illustrates that a multidimensional competition policy can have powerful effects in fostering and maintaining contestable markets. An open trade regime, complemented by wide-ranging privatization, free entry into industrial sectors and the imposition of hard budget constraints on remaining state-owned firms has led to a market structure in Slovakia that with a few exceptions is now quite similar to that found in a country such as Belgium. This in itself is quite remarkable, given that Slovakia had among the more concentrated industrial sectors of CMEA countries prior to 1990.