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Aussenwirtschaft

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Suggested Citation: Evenett, Simon J. (2003): Can Developing Economies Benefit from WTO Negotiations on Binding Disciplines for Hard Core Cartels?, Aussenwirtschaft, ISSN 0004-8216, Universität St.Gallen, Schweizerisches Institut für Aussenwirtschaft und Angewandte Wirtschaftsforschung (SIAW-HSG), St.Gallen, Vol. 58, Iss. 2, pp. 215-248

This Version is available at: https://hdl.handle.net/10419/231026

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Aussenwirtschaft; Jun 2003; 58, 2; ABI/INFORM Collection

Can Developing Economies Benefit from WTO Negotiations on Binding Disciplines for Hard Core Cartels?#

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Im September 2003 müssen die Mitgliedstaaten der Welthandelsorganisation (WTO) über die Bedingungen entscheiden, aufgrund derer jedwede Verhandlungen über ein multilaterales Rahmenabkommen in Wettbewerbspolitik stattfinden sollen. Diese Entscheidung wird unter anderem beinhalten, welche Vorschriften, wenn überhaupt, in solch ein Rahmenabkommen aufgenommen werden sollen, einschliesslich möglicher Massnahmen hinsichtlich sogenannter harter Kartelle. Dieser Beitrag diskutiert drei der grundsätzlichen Möglichkeiten, die den Entwicklungsländern in diesem Zusammenhang offen stehen. Es wird argumentiert, dass die Ablehnung jeglicher Beratungen über solche Kartelle im Rahmen der WTO keine risikolose Option darstellt. Es ist schwer vorstellbar, wie ein solcher Ansatz viel zur weiteren Abschreckung, Verfolgung und Bestrafung harter Kartelle beitragen könnte, selbst wenn er von Initiativen ausserhalb der WTO begleitet würde. Unverbindliche Vorgehensweisen wurden bereits versucht und sind, ungeachtet der erheblichen Fortschritte in den letzten Jahren, zum Teil für das unbefriedigende gegenwärtige Flickwerk von Massnahmen verantwortlich. Die zweite Alternative - die Diskussion von Wettbewerbspolitik innerhalb der WTO, jedoch unter Ausschluss von harten Kartellen - weist ähnliche Schwächen auf. Die dritte Option die Aufnahme von Verhandlungen über verbindliche Massnahmen hinsichtlich harter Kartelle - kann unter Bedingungen verfolgt werden, die den Interessen von Entwicklungsländern förderlich sind. Dieser Beitrag beschreibt, welche Voraussetzungen dies sein könnten.

Keywords: WTO competition policy, Cancun, International cartels

JEL-Codes: F13, K33, K42, L41

[#] This paper is published here in honour of Professor Heinz Hauser whose tireless dedication to analyzing the economic, legal, and policy-relevant aspects of the world trading system has been an inspiration to many students and colleagues.

^{*} A longer version of this paper was originally prepared for UNCTAD. The author thanks PHILIPPE BRUSICK, HASSAN QAQAYA, LUCIAN CERNAT, and RAJAN DHANJEE for their helpful and constructive comments on earlier drafts of this paper. The views expressed here, however, are those of the author and not of any other person or any institution.

1 Introduction: Hard Core Cartels, the Doha Development Round, and the Forthcoming Cancun Meeting of WTO Ministers

Just like industrial countries, developing economies benefit when attacks on anticompetitive corporate practices result in prices falling towards incremental costs. The poor find their incomes now buy more necessities. Exporters find their costs fall as the prices of intermediate inputs to production are reduced, and governments benefit as their limited budgets can now purchase more of the goods and services that underpin social protection programs and the like.

Non-competitive market outcomes can have domestic sources – both government-inspired and firm-based. High tariffs, barriers to foreign direct investment (FDI) and to domestic entry, and excessive regulatory burdens can impede the very competition between firms that keeps prices down. Likewise, domestic firms can collude, cartelise, or in some cases monopolise local and national markets, with higher prices invariably being the outcome.

This paper focuses on a different source of non-competitive market outcomes in developing economies: namely private international cartels and the government policies that – deliberately or unwittingly – support these conspiracies. Even though there are a number of different types of private international cartels, a growing body of evidence suggests that they can result in substantially higher prices and fewer choices for customers. Furthermore, those customers are not just private consumers; often the purchases of other firms and governments are distorted by cartelisation. In fact, it is precisely because of the harm created by this conduct that the act of cartelisation is condemned.

Anti-competitive corporate acts are receiving more attention in international fora – such as in the United Nations Conference on Trade and Development (UNCTAD), the World Trade Organization (WTO), and the Organisation for Economic Cooperation and Development (OECD) – principally because of a surge in international cartel enforcement actions in the 1990s and because of the recent wave of cross-border mergers and acquisitions, which was of an unprecedented scale. The focus here on private international cartels is not meant to imply that other forms of anticompetitive cross-border conduct by firms are unimportant, insignificant, or uninteresting. It is just that, at this point in time, the empirical record

upon which to base sound policy is much more developed for private international cartels than for any other type of cross-border anti-competitive practice.

Discussions on the appropriate national and international measures to tackle cartels are likely to intensify in the months leading up to the Cancun meeting of WTO Ministers. At that meeting, members of the WTO are due to decide upon what terms, if any, to conduct negotiations on a potential multilateral framework on competition policy. It has been proposed by some developing and industrial economies that such a framework should include provisions on so-called hard core cartels (a term defined in the next section.) These proposals have been advanced during the work programme on competition policy matters that Ministers established for UNCTAD and for the WTO and its members in the Doha Development Declaration.¹

The goal of this paper is to assess whether developing economies can benefit from negotiations that might lead to both binding provisions on national cartel enforcement and to measures that encourage voluntary cooperation on cartel enforcement matters between official agencies. After this introduction, the first order of business is to define what a private international cartel is and to relate it to the commonly-used term "hard core cartel". In the Section 3 of this paper, the enforcement record against private international cartels in the 1990s is reviewed and evidence presented on the prevalence of, and estimated damage done by, private international cartels. Section 4 discusses a number of ways in which states effectively encourage their firms' attempts to cartelise markets abroad. Drawing on this evidence and the known enforcement record, Section 5 discusses the case for a binding international accord on cartel enforcement. This case is then related to both the existing non-binding international measures to strengthen cartel enforcement efforts and a number of governmental perspectives on the merits of binding multilateral provisions on hard core cartels. Section 7 of the paper discusses how the flexibility in the existing proposals for binding provisions on hard core cartels

Paragraph 25 of that Declaration states: "In the period until the Fifth Session, further work in the [WTO's] Working Group on the Interaction between Trade and Competition Policy will focus on the clarification of: core principles, including transparency, non-discrimination and procedural fairness, and provisions on hardcore cartels; modalities for voluntary cooperation; and support for progressive reinforcement of competition institutions in developing countries through capacity building. Full account shall be taken of the needs of developing and least-developed country participants and appropriate flexibility provided to address them." Internet: http://www.wto.org/english/thewto_e/minist_e/min01 e/mindecl e.htm (downloaded May 1, 2003).

could be used to advance the interests of developing economies. Concluding remarks are offered in *Section 8*.

2 Defining Terms: Private International Cartels

To fix ideas, the definitions of different types of cartels are presented. This will serve to clarify the distinction between international cartels and some other forms of cross-border anti-competitive conduct. It is worth noting that the definition of a private cartel stated below is one typically employed in economic analysis and need not be the same as the definition of such cartels found in existing international accords. More will be made of the distinction between the former and the latter later in this section and elsewhere in the paper.

A private cartel is said to exist when two or more firms, that are not de facto or de jure controlled by a government, enter into an explicit agreement to fix prices, to allocate market shares or sales quotas, or to engage in bid-rigging in one or more markets. It is worth noting that the objective of a private cartel is to raise prices above competitive levels, so harming the customers – who can be consumers, other firms (whose competitiveness is thereby harmed), or governments.²

A private international cartel is said to exist when not all of the firms in a private cartel are headquartered in the same economy or when the private cartel's agreement affects the markets of more than one national jurisdiction. This definition, therefore, rules out cartels that involve state enterprises (as in the case of OPEC). Furthermore, the definition requires an explicit agreement between firms, which distinguishes cartelisation from collusion.³ Another aspect of this definition is that it allows for governments and the private sector to be victims of private international cartels.

It is also worth distinguishing between *private international cartels* and *export cartels*. The latter are a special type of a private international cartel in which the conspiracy does not involve commerce in the economies where the cartel members are headquartered. Often discussions of export cartels implicitly assume that such a cartel is made up of firms from one

² For a classic statement of the economics of cartelisation see STIGLER (1964).

³ In economic analyses of collusion, firms enter into implicit agreements. Such agreements can arise with repeated interaction between the firms.

nation and that the agreement is to cartelise markets abroad. (This interpretation is not surprising as many nation's laws give specific exemptions from national antitrust laws to those cartels that only affect commerce abroad.⁴) However, in principle, an export cartel could include firms headquartered in more than one economy.

Another term is prominent in the discussions on private cartels, namely, hard core cartels. This term has acquired a special significance since the OECD members agreed in 1998 to a non-binding 'Recommendation' on such cartels. According to the OECD, a hard core cartel is

"an anticompetitive agreement, anticompetitive concerted practice, or anticompetitive arrangement by competitors to fix prices, make rigged bids (collusive tenders), establish output restrictions or quotas, or share or divide markets by allocating consumers, suppliers, territories, or lines of commerce."

Perhaps the most important distinction between the definition of "private cartels" and that of "hard core cartels" is the repeated reference to the phrase "anticompetitive" in relation to "hard core cartels".⁶ This raises the issue as to whether a cartel could be pro-competitive, that is, whether a cartel's formation could result in lower prices for purchasers. As some Chicago-school scholars have pointed out, as a theoretical matter it is possible for a cartel – under certain specific circumstances – to result in large enough cost reductions that prices paid by purchasers actually fall.⁷ The relevance of this theoretical observation for policy discourse has not been established in the available empirical evidence on recently prosecuted private international cartels.

The definitions outlined above also serve to clarify the distinctions between private international cartels and other forms of anti-competitive corporate practices. First, cartels do not necessarily involve mergers, acquisitions, and other forms of inter-firm combination; which may or may

Export cartel exemptions are distinct from export cartels; after all, the former is a legal instrument and the latter are acts by enterprises. In addition, the latter can arise without the former. Moreover, the former may not induce the formation of the latter. In Section 4 of this paper, export cartel exemptions are discussed at greater length.

⁵ See OECD (2000). Notice here that the definition of hard core cartels is being discussed, not the important issue of the sectoral scope and practices covered by the OECD Recommendation. The latter is discussed in Section 6 below.

⁶ Notice that a hard core cartel may well have an international component to it, but need not do so.

⁷ See Landes (1983) for such a claim. Another logical possibility is for the formation of a cartel to increase the sum of consumer and producer surplus, and not just the former. For some empirical evidence on this matter, see DICK (1992).

not result in anti-competitive outcomes. Second, cartels can involve firms that in principle could compete for the same customers. Therefore, cartels can differ from vertical restraints between firms; although some cartels have been found to have a vertical component, too. Third, cartels, by definition, involve more than one firm, and so are different from attempts by a single firm to dominate a market. Finally, attempts by firms to collectively dominate a market are to be distinguished from cartels in that the former do not involve a formal agreement between the firms concerned.

3 The Surge in Enforcement Actions Against Private International Cartels since 1993

Perhaps the most blatant and egregious foreign source of non-competitive market outcomes in developing economies are private international cartels. On the face of it, the greater integration of national markets through trade and investment reforms should have made it harder to sustain such cartels – at least those cartels which raise prices substantially. Even if it is generally the case that trade reform undermines these cartels' operations, the large number of international cartels uncovered in the 1990s suggests that market forces alone do not offer complete protection against this menace to international commerce.

A brief account of why international cartel enforcement surged in the 1990s is instructive as it highlights both the effectiveness and the limitations of national anti-cartel regimes. The growth of cartel prosecutions occurred after 1993, when the United States revised its anti-cartel enforcement practices so as to strengthen the incentives for a cartel member to break away from its co-conspirators and to provide evidence of the cartel's operations to authorities in return for a reduction in the potential penalties. Essentially, under its so-called corporate leniency programme, the US authorities guaranteed the executives of the first cartel member which agreed to cooperate with their inquiries consideration for a full amnesty from fines and criminal sanctions. Combined with the very strength of sanctions against cartelisation in the United States - including provisions for executives to be jailed - this change in leniency provisions provided cartel members with strong incentives to come forward with information. The alternative to inducing firms to come forward with evidence is for enforcement authorities to search for evidence of cartelisation, which is often costly. It is also often fairly fruitless because cartel members are adept at putting evidence of their meetings and agreements beyond the reach of enforcement agencies. Moreover, overly intrusive searches give rise to claims of harassment from the private sector. It should be noted that the European Commission as well as other jurisdictions' enforcement agencies – such as Ireland and Great Britain – have introduced similar leniency programmes in recent years. However, some nations have debated doing so but have rejected adopting a leniency programme. In the case of Australia, the rejection was on the extraordinary grounds that these schemes provide incentives for businessmen to "dob" (an Australian term meaning "incriminate") their friends and fellow businessmen.

What did this combination of strong sanctions for cartelisation and a specially-tailored leniency program accomplish? Evidence collected from amnesty programmes in the United States and the European Union has been instrumental in the prosecution of most of the forty or more private international cartels uncovered since 1993. Since 1993, fines imposed by American authorities on members of international cartels have exceeded US\$ 1.9 billion. Last year alone, the European Commission fined international cartel members over a billion euros.

Table 1 lists the headquarters of the firms that participated in forty private international cartels prosecuted by the United States and the EC since 1990. As can be seen in this table, these cartels affected a wide range of products and were not confined to a small number of economic sectors. Moreover, the cartel members were spread all over the world having their headquarters in 31 economies, eight of which were in developing economies. These findings, and others, suggest that is difficult to sustain the argument that private international cartels are a geographically localised problem or one that is concentrated in a small number of industries. Furthermore, 24 of these 40 cartels lasted for at least four years, casting doubt on the claim that private international cartels quickly collapse under the weight of their own incentive problems or under pressure from imports from non-cartel members (EVENETT, LEVENSTEIN and SUSLOW 2001). The duration of the private international cartels prosecuted in the 1990s is shown in Figure 1.

⁸ US officials claim that before 1993 they received approximately one application for leniency a year. After 1993, they claim they received on average one application for leniency per month. It is worth bearing in mind that these numbers undoubtedly include leniency applications by firms in cartels that affect only US commerce, and so would fall outside the definition of a private international cartel.

⁹ This finding suggests that private international cartels cannot be accurately characterised as a North-South phenomenon, with Northern firms exploiting – to use the deliberately emotive language of recent debates over international trade reform – Southern purchasers. Indeed, if such a characterisation were entirely accurate, it would beg the question as to why the EC and the US prosecuted these cartels in the first place!

Table 1 Locations of the Headquarters of Firms that Were Convicted of Price Fixing by the United States and the European Commission During the 1990s

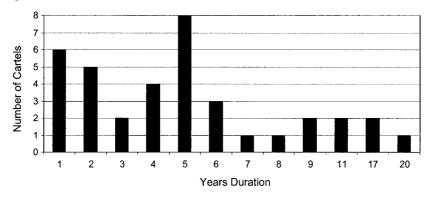
Angola	Shipping		
Austria	Cartonboard, citric acid, newsprint, steel heating pipes		
Belgium	Ship construction, stainless steel, steel beams		
Brazil	Aluminum phosphide		
Canada	Cartonboard, pigments, plastic dinnerware, vitamins		
Denmark	Shipping, steel heating pipes, sugar		
Finland	Cartonboard, newsprint, steel heating pipes		
France	Aircraft, cable-stayed bridges, cartonboard, citric acid, ferry operators, methionine, newsprint, plasterboard, shipping, sodium gluconate, stainless steel, steel beams, seamless steel tubes		
Germany	Aircraft, graphite electrodes onboard, citric acid, aluminum phosphide, lysine, methionine, newsprint, pigments, plasterboard, steel heating pipes, seamless steel tubes, vitamins		
Greece	Ferry operators		
India	Aluminum phosphide		
Ireland	Shipping, sugar		
Israel	Bromine		
Italy	Cartonboard, ferry operators, newsprint, stainless steel, steel heating pipes, seamless steel tubes		
Japan	Graphite electrodes, lysine, <i>methionine</i> , ship transportation, shipping, sodium gluconate, sorbates, seamless steel tubes, thermal fax paper, vitamins		
Luxembourg	Steel beams		
Malaysia	Shipping		
Mexico	Tampico fiber		
Netherlands	Cartonboard, citric acid, ferry operators, ship construction, sodium gluconate, tampico fiber		
Norway	Cartonboard, explosives, ferrosilicon		
Singapore	Shipping		
South Africa	Diamonds, newsprint		
South Korea	Lysine, methionine, ship transportation, shipping		
Spain	Aircraft, cartonboard, stainless steel, steel beams		
Sweden	Cartonboard, ferry operators, newsprint, stainless steel		
Switzerland	Citric acid, laminated plastic tubes, steel heating pipes, vitamins		
Taiwan	Shipping		
UK	Aircraft, cartonboard, explosives, ferry operators, newsprint, pigments, plasterboard, shipping, stainless steel, seamless steel tubes, steel beams, sugar		
US	Aircraft, aluminum phosphide, bromine, cable-stayed bridges, cartonboard, citric acid, diamonds, ferrosilicon, graphite electrodes, isostatic graphite, laminated plastic tubes, lysine, maltol, methionine, pigments, plastic dinnerware, ship construction, ship transportation, sorbates, tampico fiber, thermal fax paper, vitamins		
Zaire	Shipping		

Source: Levenstein and Suslow (2001) Table 1;

Note: Products in italics are currently were investigation at the time this paper

was written.

Figure 1 The Duration of International Cartels Prosecuted in the 1990s



Source: Levenstein and Suslow (2001) Table 1;

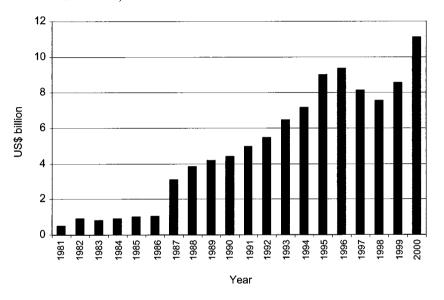
Turning now to the effects of these private international cartels, the findings of detailed qualitative research are disquieting (Connor 2001; Evenett, Levenstein, and Suslow 2001; Levenstein and Suslow 2001). In addition to the purchasers of cartelised products paying more, there is evidence that some cartel members took steps to:

- 1. shut out non-members from markets through the use of antidumping investigations,
- 2. co-opt new entrants in their industry, and
- 3. limit access to the latest technological developments only to cartel members.

These latter effects imply that private international cartels also affect non-cartel members' access to, and ability to compete in, international markets. Attempts to quantify the impact of private international cartels have grown in sophistication in recent years. Initially, studies focused on the price reductions observed after a cartel collapsed and most studies pointed to a 20–40 percent fall in prices (Levenstein and Suslow 2001; OECD 2000). In addition, various estimates have been made of the value of international trade flows that have been affected by cartelisation. *Figure 2* reproduces calculations of the total value of developing economy imports of twelve cartelised products throughout the 1990s (in this figure, if a cartel operated from 1993 to 1995, for example, then only for those years are developing country imports of the cartel's goods included in the reported totals). By 1995, annual imports of these twelve cartelised products by developing economies routinely exceeded US\$ 8 billion and exceeded US\$ 80 billion from 1990 to 2001. Assuming a 20–40 percent price

overcharge, this implies that developing economies paid US\$ 12.5–25 billion dollars more than they should have done for these twelve products alone. This range of overcharges is likely to be a substantial underestimate of the true overcharges paid by developing economies during 1990–2001 as it omits the overcharges on the products supplied by the other twenty eight private international cartels listed in *Table 1* and the overcharges of the undetected private international cartels.

Figure 2 Total Imports of Twelve Cartelised Products by Developing Countries, 1981–2000



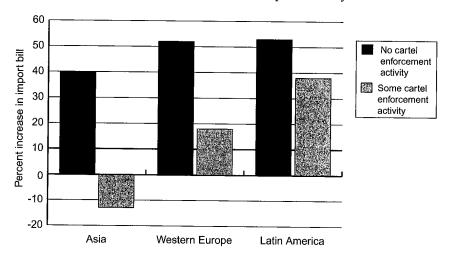
Source: Statistics Canada World Trade Analyzer database;

Note: Considerable effort went into matching the products sold by each of the twelve cartels to the relevant four-digit (SITC) product category in that database. All reported values are converted into year 2000 US dollars.

The effects of certain individual private international cartels have been analysed with more sophisticated empirical techniques (CLARKE and EVENETT 2003; CONNOR 2001; WHITE 2001). A recent analysis of the international vitamins cartel, which divided up the world markets for various types of vitamins from 1989 until 1999, was able to recover estimates of the overcharges paid by 90 vitamins importing nations throughout the 1990s. One of the key findings was that the vitamins cartel appears to have generated more overcharges in those jurisdictions with weak cartel enforce-

ment regimes. For example, after the formation of the vitamins cartel in 1990, those Latin American economies that did not enforce their cartel laws saw their total import bills for vitamins jump 53 percent; which exceeds the 38.1 percent increase in the comparable import bills of the Latin American economies that did enforce such laws. ¹⁰ Similar discrepancies were also found in Asia and Western Europe (see *Figure 3*), suggesting that, in addition to deterring the formation of cartels in the first place, tough cartel enforcement regimes also reduce the damage done by those conspiracies that still have the audacity to get underway.

Figure 3 Impact of the Vitamins Cartel on Import Bills by Continent



Source: Clarke and Evenett (2003) Table 6.

Table 2 presents (what are actually under-)estimates of the overcharges on vitamins imports by 90 economies (see Clarke and Evenett 2003). The total overcharges in India amounted to US\$ 25.71 million (converted to year 2000 prices). The total overcharges for the ten European Union members reported in Table 2 were estimated to be US\$ 660.19 million; that is, approximately two-thirds of a billion dollars. The total overcharges by these 90 importers amounted to US\$ 2,709.87 million throughout the 1990s; just under two and three-quarter billion dollars for this car-

¹⁰ It should be noted that evidence from industry studies suggests that demand for vitamins is price-inelastic; hence, increases in the price of vitamins will result in greater expenditures on vitamins.

¹¹ No doubt differences in the size of India's and Europe's economy account for much of the difference in the amount of overcharges.

Table 2 Estimated Overcharges From the International Vitamins Cartel, 1990–1999, by Importer

Brazil			Millions of US dollars			
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		Millions of US dollars		
Importing economy		Overcharges paid on Vitamins imports during the	Total Value of lime ports during years when importer did.	Total value of im- ports during years when importer aid
		conspiracy	not have a cartel law	have a cartel law
	Nigeria	7.00	20.14	0.00
	Bangladesh	6.42	22.26	0.00
1	Syria	5.79	20.08	0.00
	Paraguay	4.57	13.18	0.00
	Tunisia	4.45	12.80	0.00
	Vietnam	4.38	15.19	0.00
	Costa Rica	3.82	11.03	0.00
	Bolivia	3.45	9.97	0.00
۱ "	Zimbabwe	3.41	9.80	0.00
ž	Lebanon	3.11	10.77	0.00
l e	Dominican Rep. El Salvador	3.07 2.70	8.86	0.00
<u>5</u>	Jordan	2.70 2.54	7.80 8.82	0.00 0.00
용	Jamaica	2.54	6.09	0.00
l 8	Kenva	1.79	5.16	0.00
ЫÄ	Ghana	1.79	3.81	0.00
2	Nepal	1.21	4,21	0.00
S	Nicaragua	1.20	3.46	0.00
5	Cote D'Ivoire	0.88	2.53	0.00
Ä	Senegal	0.82	2.36	0.00
Sec	Trinidad Tobago	0.81	2.33	0.00
<u>8</u> €	Panama	0.68	1.96	0.00
 =	Madagascar	0.60	1.73	0.00
f cartel pros (continued)	Ethiopia	0.59	1.69	0.00
8 8	Yemen	0.58	2.02	0.00
6	Mali	0.49	1.41	0.00
ည်	Mauritius	0.46	1.33	0.00
i i	Cameroon	0.39	1.12	0.00
i Š	Cambodia	0.28	0.98	0.00
9	Benin	0.22	0.63	0.00
=	Togo	0.19	0.53	0.00
¥	Tanzania	0.16	0.46	0.00
S	Haiti	0.11	0.33	0.00
Ë	Angola	0.11	0.33	0.00
Economies with no evidence of cartel prosecutions in OECD documents (continued)	Gabon	0.09	0.27	0.00
	Niger	0.07	0.19	0.00
	Congo	0.06	0.19	0.00
	Burkina Faso	0.06	0.17	0.00
	Malawi	0.05	0.13	0.00
	Rwanda	0.04	0.12	0.00
	Uganda Guinea	0.03 0.03	0.10 0.09	0.00
	Laos	0.03	0.09 0.10	0.00 0.00
	Chad	0.03	0.10	0.00
	Mozambique	0.00	0.04	0.00
		0.00	0.01	0.00

Source: CLARKE and EVENETT (2003) Table 7;

Note: In year 2000 US dollars. Total value of overcharges for imports into these 90 economies is 2,709.87 million US dollars. This table does not include overcharges for Papua New Guinea or for Korea.

tel alone. Furthermore, as CONNOR (2001) has shown and as various OECD reports can attest, the international vitamins cartel is almost certainly not alone in creating over a billion dollars of overcharges. In sum, the 1990s saw many private international cartels exploit the very open markets that multilateral trade reforms have sought for decades to encourage. The result was to raise prices and transfer billions of dollars of rents from purchasers to cartel members. Private cartels are indeed a cancer on international commerce.

4 State Encouragement of Private International Cartels

Another feature of recent research is that it has identified a number of ways in which states deliberately or unwittingly encourage the formation and durability of private international cartels.

There is also evidence that cartel members use antidumping actions, a form of WTO-legal discretionary trade policy, to effectively "police" private international cartels. For example, Indian exporters of graphite electrodes complained that they were shut out of markets where cartel members operated through the threat and use of antidumping investigations (see Levenstein and Suslow 2001). Furthermore, US citric acid producers twice tried to use antidumping actions to prevent entry into the American market of Chinese producers that were not members of the cartel. It so transpired that both attempts did not result in antidumping duties, but recent research has shown that even unsuccessful antidumping actions result in a "chilling" effect on imports (PRUSA 1999). These two examples further highlight the lost opportunities for developing country exporters that result from attempts to sustain international cartels using, or rather abusing, trade remedy laws. These export losses are especially important when ongoing shifts in comparative costs, that would otherwise have favoured developing economy exporters, do not translate into greater market shares - principally because existing cartel agreements tend to lock cartel members into market share allocations that were determined, in large part, by past cost levels. This factor was at work in the lysine cartel, see Levenstein and Suslow 2001).

The relationship between trade policy and cartel formation has another insidious dimension. In some prominent industries, the so-called unfair trade laws have been used to encourage foreign suppliers to negotiate a market-sharing or other cartel agreement. In the case of the aluminium

cartel, such negotiations were actually facilitated by the United States' government in 1994 (STIGLITZ 2001). The result was to end years of falling aluminium prices, much to detriment of corporate purchasers such as food processing companies. In 2001 and 2002 there were considerable concerns that this misuse of trade remedy laws would be repeated in the steel industry, however, to date the safeguards actions have not resulted in a global cartel agreement. Given that steel and aluminium are imported in large quantities by developing economies, their interests are adversely affected by these essentially government-sanctioned arrangements.

The transportation industry is another sector where government-inspired or government-tolerated cartels are rife, in particular for ocean liner shipping conferences. These conferences involve cooperative working arrangements as well as agreements to set prices. Fink, Mattoo and Neagu (2001) estimate that ending these cosy arrangements between private shipping companies would reduce transportation prices on US routes by 20 percent, so reducing the cost of exporting goods to the American market.

There is another form of state encouragement of private international cartels. Many nations appear to have taken the view that their own firms can cartelise markets – so long as those markets are abroad. In fact, numerous jurisdictions have explicitly exempted export cartels from their domestic competition laws – essentially providing some legal privileges and immunities to their own nation's firms which are members of export cartels. *Table 3* lists many of the jurisdictions which have such exemptions in their competition laws (see also OECD 1995). It is worth noting that in recent years some nations have repealed such exemptions – in part, perhaps, because they fear that if their firms get into the habit of cartelising foreign markets then there is a greater risk that the same firms will attempt to cartelise the home market, too.

Initially, such export cartel exemptions were justified on the grounds that small exporters could join together to share the allegedly substantial costs of marketing their products abroad. If these cartel exemptions were specifically to aid small firms, then one might have expected the relevant legislation to be confined to these firms. Invariably, it is not. By encouraging domestic firms to engage in anti-competitive acts abroad, exemptions for export cartels are yet another example of the very 'beggar-thy-neighbour' act that enlightened policymakers have sought to discourage since the wave of retaliatory tariff increases in the early 1930s.

Table 3 National Exemptions To Competition Law for Exporters

Country :	Exemption for	Reporting Requirement
Australia	Contracts for the export of goods or supply of services outside Australia	Submission of full particulars to the national authority within 14 days
Brazil	Joint ventures for exports, as long as there are no effects on the Brazilian market	Must be approved by the national authority
Canada	Export activities that do not affect domestic competition	None
Croatia	Agreements that contain restrictions aiming at improving the competitive power of undertakings on the inter- national market	Prior notification of the agreement to national authority within 30 days of the conclusion of the agreement
Estonia	Activities that do not affect the domestic market	None
Hungary	Activities that do not affect the domestic market	None
Japan	Agreements regarding exports or among domestic exporters	Notification and approval of industry administrator required
Latvia	Activities that do not affect the domestic market	None
Lithuania	Activities that do not affect the domestic market	None
Mexico	Associations and cooperatives that export	None
New Zealand	Arrangements relating exclusively to exports and which do not affect the domestic market	Authorisation required
Portugal	Activities that do not affect the domestic market	None
Sweden	Activities that do not affect the domestic market	None
United States	Webb-Pomerene Act: Activities that do not affect domestic competition. Export Trading Companies Act: Strengthened immunities granted by Webb-Pomerene Act.	Webb-Pomerene Act: Agreements must be filed with the US Federal Trade Com- mission. Export Trading Companies Act: Certificates of Review provided by US Department of Commerce.

Source: OECD (1995); AMERICAN BAR ASSOCIATION (1991); OECD (2000); and Internet: http://www.gettingthedealthrough.com (downloaded May 1, 2002)

To summarise, throughout the 1990s developing economies imported substantial amounts of goods that were sold by privately-orchestrated and privately-run international cartels. If this were not bad enough, some of

these cartels have used government trade policies to police adherence to cartel agreements and to shut out potential entrants – many of which come from developing economies. This suggests that international cartels have reduced developing countries' exports as well as hurting purchasers, the traditional victims of cartelisation. What is even worse is that, in a small number of economically important sectors, governments have actually taken steps towards organising or sanctioning cartels whose purpose is to raise prices on international trade routes or in world markets. Add to this the damage done by export cartels, and it becomes clear that the 1990s have witnessed numerous external threats to competitive market outcomes in developing economies.

5 The Rationale for an International Accord on Cartel Enforcement

Findings such as those in *Figure 1* and *Table 2* may provide a rationale for robust national cartel enforcement regimes – but do they also provide a rationale for international initiatives on cartel enforcement? For this question to be answered in the affirmative it is enough to show that national cartel enforcement efforts – or the absence of such efforts – create 'spill-overs' or knock-on effects in other jurisdictions. An international agreement, then, may be able to strengthen the positive spillovers and reduce the harm done by negative spillovers. Two arguments, borne out in the enforcement experience of the 1990s, imply there is a case from an international accord that specifies minimum standards of cartel enforcement.¹²

The first spillover arises from public announcements in one nation about cartel enforcement actions that tend to trigger investigations by trading partners. For example, Korea began investigating the graphite electrodes cartel after reading about American enforcement actions against this cartel. Likewise, Brazil initiated investigations into the lysine and vitamins cartels after US investigations were concluded (see Brazil 2002). Trading partners therefore benefit from active enforcement abroad – and these

¹² Other arguments for international collective action against private international cartels can be found in Evenett, Levenstein and Suslow (2001); and Clarke, Evenett and Gray (2003).

¹³ This is not to suggest that, at present, there is much inter-agency cooperation on cartel enforcement, with the potential exception of cooperation between US and Canadian agencies (see Waller [2000] for an account of the latter.) This dearth of cooperation is probably a reflection of the fact that confidential information on cartel cases typically cannot be shared with foreign enforcement agencies and that, until recently, few agencies beyond Brussels, Ottawa, and Washington, D.C., were enforcing their jurisdiction's cartel laws in the first place. The constraints on sharing confidential information are discussed at greater length in the next section.

benefits are likely to be reinforced over time as formal and informal cooperation between competition authorities deepens.

The second argument is based on the fact that prosecuting an international cartel almost always requires securing testimony and documentation about the nature and organisation of the conspiracy. To the extent that an international cartel hides such documentation in a jurisdiction that cannot or will not cooperate with foreign investigations into the cartel's activities, this jurisdiction's actions (or non-actions) have adverse effects on their trading partners' interests. The key point is that when a nation does not rigorously enforce its cartel laws the damage done is rarely confined to its own borders. An international accord on the enactment and enforcement of cartel laws can go some way to eliminating *safe havens* for domestic as well as international cartels. Moreover, such an accord would have to be binding to prevent a national government – for whatever reason – from failing to enact such a law.

Much has been made by the critics of a potential WTO agreement on competition policy of the need to identify spillovers as the rationale for international collective action (HOEKMAN and MAVROIDIS 2002). The purpose of this section has been to show the difficulties in obtaining evidence and cartel-related information that underlie two such spillovers.

6 Towards Multilateral Disciplines on Private International Cartels?

The previous sections have pointed out the harm caused by private international cartels and the causes of sub-optimal levels of anti-cartel enforcement; thereby providing the backdrop for a discussion on the desirability of binding WTO disciplines on cartel enforcement. Before doing so, it is important to appreciate that there are already important non-binding international accords in place that encourage nations, individually and collectively, to tackle private international cartels.

Mention has already been made of the OECD 'Council's Recommendation Concerning Effective Action Against Hard Core Cartels', adopted on March 25, 1998, which enjoined OECD members to strengthen their enforcement efforts against hard core cartels. It is worth noting in this regard, however, that the effectiveness of this Recommendation is tempered by the considerable scope it permits nations to exempt certain sectors

and practices from the measures against hard core cartels, as the following quotation makes clear:

"the hardcore cartel category does not include agreements, concerted practices, or arrangements that (i) are reasonably related to the lawful realisation of cost-reducing or output-enhancing efficiencies, (ii) are excluded directly or indirectly from the coverage of a Member country's own laws, or (iii) are authorised in accordance with those laws." ¹⁴

This statement explains why, as a legal matter, export cartels are not considered to be hard core cartels in certain jurisdictions that have enacted certain legal privileges for domestic firms that cartelise markets abroad. In fairness, the Recommendation does go on to note:

"However, all exclusions and authorisations of what would otherwise be hardcore cartels should be transparent and should be reviewed periodically to assess whether they are both necessary and no broader than necessary to achieve their overriding policy objectives." ¹⁵

This OECD initiative is pre-dated by the United Nations General Assembly's adoption on December 5, 1980 of the 'Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices', the so-called UNCTAD Set. ¹⁶ The latter contains an explicit injunction to firms to refrain from many of the measures taken by private international cartels, as the following statement makes clear:

"Enterprises [...] should refrain from practices such as the following when, through formal, informal, written or unwritten agreements or arrangements, they limit access to markets or otherwise unduly restrict competition, having or being likely to have adverse effects on international trade, particularly that of developing countries, and on the economic development of these countries:

- (a) Agreements fixing prices, including as to exports and imports;
- (b) Collusive tendering;
- (c) Market or consumer allocation arrangements;
- (d) Allocation by quota as to sales and production;
- (e) Collective action to enforce arrangements, e.g. by concerted refusals to deal;

¹⁴ OECD (1998) section I.A.2.b.

¹⁵ OECD (1998) section I.A.2.b.

¹⁶ This Set has been reviewed by UN members in 1985, 1990, 1995, and 2000. The Fourth Review Conference, held on September 25–29, 2000, adopted a resolution which: "Reaffirms the validity of the UN Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices, recommends to the General Assembly to subtitle this set for reference as the "UN Set of Principles and Rules on Competition", and calls upon all member States to implement the provisions of the Set." This resolution is contained in UN document TD/RBP/CONF.5/15.

- (f) Concerted refusal of suppliers to potential importers;
- (g) Collective denial of access to an arrangement, or association, which is crucial to competition."¹⁷

Furthermore, the Set calls upon signatories to act individually or collectively to tackle restrictive business practices, of which international cartelisation is a leading example. In the preamble to Section IV, the Set states that signatories are:

"Convinced of the need for action to be taken by countries in a mutually reinforcing manner at the national, regional and international levels to eliminate or to effectively deal with restrictive business practices [...]".

Even though the Set and the OECD Recommendation are non-binding, it is quite likely that both international initiatives have strengthened cartel enforcement in both developing and industrial economies. These measures have helped raise the public profile of cartel enforcement (and other forms of competition policy enforcement, for that matter) and have facilitated the discussion and exchange of best practices and views at regular international meetings. The question of interest here, however, is whether nations ought to go the next step and consider negotiating and adopting a binding agreement on national cartel enforcement under the auspices of the WTO. To better understand the issues involved, it might be useful to describe precisely some of the recent contributions by nations to the WTO's 'Working Group on the Interaction Between Trade and Competition Policy'. First, the contributions of several developing countries are described and then the proposals of the European Community and its Member States for multilateral rules on hard core cartels are outlined.

A number of submissions to this Working Group have noted the harm done to developing countries by international cartels. The following remark by Thailand is representative in this regard:

"Thailand recognizes the potential damage associated with an international cartel and the urgent need to eradicate these cross-border collusive practices. We also recognize that these cartels tend to operate in countries with weak enforcement of competition laws and thus support multilateral assistance in providing mutual assistance in fighting these cartels" 18.

¹⁷ UNCTAD (2000) section IV.D.3., p. 13.

¹⁸ THAILAND (2002a) para. 1.

Korea, for one, has also stated that:

"[...] regulations on cartels should be included in the multilateral framework on competition policy, for their negative impacts are clear and also significantly affect international trade"¹⁹.

This Korean contribution goes on to usefully describe a number of the key components of potential multilateral disciplines on hard core cartels; namely, the definition and scope of hard core cartels, obligations on WTO members to take effective enforcement action against such cartels, provisions for flexibility, and modalities for voluntary co-operation. With respect to non-discrimination and exemptions, Thailand has proposed that export cartels should be prohibited (Thailand 2002b, para. 2.1). Moreover, India has argued for a ban on exemptions from national competition laws for export cartels, although it is envisaged that this ban would only apply to industrialised countries (India 2002, para. 3).

With respect to international co-operation in the enforcement of anti-cartel laws, Thailand has made an ambitious proposal (see THAILAND 2002a). Specifically, Thailand has argued

"that the initial commitment in multilateral cooperation in fighting hard-core cartels should consist of the following elements:

- Notification, which requires authorities that are in the process of investigating and prosecuting international hard-core cartel cases to promptly alert concerned authorities in countries that the cartels may be operating. The notification should include, at a minimum, the background and preliminary analysis of the particular case. Authorities should be kept up-to-date on a regular basis with regard to the progress.
- Mandatory consultation, which requires governments that are investigating an alleged cartel to engage in discussions with other Member countries whose interests may be affected.
- Assistance, which requires competition authorities to co-operate in terms of providing analytical assistance, sharing of experience, suggestions concerning enforcement techniques, etc. Requests for information gathering should also be facilitated."²¹

¹⁹ KOREA (2002) para. 4.

²⁰ It should be noted that this submission does not include specific proposals from Korea on each of these matters. Nevertheless, this submission is – in this author's view – a particularly helpful contribution as it lays out a number of important issues that would probably have to be addressed if negotiations began on multilateral disciplines on hard core cartels.

²¹ THAILAND (2002a) para. 5.

This submission goes on to make clear that many of the above obligations would be mandatory and not voluntary. Thailand has also argued that – due to financial constraints in developing countries – competition agencies in developing economies be

"financially compensated for delivering requested services and be allowed to cooperate to the extent possible subject to technical and financial constraints" ²².

The European Community and its Member States have put forward perhaps the most comprehensive proposal for binding WTO disciplines on private international cartels in a submission on July 1, 2002 (submission No. WT/WGTCP/W/193). This submission characterises hard core cartels as:

"[...] cases where would-be competitors conspire to engage in collusive practices, notably bid-rigging, price-fixing, market and consumer allocation schemes, and output restrictions. These practices can appear in a number of shapes and combinations" ²³.

The submission goes on to describe EC enforcement actions against private international cartels as well as to review the recent research findings on the effects of such cartels on the world economy, noting in particular research undertaken at the OECD and for the World Bank.

On the basis of this submission, the Commission envisages that a potential WTO agreement on hard core cartels could include the following provisions:

- "a clear statement that [hard core cartels] are prohibited" (EC 2002, p.
 This presumably includes domestic hard core cartels as well as private international cartels.
- 2. a definition of "what types of anti-competitive practices could be qualified as 'hard core cartels' and would be covered by the multilateral ban" (EC 2002, p. 5). The EC notes, in this respect, that such a definition might include a description of the permitted exceptions and exemptions to such a multilateral ban, although in this submission the EC did not take a stand on what those exemptions and exceptions might be (see EC 2002, p. 6). It would appear that, at the time of making the proposal, the EC was not prepared to take a position on whether export cartels are a type of hard core cartel.

²² THAILAND (2002a) para. 6.

²³ EC (2002) p. 1.

- 3. a commitment by WTO members "to provide for deterrent sanctions in their domestic regimes" (EC 2002, p. 6), while noting that a variety of sanctions are available.
- 4. on "appropriate procedures in the field of voluntary cooperation and exchange of information. Indeed, transparency is an essential element of a framework of competition. Provisions have therefore to be developed on notification, information exchange and cooperation between competition authorities. These would include provisions regarding the exchange of information and more generally, cooperation procedures, e.g. when authorities are launching parallel investigations into the same practice. Negative and positive comity instruments could also be addressed" (EC 2002, p. 7).

It would appear, therefore, that the European Commission envisages a cartel enforcement architecture that includes strong national pillars (enforcement authorities) and a chapeau that links the pillars (information exchange and notification.) Although the EC's submission leaves the reader in no doubt that there are many subtle parameters to be negotiated, the construction of such an architectural edifice would, in their view, constitute:

"a major step towards effectively curbing such cartel activity and eliminating their adverse impact" ²⁴.

In light of the evidence presented in earlier sections, the EC proposal has correctly identified the importance of private international cartels as a distortion to the world trading system and has rightly located two of the policy-related causes of sub-optimal levels of enforcement: ineffective or non-existent national cartel enforcement regimes and inadequate information exchange. In assessing the Commission's proposal it should be borne in mind that the EC is not advocating that WTO members adopt the full set of antitrust or competition laws. The EC is only advocating the enactment and effective implementation of anti-cartel legislation, which is important as fighting cartels is widely regarded as the relatively undisputed 'high ground' of competition policy.²⁵ Nor is the EC proposing that each nation – irrespective of their level of development – adopt exactly the same type of cartel law. Rather it is advocating that a cartel law, however implemented, should meet certain basic criteria. Consequently, it

24 EC (2002) p. 7.

²⁵ That is, the practical and conceptual arguments for attacking cartels are widely regarded as stronger than the arguments in favour of intervention in other areas of antitrust or competition policy (such as vertical restraints and mergers).

cannot be asserted that the EC is seeking to impose a 'one size fits all' solution to the cartel problem; to use that often-repeated and tired cliché.

One interesting issue raised in the Thai submission is the efficacy of a multilateral rule requiring the mandatory sharing of all cartel investigation-related information. Often, the argument given in defence of not sharing all such information is that some of it is confidential and is protected by statute. This particular argument is not very persuasive as the information needed for cartel prosecutions is often retrospective (and therefore need not concern future business plans) and typically relates to information as to when corporate executives met, where, and what illicit agreements they signed. It is not clear that national statutes should be protecting this type of information. Moreover, even if national statutes currently prevent such information being exchanged, nothing prevents a WTO member from proposing a provision that such statutes be amended to explicitly exclude protections for documents relating to cartel activities.

There is, however, a more compelling and distinct rationale for not requiring the mandatory exchange of all information obtained in a cartel investigation. The point to bear in mind is that most of the private international cartels prosecuted in the 1990s by the EC and the US authorities resulted from information supplied through corporate amnesty programmes. The incentive of a firm that is participating in a private international cartel to furnish such information to a national competition authority is severely diminished if that information must be automatically passed on to other nations' competition authorities where the firm could face sanctions for its illicit conduct. Put bluntly, the mandatory sharing of information acquired during cartel investigations will result in a substantial reduction in the amount of information supplied through leniency programmes; which – on the basis of the experience since 1993 – would compromise one of the most effective weapons in the fight against private international cartels. Indeed, such considerations may account for the assurance given by the US Department of Justice of the confidentiality that can be accorded to information supplied by leniency applications.²⁶

There are a number of responses to this conundrum. The first response²⁷ is to require some form of notification by authorities to other nations whose interests may be affected by a private international cartel or by an

²⁶ See "Status Report: Corporate Leniency Program," issued by the US Department of Justice in June 2002, Internet: http://www.usdoj.gov/atr/public/guidelines/11314.pdf (downloaded May 1, 2003).

²⁷ This is in fact what the EC submission proposes.

investigation into such a cartel; a requirement that may not actually result in much investigation-specific information being shared. The second response is to encourage the formation and operation of joint corporate leniency programmes. Such joint programmes could offer cartel members the prospect of some (or even full) leniency in a number of jurisdictions in return, of course, for information on the cartel's activities within those jurisdictions. This may well strengthen the incentive of firms to defect from a cartel agreement but has little to offer countries that are not members of such joint programmes.

A third response is for a nation to automatically offer a firm that receives amnesty from another WTO member's competition authority no worse treatment (in terms of reductions in fines and non-incarceration of executives) if the firm comes forward with the same information it supplied the first competition authority and if it supplies any additional information and assistance needed to secure a prosecution in the second jurisdiction.²⁸ This response has the advantage that a nation can implement such a provision unilaterally and does not rely on a nation finding willing partners for a regional competition enforcement body or for a joint leniency programme. Furthermore, a no-worse-treatment provision could be used as evidence in support of a nation's claim that it is serious about enforcing its cartel law. Finally, such provisions would strengthen the incentive of firms to defect from their cartel agreement in the knowledge that a successful amnesty application to one jurisdiction's authority would result in (at least) comparable treatment from some other nation's enforcement bodies.²⁹ In sum, there are creative ways to enhance the flow of investigation-related information that do not involve the mandatory sharing of information.

Another important matter concerns the role of Special and Differential Treatment in any multilateral framework on competition policy (the former term is commonly discussed in the literature on trade and competition policy, see OECD 2001). Even though it is unclear why any government that wanted to eliminate distortions to market forces would want to do so, proponents of a multilateral framework accept that WTO members

²⁸ This proposal could be modified in certain ways. So as to avoid the problem of any one nation's anti-trust authority "giving away the store" (so-to-speak) to leniency applicants, there could be commonly agreed rules on what constitutes sufficient cooperation by a leniency applicant with an antitrust authority. Alternatively, the promise of automatic leniency might only follow if a jurisdiction with a known track record of enforcement offers leniency to an applicant.

²⁹ It should also be said that nothing prevents a nation from adopting such a provision now, in the absence of a WTO agreement.

may wish to negotiate exceptions and exemptions from the multilateral ban on hard core cartels. Furthermore, at present, these proponents do not rule out longer transitional periods for developing economies, and technical assistance is often mentioned as a necessary complement to any WTO rules that require stronger cartel enforcement regimes.

In fact, the role of transitional periods and technical assistance is likely to assume greater importance as discussions intensify over the developmental consequences of a credible national cartel enforcement regime. Ever since the TRIPs (Agreement on Trade-Related Aspects of Intellectual Property Rights) debacle, developing economies have raised concerns about the implementation costs of existing and potential new WTO disciplines, and the concerns have been echoed by certain trade policy experts (see, for example, Winters 2002). Evenett (2003) presents the available evidence on this matter and, after considering existing proposals for a multilateral framework on competition policy, concludes that in general fears about excessive implementation costs for developing countries are exaggerated. However, these concerns appear to be greater for the least developed countries and neither of the foregoing remarks is to suggest that the issue of implementation costs is irrelevant, unimportant, or not worthy of further study.

7 Options for Developing Economies

In the run-up to the fifth WTO Ministerial Conference in Cancun, Mexico, policymakers will have to weigh a number of options with respect to hard core cartels. Depending on how one interprets the Doha Declaration of WTO Ministers, at a minimum developing countries will have to – along with other WTO members – decide the modalities for a negotiation of a potential multilateral framework on competition policy, which could include possible disciplines on hard core cartels. On another interpretation, WTO members in Cancun will have to decide whether any negotiations on such a framework will occur at all.

It would appear that developing economies have at least the following three broad options to consider in this regard:

- 1. Decide not to start any formal negotiations on a multilateral framework on competition policy;
- 2. Decide to start formal negotiations on such a framework but not on potential provisions for hard core cartels;

3. Decide to start formal negotiations on such a framework which includes potential provisions on hard core cartels.

Stating these three broad options will help structure the subsequent discussion. No doubt there exist other potential options; nevertheless, the considerations described below are likely to have some bearing on those other options. Moreover, within each of the three broad options discussed here, there is plenty of room for further clarification and the like.

What would be involved in the first option? Here, developing economies could individually or collectively argue that negotiations on competition law-related matters should not be part of the Doha Development Round. In the absence of multilateral negotiations on competition matters, developing economies would then be free to develop their own cartel enforcement regimes (and other competition laws, for that matter). Moreover, they would be free to cooperate with other nation's enforcement agencies (if all of the parties concerned found that advantageous). And, policy-makers would be free to implement, for example, whatever components of the UNCTAD Set and the OECD Recommendation on hard core cartels they like.

As far as the impact on the negotiations for the Doha Development Round is concerned, this first option would appear to have two consequences for developing countries. One is that developing countries would not have to devote some of their WTO expertise and resources to discussing a multilateral framework on competition policy; a potentially important consideration where such negotiating talent is scarce. This often-heard argument is, however, very one sided. For sure, negotiations take time and cost resources. However, previous sections have made clear just how costly is the status quo to all customers in developing countries including the government which, it should not be forgotten, is often the largest purchaser of goods and services in an economy. The case was made that, without a minimum global standard for national cartel enforcement, hard core cartels are likely to target as well as organise their conspiracies in those jurisdictions with no or weak anti-cartel measures. The issue, therefore, is not whether negotiations are "costly" - each and every type of multilateral negotiation involves incurring some costs - but whether the potential benefits exceed any costs. And, those benefits depend in large part on the likely scope of the negotiations; a matter that is discussed at greater length below.

One way to think about the potential benefits is to consider the following hypothetical. Suppose that multilateral provisions on hard core cartels reduced by just one percent the share of government spending that is affected by bid-rigging, and that on that one percent of purchases in the absence of bid-rigging prices are a mere five percent lower. 30 This would imply that total government spending would fall by 0.05 percent. In India in 2000, the central government spent the equivalent of US\$ 81.3 billion³¹, and a 0.05 percent reduction in that budget due to less bid-rigging would generate over US\$ 40 million a year in savings. These benefits – which ignore any benefits to other Indian purchasers affected by hard core cartels - could then be compared to the cost of negotiating and implementing provisions on hard core cartels. Admittedly, India has a large government budget. But even Zambia³², which had a government budget of US\$ 340 million in 2000, would on the calculations above see annual savings of approximately US\$ 0.17 million; a number that would rise as Zambia's government spending increases. Most likely, it will take only tiny reductions in the incidence of bid-rigging to make government investments in negotiating (and for that matter, implementing) multilateral provisions on hard core cartels worthwhile.33

The other consequence of pushing competition law-related issues off the negotiating table for the Doha Development Round is that it reduces the number of issues over which cross-sectoral trade-offs can be made. Exploiting these trade-offs is at the heart of multilateral trade negotiations and the associated give-and-take will be necessary to secure an overall agreement for the Doha Development Round. There can be no guarantee that some of the proponents of the so-called 'Singapore Issues'³⁴, including the European Union, will be willing to make concessions on market access – which is one of the central demands of developing countries – without negotiations on issues such as competition. In short, the first option is hardly risk-free or costless. Moreover, this option essentially involves maintaining the unsatisfactory arrangements for tackling hard core cartels.

³⁰ As noted earlier, private international cartels tend to inflate prices by 15-20 percent; so the assumption of a five percent price increase is a very conservative one and stacks the analysis against finding significant gains to firm action against bid rigging.

³¹ This figure was taken from CUTS (2003). The example developed in the text here is not found in CUTS (2003).

³² Zambia was chosen because in 2000 it had the lowest total levels of central government spending in the seven countries studied in CUTS (2003). See Table 7 of the latter document.

³³ See Clarke, Evenett and Gray (2003) for a further empirical elaboration of this point.

³⁴ As well as competition, these three other 'Singapore Issues' still under consideration by members of the WTO are investment, trade facilitation, and transparency in government procurement.

The second broad option described on page 240 would involve starting negotiations on competition-law related matters at the WTO but without the inclusion of provisions on hard core cartels. This option might, therefore, include negotiations on the application of core principles³⁵ to the enforcement of competition law, modalities for voluntary cooperation between agencies that enforce competition law, and capacity building and technical assistance. The potential consequences of negotiations on these matters is beyond the scope of this paper, however others have recently discussed their resource implications at length (see EVENETT 2003). There is, however, one hard core cartel-related implication of such negotiations, and this refers to the potential disciplines on voluntary cooperation. To the extent that such disciplines result in greater cooperation between the enforcement agencies of those jurisdictions with national cartel laws, then improvements over the status quo can be expected. Having said that, these benefits will not accrue to all nations - as only a fraction of them have cartel laws, enforce them, and are likely to engage in cooperation. Few developing countries currently meet these conditions, although they might do so in the future. The final observation on this second option is that, because WTO members would not be required to adopt a cartel law, then the safe havens for cartels would remain.

The third broad option would include negotiations at the WTO on potential multilateral disciplines on hard core cartels. The expected benefits to developing countries of this option would depend on the scope of the negotiation. The first point to be made in this regard is that a multilateral requirement to enact and enforce a cartel law is almost certainly good for developing economies in their own right; as the proper implementation of such measures deters cartel formation in their jurisdiction of domestic and international cartels in the first place and encourages those cartels that do form to limit price increases. That is, a multilateral requirement to enact and properly enforce a national cartel law amounts to insisting that WTO members take steps that, on economic grounds, are in their interests anyway! From a global perspective, such a requirement would reduce the adverse knock-on effects for trading partners of a nation's decision not to enact or to enforce a cartel law.

35 These core principles include transparency, procedural fairness, and non-discrimination.

³⁶ Of course, the very fact that not every nation takes these steps is probably due to the strong private sector and official interests that are opposed to vigorous cartel enforcement. Indeed, one can think of the effects of a multilateral requirement to enforce and enact a cartel law as strengthening the hand of reformers within a jurisdiction.

The second point to be made here is that developing countries might take special care to ensure the scope of the sectors and types of private cartels covered by any multilateral disciplines are as broad as possible. In particular, developing countries could insist that – along the lines that Thailand has – directly trade-related cartels should be on the negotiating table (see Thailand 2002b, para. 2.1, 3.2). The latter includes cartels in the shipping industry (including laws governing the formation and operation of liner shipping conferences) and export cartels (in particular the legal exemptions which give members of such cartels certain legal privileges under national cartel laws.) Both types of cartel have a 'beggar-thy-neighbour' aspect to them, and regulating the state measures that underlie them would fall well within the traditional domain of multilateral trade negotiations.

More generally, national policymakers should resist arguments for "flexibility" in sectoral and other exemptions, exclusions, and the like from any multilateral disciplines on hard core cartels. Although political factors may lead policymakers in a different direction, from an economic point of view there is little convincing evidence of the need for such exceptions in the first place. Indeed, "flexibility" can come at a substantial cost to purchasers that have to pay more for goods and services than otherwise. Where political sensitivities call for the creation of exemptions and the like, developing countries could insist on such exemptions being transparent, time-limited, reported to the WTO on a regular basis, and subject to regular national and (possibly even international) review for an assessment of their continuing existence. Such a hard line against exceptions etc. will also reinforce the hand of pro-competition law enforcement officials in developing economies.

The third point to be made is that developing countries might adopt a pragmatic approach to the modalities on voluntary cooperation in hard core cartels. As argued earlier, demanding the sharing of all case-specific material is likely to compromise one of the principal sources of such information in the first place – namely, the voluntary application for leniency by members of existing conspiracies. Instead, developing countries might insist on notification requirements that ensure that the national enforcement agency responsible notifies the WTO (or some other body) after it has completed its investigation and possible prosecution of a private cartel whose actions distort foreign as well as domestic markets. This would avoid the costs and time needed to complete potentially a large number of bilateral notifications and would also have the advantage of creating

central registers of cartel enforcement activities and of international cartels.

Some have voiced concerns about the costs associated with notification. In large part, these notification costs are dependant on the case load of the enforcement agency. The size of the case load, in turn, depends on the strength of a nation's deterrents to cartelisation and on the investigative means at the disposal of officials. It is quite likely that a nation with strong deterrents to cartelisation and effective enforcers will over time demonstrate its seriousness of purpose to the private sector which, in turn, will result in fewer attempts to cartelise and therefore in smaller potential case loads. Even if notification is expected to occur frequently, it should be possible for negotiators to craft notification requirements that are straightforward to implement.

The fourth point to be made in regard to the option of negotiating a multilateral framework on competition policy is that developing countries could insist, as part of the package, on binding levels of technical assistance and capacity building efforts in the future. The latter will help offset any implementation costs from enforcing a national cartel law; further increasing the net benefits of such a framework.

When comparing these three options, it is evident that the first two options represent little or no advance over the status quo. This status quo has seen the cancer of private international cartels inflict billions of dollars of damage – through overcharges for customers and lost export sales for non-cartel members – on developing countries since 1990. In contrast, the third option discussed here – that is, initiating negotiations on potential provisions of hard core cartels – can help developing countries create or reinforce the national foundations for excising this cancer as well as erecting an international architecture to align national efforts towards this important goal. However, developing countries must make sure that negotiations on multilateral disciplines on hard core cartels are as broad in their scope as possible, resisting attempts to exclude sectors and practices – in particular the directly-trade related cartels – that adversely affect their exporters' as well as their purchasers' interests.

8 Concluding Remarks

Over the last ten years the body of evidence on the harm done to developing countries by hard core cartels has mushroomed. It is quite likely that such cartels cost consumers (including the poor), exporters, and governments in the developing world billions of dollars every year. Moreover, after the well-publicised prosecution of several global cartels, it is hard to argue that such conspiracies are inconsequential or unimportant. Developing countries are beginning to take national measures to attack these anti-competitive practices, and the question addressed here is whether such initiatives could be usefully complemented by potential multilateral disciplines on hard core cartels.

Whether developing countries will benefit from negotiations on multilateral disciplines on hard core cartels at the WTO will depend on a number of factors, and no outcomes are guaranteed. However, active participation by developing countries in any such negotiations could tilt the balance in their favour. For example, developing countries could insist that negotiating modalities include all of the legal arrangements that underpin trade-related cartels, such as export cartel exemptions and liner shipping conferences. That is, developing countries can insist that a broad definition of hard core cartels is on the negotiating table. Furthermore, negotiators from developing economies could demand that a flexible approach be taken to the means by which any commitments are implemented, recognising differences in stage of development, legal and business cultures, and the like. Moreover, developing countries could insist on enhanced capacity building efforts during the negotiations and not after their conclusion. All of these remarks suggest that there are a number of proposals which negotiators from developing countries could advance so as to best further their individual and collective interests.

References

- AMERICAN BAR ASSOCIATION (1991), Special Committee Report on International Antitrust, Washington D.C.
- BRAZIL (2002), *Contribution from Brazil*, Second OECD Global Forum on Competition Policy, January 29.
- CLARKE, JULIAN L. and SIMON J. EVENETT (2003), The Deterrent Effects of National Anti-Cartel Laws: Evidence from the International Vitamins Cartel, forthcoming in *Antitrust Bulletin*.
- CLARKE, JULIAN L., SIMON J. EVENETT and K. GRAY (2003), Sector Report: Competition. Sustainability Impact Assessment for the Doha Round.
- CONNOR, JOHN M. (2001), Global Price Fixing: Our Customers are the Enemy, Boston: Kluwer Academic Publishing.
- CUTS (2003) [Consumer Unity & Trust Society], *Pulling Up Our Socks*, A Study of Competition Regimes of Seven Developing Countries of Africa and Asia under the 7-Up Project, Internet: http://cuts.org/pulling.pdf (downloaded May 1, 2003).
- DICK, Andrew R. (1992), Are export cartels efficiency enhancing or monopoly promoting: Evidence from the Webb-Pomerene experience, *Research in Law and Economics* 14, pp. 89–127.
- EC (2002), Communication from the European Community and its Member States to the Working Group on the Interaction between Trade and Competition Policy, Document No. WT/WGTCP/W/193, July 1.
- EVENETT, SIMON J. (2003), Study on the Issues Relating to a Possible Multilateral Framework on Competition Policy, Prepared for the Secretariat of the World Trade Organization and circulated to the Working Group on the Interaction between Trade and Competition Policy, May 14.
- EVENETT, SIMON J., MARGARET C. LEVENSTEIN and VALERIE Y. SUSLOW (2001), International Cartel Enforcement: Lessons from the 1990s, World Economy 24 (9), pp. 1221–1246.
- Fink, Carsten, Aaditya Mattoo and Ileana C. Neagu (2001), *Trade in International Maritime Services: How Much Does Policy Matter?*, World Bank Policy Research Working Paper No. 2522, The World Bank.
- HOEKMAN, BERNARD M. and PETROS C. MAVROIDIS (2002), Economic Development, Competition Policy, and the WTO, World Bank Policy Research Working Paper No. 2917, revised July, The World Bank.
- India (2002) [Government of India], Communication from India to the Working Group on the Interaction between Trade and Competition Policy, Document No. WT/WGTCP/W/216, September 26.

- KOREA (2002) [Government of Korea], Communication from Korea to the Working Group on the Interaction between Trade and Competition Policy, Document No. WT/WGTCP/W/200, August 12.
- LANDES, WILLIAM M. (1983), Optimal Sanctions for Antitrust Violations, *University of Chicago Law Review* 50 (2), pp. 652–678.
- LEVENSTEIN, MARGARET C. and VALERIE Y. SUSLOW (2001), *Private International Cartels and The Effect on Developing Countries*, Background Paper to the World Development Report 2001, Washington D.C.
- OECD (1995), Antitrust and Market Access: The Scope and Coverage of Competition Laws and Implications for Trade, Paris: OECD.
- OECD (1998), Recommendation of the Council concerning effective action against hard core cartels, Document No. C(98)35/FINAL, March 25, Internet: http://www.oecd.org/pdf/M00018000/M00018135.pdf (downloaded May 1, 2003).
- OECD (2000), Hard Core Cartels, Paris: OECD.
- OECD (2001), The Role of Special and Differential Treatment at the Trade, Competition and Development Interface, Joint Group on Trade and Competition, Directorate for Financial, Fiscal and Enterprise Affairs, Paris: OECD.
- PRUSA, THOMAS J. (1999), On the Spread and Impact of Antidumping, NBER Working Paper No. 7404, Cambridge (Mass.): National Bureau of Economic Research.
- Stigler, George J. (1964), A Theory of Oligopoly, *Journal of Political Economy* 72 (1), pp. 44–61.
- STIGLITZ, JOSEPH E. (2001), Globalization and its Discontents, Basic Books. THAILAND (2002a) [Government of Thailand], Communication from Thailand to the Working Group on the Interaction between Trade and Competition Policy, Document No. WT/WGTCP/W/205, August 15.
- THAILAND (2002b) [Government of Thailand], Communication from Thailand to the Working Group on the Interaction between Trade and Competition Policy, Document No. WT/WGTCP/W/213, September 26.
- UNCTAD (2000), The United Nations Set of Principles and Rules on Competition, Geneva: UNCTAD.
- WALLER, SPENCER W. (2000), Anti-cartel Cooperation, in: SIMON J. EVENETT, ALEXANDER LEHMANN and BENN STEIL (eds.), Antitrust Goes Global: What Future for Transatlantic Cooperation?, Washington D.C.: The Brookings Institution Press, pp. 98–116.
- WHITE, LAWRENCE J. (2001), Lysine and Price Fixing: How Long? How Severe?, *Review of Industrial Organization* 18 (1), pp. 23–31.
- WINTERS, L. ALAN (2002), *Doha and the World Poverty Targets*, University of Sussex, mimeo.