Developing Countries and Enforcement of Trade Agreements: Why Dispute Settlement Is Not Enough

Chad P. Bown
Bernard M. Hoekman

The World Bank
Development Research Group
Trade Team
December 2007
Abstract

Poor countries are rarely challenged in formal World Trade Organization trade disputes for failing to live up to commitments, reducing the benefits of their participation in international trade agreements. This paper examines the political-economic causes of the failure to challenge poor countries, and discusses the static and dynamic costs and externality implications of this failure. Given the weak incentives to enforce World Trade Organization rules and disciplines against small and poor members, bolstering the transparency function of the World Trade Organization is important for making trade agreements more relevant to trade constituencies in developing countries. Although the paper focuses on the World Trade Organization system, the arguments also apply to reciprocal North-South trade agreements.

This paper—a product of the Trade Team, Development Research Group—is part of a larger effort in the department to analyze the enforcement of trade agreements. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at bhoekman@worldbank.org.
Developing Countries and Enforcement of Trade Agreements: Why Dispute Settlement Is Not Enough

Chad P. Bown†
Brandeis University and The Brookings Institution

Bernard M. Hoekman‡
The World Bank and CEPR

JEL No.: F13

Keywords: Trade agreements, credibility, WTO, enforcement, dispute settlement, developing countries

† Bown: Associate Professor of Economics, Department of Economics and International Business School, MS 021, Brandeis University, Waltham, MA 02454-9110 USA. Tel: 781-763-4823, fax: 781-736-2269, email: cbown@brandeis.edu, web: http://www.brandeis.edu/~cbown/.


The opinions expressed in this paper are our own and should not be attributed to the World Bank or the Brookings Institution. Thanks to Kyle Bagwell, Robert Staiger, Rachel McCulloch, Gregory Shaffer, Jide Nzelibe and participants at the Bretton Woods ASIL-IELG conference for helpful comments on an earlier version. All remaining errors are our own.
1 Introduction

Research on developing country engagement in the international trading system increasingly challenges its relevance for their economic interests and performance.¹ Within this area of research, there is a growing political-legal-economic literature analyzing the failure of poor member countries to engage actively in the World Trade Organization (WTO), especially through formal legal participation in WTO dispute settlement provisions. Most analysis of poor countries’ lack of engagement in WTO dispute settlement focuses on hurdles to participation as complainants or interested third parties in disputes related to their export market access interests.² For example, only one least developed country (LDC) has ever initiated WTO dispute settlement proceedings: Bangladesh in a 2004 case against India involving Indian anti-dumping duties on lead acid batteries (WTO/DS/306).³

The focus on defending export interests ignores a dimension of the dispute settlement process that may be more important for developing countries and the economic development relevance of the WTO: developing countries in the WTO system are rarely challenged as respondents in WTO litigation. As table 1 indicates, through the end of 2006, only two low-income WTO members (India and Pakistan) have been formally challenged by WTO litigation. Put more starkly, of the more than 350 formal WTO dispute settlement cases through 2006, none of the 32 WTO members classified by the United Nations as LDCs have been challenged.

As it is unlikely that poor countries are in full compliance with their trade liberalization commitments, the failure of WTO members to enforce the provisions of trade agreements reduces the value of participation in such agreements for these countries. Lack of enforcement reduces economic gains from WTO membership for several reasons: welfare economic losses due to continued import protection within developing economies; diminished incentives for the country to take on additional WTO commitments such as reducing tariff bindings to meaningful


² Examples from the economics literature include Bown and Hoekman (2005), Bown (2005a, b), Horn, Mavroidis and Nordström (2005), and Nordström (2005). Examples from politics and legal scholarship include Davis and Bermeo (2006), Busch and Reinhardt (2003) and Shaffer (2006).

³ This case was settled in the consultations stage (Taslim, 2006). See Horn and Mavroidis (2006) and their database on WTO disputes at www.worldbank.org/trade/WTOdisputes.
levels (i.e., at or close to applied rates); as well as externality costs imposed on other developing countries.

There are a number of possible explanations why WTO members do not challenge poor countries. First, poor countries have made only a limited number of market access commitments in the WTO, and they can invoke various provisions that offer them special and differential treatment (SDT) when it comes to application of specific rules. Second, litigation is expensive in economic terms (resource costs), and the potential gains to foreign exporters in terms of increased market access from winning a case may be too small to compensate for the cost of litigation. Third, litigation is also politically expensive – many governments, especially high-income nations, may prefer not to be seen as “picking on” a poor country for WTO violations.

While developing countries can invoke SDT provisions and many have not bound a large number of their nonagricultural tariffs in the WTO, the concern we focus on in this paper is that even if a poor country decides to make full use of the WTO as a commitment mechanism, the current system makes enforcement unlikely. This in turn implies that developing countries are not realizing the full economic benefits of WTO membership, and may help explain why commitments by developing countries are more limited than those of industrialized economies.

The maintained assumption in this paper is that implementation of negotiated commitments is desirable from a national welfare perspective, especially when it comes to the core disciplines of the WTO that are unambiguously welfare enhancing: tariff bindings, bans on the use of quotas, and the principle of nondiscrimination. Non-enforcement of these types of disciplines greatly reduces the relevance and benefits of membership in a trade agreement.

We recognize that in practice, non-enforcement of some WTO rules may be welfare enhancing for a developing country. A case in point is the TRIPS agreement, where the short-run welfare benefit of implementation of commitments by some developing countries has been questioned by numerous analysts. An implication of the weak dispute settlement-cum-enforcement incentives in the case of small/poor countries is that many such WTO members will have “policy space” on a de facto basis. Proponents of greater policy space in the WTO context therefore might argue that the skewed incentive structure for enforcement under the WTO – which requires a minimum “size threshold” to be satisfied – is appropriate. The effect of the

---

4 Every WTO member was required to bind all agricultural tariffs as a precondition for accession to the WTO. For a discussion, see Hoekman and Kostecki (2001).
incentive structure that drives WTO dispute settlement is to ensure that in practice governments of small developing countries may have significant policy flexibility, even in areas where in principle they are bound to multilateral disciplines.

Insofar as non-enforcement of WTO rules would be beneficial for a country, the de facto policy space that is implied by a lack of enforcement is in our view symptomatic of another problem: badly designed rules and commitments. The appropriate remedy is to re-negotiate the rules or to seek waivers, and not to rely on the low probability of being confronted with a dispute. Developing countries that desire greater policy flexibility should negotiate this directly. Similarly, in a number of policy areas affecting trade that are not yet subject to binding multilateral rules there may well be a good case for cooperation that is not associated with binding, enforceable commitments (Hoekman, 2005). Explicit agreement (based on negotiations) to define mutually acceptable rules of the game is the appropriate mechanism to enhance the “development relevance” of the WTO. The status quo – de facto exemption from WTO dispute settlement – is not.

In addition to highlighting the potential costs created by a lack of enforcement, this paper also raises questions about the applicability of the economic theory used to explain the formation of trade agreements, and in particular, the case of WTO membership for small, poor countries. One strand of the theory (e.g., Bagwell and Staiger 1999, 2002) stresses terms-of-trade effects as the driving force underpinning cooperation between countries on trade and related policies. The argument is that countries negotiate away the negative terms-of-trade externalities that would be created by the imposition of trade restrictions in partner countries. A legitimate economic question to ask from the perspective of this theory is, if a country is small and unable to affect prices (in the terms of trade sense) as we might expect for many developing countries; what does such a country stand to gain from a trade agreement? That is, why does it “need” the WTO at all? A partial, and yet incomplete, answer to this question is that the government of the small country would like to join the WTO because its exporters stand to benefit from the low tariffs that large WTO member countries negotiate reciprocally with one another but must then extend to all other members under the most favored nation (MFN) rule. But the terms-of-trade strand of

---

5 I.e., a small country should have an economic welfare incentive to open up its market to imports unilaterally.

6 This answer is incomplete because it does not explain why large countries want small countries to join the WTO.
theory does not explain why small country governments negotiate limits on their own use of import tariffs and other policies when joining such a trade agreement.

A second strand of economic theory (e.g., Tumlir, 1985; Staiger and Tabellini, 1987; Maggi and Rodriguez-Clare 1998, forthcoming) indicates a potential commitment device benefit for small, poor country governments that limit their own use of trade policy by negotiating entry into trade agreements. This line of theory has the agreement serving as a lock-in mechanism or anchor for trade and related policy reforms. By committing to certain rules that bind policies, a government can make its reforms more credible; officials can tell interest groups seeking the imposition of policies that violate the commitments that doing so would result in retaliation by trading partners. However, if the agreement is unlikely to be enforced in practice because it does not create adequate follow-through incentives, the political-economy explanation for cooperation breaks down. Why then do we observe such reciprocal trade agreements in the first place?7

The rest of this paper proceeds as follows. Section 2 presents a very simple economic framework to illustrate the economic problems associated with a failure to enforce WTO commitments, and discusses evidence on the on the use of antidumping and the effectiveness of the General Agreement on Trade in Services (GATS) as a commitment device. In section 3 we assess a range of alternative institutional approaches to “enforce” commitments under the current dispute settlement system, highlighting the problems associated with each. Section 4 discusses alternative, transparency-based approaches to address the problems associated with the current weak incentives to enforce the commitments of poor countries. Section 5 concludes.

2 Implications of the Mechanics of WTO Enforcement

To illustrate the problems that arise in enforcing a developing country’s WTO commitments, consider a two country economic model with three actors: an importing industry (or consumer interests) and an import-competing industry in the developing country of interest, and one exporting industry in a foreign country. For simplicity, we represent the two countries as taking on WTO commitments by assuming that each agrees to free trade.

7 See also the discussion in Bagwell and Staiger (2002, p. 4). While our discussion below is framed in terms of the WTO, the issues are more general; they apply to the incentives generated within most reciprocal, North-South trade agreements.
Assume for concreteness that the importing interest group in the developing country is an industry C that relies on some imported intermediates as part of its production process.\(^8\) Typical examples might be a clothing industry that requires imports of textiles; auto producers or the construction industry that require imports of steel, etc. Industry C could produce a non-tradable (e.g., construction) or a good that is traded as either an exportable or that also competes in the domestic market with imports (not modeled). A second industry P in the developing country produces goods that compete with the imported intermediate product from F – i.e., P also produces the steel or textiles that can be used as inputs in downstream industry C. Thus the developing country industry P competes directly with foreign industry F, but it does not compete with industry C.

To illustrate the potential role for an institution like the WTO, consider the following typical policy scenario. In the face of import competition from F, industry P in the developing country lobbies for protection from imports, which policymakers grant in some WTO-inconsistent manner.\(^9\) The imposition of this new import restriction has the standard welfare-economic implications for the developing country as it raises the production costs to developing country industry C. If the policy is imposed as a tariff, the industry may be able to continue sourcing from its preferred foreign supplier industry F, but at a higher cost. Alternatively, it can switch to the domestic competitor P, which it was not entirely sourcing from before the import restriction because it was more costly, the industry offered a lower quality variety, the industry was capacity-constrained, etc.

Whatever its sourcing choice, the implication is that developing country industry C will have to reduce production because of the higher cost associated with the import restriction, and this will lead to either a reduction in wages or laying off workers, as the industry is less competitive. The effect of this reduced competitiveness may be strongest if C produces a tradable product, as any (not-modeled) foreign competition that it faces could still source inputs from the lower cost foreign industry F. A simple economic welfare analysis would most frequently reveal that not only is the domestic consuming industry harmed by this import

\(^8\) The analysis of interest group C representing final consumers (households) is similar, with the exception that in general it will be more difficult for consumers to organize.

\(^9\) The form of the WTO-inconsistent protection that eliminates market access is immaterial – it could take the form of an inappropriate application of domestic antidumping or safeguard law, imposition of a tariff in violation of the country’s Article II bindings, a quantitative restriction, or some other non-tariff barrier to trade.
restriction, but the losses it suffers are larger than the gains to the other domestic industry P, and
thus this policy is welfare-reducing from the perspective of the economy as a whole.

In many countries, the existing domestic institutional process will not allow for industry
C to voice its concerns regarding the implications of requests for import restrictions by industry
P.10 If so, there is a potential efficiency-enhancing role for an external institution, such as the
WTO.11 The “enforcement” that is provided by the WTO comes through its role as an
intermediary. The existence of the WTO establishes a forum where foreign industry F – the
exporter of the intermediate inputs that has also been harmed by the WTO-inconsistent trade
restriction that has shut off its market access – engages its government to file and pursue a
dispute on its behalf. If successful, the foreign government undertaking a dispute on behalf of
industry F will also be working in the interest of developing country industry C (or, more
generally, consumers). Furthermore, the dispute is likely to be valued by the developing
country’s own government, which did not have the ability to implement its preferred policy in
the absence of the commitment power facilitated by the WTO.

How does the initiation of a trade dispute ultimately benefit industry C and the
developing country? To illustrate, we sketch out the classic political-legal-economic path to
WTO dispute resolution. First, F’s government makes legal arguments before the WTO Dispute
Settlement Body (DSB), and it convinces a Panel and then (if there is an appeal) the Appellate
Body that the developing country government’s import restriction was WTO-inconsistent. In
order to enforce the commitment when industry P’s government still refuses to comply, the
WTO process allows for F’s government to demand the rebalancing of concessions and to

---

10 This is frequently the case when it comes to antidumping or safeguard laws, for example. The statutes and
domestic institutions set up to administer the injury investigation do not allow for a consumer interest role in the
process. For a discussion see Finger (2002).

11 Maggi and Rodriguez-Clare (1998) illustrate a commitment role for the WTO in a formal economic model,
suggesting it can be welfare-improving even for a small country when the domestic government has a weak
bargaining position relative to domestic lobbies. Without the commitment power provided by the WTO, the
government imposes distortionary trade restrictions and is compensated with rents extracted from the lobbies.
However, when the government has a weak bargaining position the resulting rents are small, and even a small
country’s government would prefer to introduce a trade agreement like the WTO. The agreement allows the
government to commit to trade liberalization, yielding long run improvements in national welfare associated with
efficient resource allocation that are large enough to compensate it for the lost rents. Maggi and Rodriguez-Clare
(forthcoming) introduce an extended model which explores the tradeoffs facing a government with an incentive to
sign a trade agreement for both the terms-of-trade and commitment motives. Staiger and Tabellini (1987) provide
alternative arguments for a commitment role for the WTO by showing how a domestic government with income
redistribution motives can benefit from external enforcement when it seeks to implement an optimal policy of free
trade that is time-inconsistent.
receive authorization from the WTO to retaliate by raising its tariffs to reduce the market access toward imports from the respondent developing country. This retaliation threat activates political pressure within the developing country as its exporters (not modeled) mobilize in self-interest to convince the respondent government to get rid of the WTO-inconsistent import restriction adversely affecting industry F (and C). The moral of the commitment role story is that foreign industry F is there to “rescue” consumer interests via WTO dispute settlement,12 in the process also enhancing overall economic welfare in the developing country.13

In order for the WTO to provide a poor country with the efficiency-enhancing, enforcement-cum-commitment role posited by economic theorists, a foreign industry F must actively engage. In practice, however, there are a number of reasons why no such foreign industry may invoke the enforcement mechanism. First, if the developing country market is small, foreign industry F may not even attempt to convince its government to file a WTO trade dispute, because the resource costs of litigation exceed the potential market access benefits. Second, even if the industry were willing to absorb the economic costs of pursuing a case because the developing country market was sufficiently large, the international political costs for the foreign government of pursuing a trade dispute against a poor country may be too high relative to the expected benefits.14 In the current WTO system, if no foreign government/industry F pair combination engages, potential disputes do not get filed and the WTO fails to provide an external enforcement device.

---

12 Note that there is nothing here to suggest that this story is limited to industries C and P in developing countries. For example, let P be the US steel industry, C be the US steel-consuming industry, let F be steel producers in the EU, and let the policy in question be the 2002 US steel safeguard. One economic interpretation of the WTO trade dispute concerning that policy was that the EU’s effective use of retaliation threats contributed to the US terminating the WTO-inconsistent safeguard to the benefit of the US steel-consuming industries and US economic welfare. From this perspective, the paradoxical implication is that developed countries such as the US are using the WTO to improve their economic welfare by “losing” (legally) such WTO trade disputes on a regular basis.

13 For reasons of domestic politics, the WTO is not likely to receive credit from the domestic government for taking on this role. Most likely the government will place the blame on the WTO in order to deflect political pressure levied by industry P. Furthermore, external critics may charge that the WTO is a non-democratic, supra-national bully forcing an unwelcome policy change on the developing country, as they fail to recognize the developing country is simply changing its policy back to one it had voluntarily committed itself to by agreeing to WTO membership.

14 There are a number of other contributing factors, including that the foreign government may not file a case of market access interest to its exporters because it lacks the imports from the developing country in question. Under the current “retaliation as compensation” approach, imports are a necessary condition to establish the credible retaliatory threat needed to mobilize exporting interests in the developing country needed to convince the government to remove the initial import restriction (Bown 2004a,b).
The above concern complements the terms-of-trade strand of the research literature on trade agreements. Bagwell and Staiger (1999, 2002) model the WTO as an institutional framework where “large” countries balance reciprocal market-access concessions to neutralize the terms-of-trade effects of their policy changes. From this perspective, the failure of any self-interested party to engage actively to enforce poor country WTO commitments comes into sharper relief. A small developing country that raises its tariff in a WTO-inconsistent manner may go unchallenged because it is unlikely that it both (i) imports in sufficient volume that its tariff imposes an external cost on a trading partner that is large enough to induce the partner to seek to offset it by raising its own tariff (via authorized retaliation after a trade dispute), and (ii) exports in sufficient volume to that partner so that such a retaliatory tariff would lead to the partner’s own terms-of-trade gain.

2.1 Additional concerns with the failure to enforce WTO commitments
The foregoing considerations are not the only economic implications when poor country commitments are not enforced. There may also be important dynamic costs and externality concerns.

First, if we assume that industry leaders are rational and forward thinking, industry C recognizes that there will be a lack of follow-through when it comes to enforcement of WTO rules. Even with the institutional framework in place, the political-economic incentives and environment may make it infeasible for foreign industries F to pursue cases. An implication is that when industry C considers how much political capital to allocate to convince its government to liberalize import markets, it will under-invest. The industry recognizes that there will be no active enforcement at the WTO of the market-access commitments that it would have to spend resources to convince its government to take on. The same dynamic will arise, but even more strongly, in the case of consumers more generally.

Second, consider the case of a large developing country, and the question of whether it is likely to be able to use an agreement such as the WTO to escape from its terms-of-trade driven prisoner’s dilemma. Foreign governments, especially of high-income countries, that are potential negotiating partners may fear a public outcry if they initiate a future trade dispute in an effort to enforce the developing country’s concessions. In such an environment, potential partners may be less willing to negotiate reciprocal concessions with even large developing countries in the first
place. Combined, these two problems associated with the disincentive to engage developing country governments may help explain why tariff bindings and services liberalization commitments in the General Agreement on Trade in Services (GATS) tend to be limited for many developing countries.

Third, it is important to consider the welfare implications for the exporting country industry. Suppose exporters in other developing countries are also disproportionately the target of developing country trade restrictions that are not being challenged at the WTO, and, by extension, the developing country market access liberalization commitments that are not being made because of the lack of expected enforcement. If so, an additional concern may arise. In the self-enforcing WTO system, we expect developing country exporters to be targeted disproportionately for a number of reasons, including their limited retaliatory and legal capacities. Such limitations are likely to discourage the exporters’ government’s willingness and ability to engage in the WTO dispute resolution process to enforce their expected export market access, independent of whether the potential respondent is also a developing country.¹⁵

While the economic welfare implications of failing to challenge developing country action are first order in importance, there are additional institutional implications worth discussing. For example, Davis and Bermeo (2006) show that a developing country that has been challenged is more likely to subsequently challenge other WTO members in defense of its own export market access interests. In this manner, there may be “learning by doing,” i.e., facing a dispute as a respondent may eliminate some hurdles to participation and increase the likelihood that a developing country will engage in the dispute settlement process as a complainant.

This institutional externality is another area where the WTO principle of reciprocity emerges. For political reasons, getting an external commitment mechanism like the WTO to work to enforce domestic reform likely requires that countries have a relatively balanced portfolio of WTO cases to show to their constituencies – some that they “win” on the complainant side through increased market access for their exporters, and some that they “win” (by “losing”) on the respondent side where they agree to live up to import market liberalization commitments that are being enforced. Political sustainability of the WTO as an institution may require a balanced set of realistic expectations of what the organization, which coordinates a

¹⁵ In a sample of data including WTO-inconsistent policies imposed by both developed and developing countries, Bown (2005b) presents evidence that such variables affect the incentives of adversely affected exporters to engage in formal WTO dispute settlement.
balance of concessions across countries, can do. If expectations for what the WTO can feasibly accomplish for a country become unrealistic, it will ultimately turn out to be a failure in the eyes of the public, thus undermining the institutional sustainability and the efficiency-enhancing economic welfare benefits generated by the system.

To summarize, the failure of the current enforcement model – i.e., the failure of WTO members to challenge developing countries that do not live up to market access commitments – may give rise to at least four potentially important economic problems from the perspective of developing countries. First, it imposes welfare costs on the economy and losses to consumers and consuming industries that are larger than the gains enjoyed by domestic producers that would otherwise have to compete with imports. Second, it creates an environment where domestic industries in developing countries do not face the socially optimal incentives to invest their political capital in trade liberalization because they foresee that liberalization commitments will not be enforced. Third, foreign governments may be unwilling to negotiate reciprocally with even “large” developing countries in need of escape from a terms-of-trade driven prisoner’s dilemma if such governments anticipate a future environment in which they are politically unable to enforce a poor country partner’s commitments. Fourth, developing countries may be imposing new and unchallenged import restrictions that disproportionately affect the potential exports of other developing countries.

2.2 Evidence
In this section we briefly discuss empirical research and newly available sources of data supporting these concerns, focusing on the global use of antidumping, developing country use of GATS as a commitment device, and some evidence that commitments matter for a country’s trade performance. As noted in the Introduction, the prima facie “stylized fact” that underpins our argument is that small/poor developing countries are challenged only very infrequently in the WTO.

2.2.1 Developing country use of antidumping and other trade remedies
The first question is whether developing countries are imposing potentially challengeable, WTO-inconsistent import restrictions. One data source suggesting an answer to this question is members’ potentially WTO-inconsistent application of trade remedies such as antidumping and
countervailing duties, as well as safeguard measures. As Table 2 indicates, some of the heaviest users of trade remedies such as antidumping are now developing economies. At the same time that the use of trade remedies has proliferated across the WTO membership, the application of trade remedies increasingly faces legal challenges through formal WTO dispute settlement. Indeed, Table 3 indicates that almost half of the WTO disputes initiated between 1999 and 2006 involved challenges to trade remedies. Furthermore, in most trade-remedy cases that make it through the panel process, the Dispute Settlement Body has found some WTO-inconsistent element of the investigation undertaken and/or measure imposed by the respondent country.\(^\text{16}\)

Thus there is little evidence from the WTO caseload that a country that applies a trade remedy is likely to have it ruled as being consistent with its WTO obligations. Given this context, one particularly interesting feature of the data is that a developing country’s use of a trade remedy is unlikely to be formally challenged under the WTO Dispute Settlement Understanding (DSU). For example, developing countries are some of the most frequent new users of antidumping. If we assume developing country government agencies are just as likely as developed countries to apply WTO-inconsistent measures,\(^\text{17}\) we would expect many of these measures to be challenged at the WTO. While the data in the right hand column of Table 2 suggest that some developing country use of antidumping is being challenged by WTO litigation, the number of challenges is small – especially when we consider that over half (38 of 69) of the challenges reported in the table were brought up in only two disputes (DS304 and DS318) against India that never made it past the stage of the EU and Taiwan requesting consultations. For the most part, the explosion in developing economy use of newly-imposed and potentially WTO-inconsistent antidumping measures is going unchallenged by WTO litigation.

There are many possible reasons why developing country use of antidumping is going unchallenged by formal WTO trade disputes. As a specific example, Bown’s (2006a) cross-country study of determinants of DSU challenges to the use of antidumping presents evidence, consistent with the concerns raised here, that an antidumping measure is less likely to be challenged the smaller is the value of export market access lost to the measure. Exporters are

\(^{16}\) For a review of some of the jurisprudence, see Cunningham and Crib (2003), Durling (2003) and Sykes (2003).

\(^{17}\) There is little ex ante reason to expect that the investigative agencies in developing countries are more likely than those in the US or EU, for example, to implement a WTO-consistent investigative procedure and apply a WTO-consistent trade restriction. If anything, given the lack of historical familiarity with the interaction between national trade remedy laws and GATT/WTO law, one would expect developing countries to be more likely than developed countries to implement measures that are inconsistent with WTO obligations.
unlikely to spend the resource costs of pursuing WTO litigation if the expected market access gains from winning the case against a developing country respondent are small.

Finally, data in Table 4 suggest that some of the major targets of poor country use of antidumping are exporters in other developing countries. The table presents detailed information from five of the largest developing country antidumping users regarding the foreign exporters that they most frequently target with imposition of new trade restrictions. Not surprisingly, China is each antidumping user’s first or second most-frequent target, despite being no higher than the fourth biggest source of imports for any one of these developing countries. Furthermore, each of these countries substantially targets other developing country exporters with their use of antidumping, frequently out of proportion to the country’s overall share of the user’s import market, as is the case with China.18

2.2.2 Evidence from the GATS
Other suggestive evidence comes from transition economies that acceded to the WTO after 1995. Eschenbach and Hoekman (2006) compare GATS commitments with the evolution of actual policy stances over time in 16 transition countries, using an index of service sector policy compiled by the European Bank for Reconstruction and Development (EBRD). Over half of the 16 transition countries are economies that had the prospect of accession to the EU. No such country made very deep commitments in the GATS, and in practice all are much more open than their GATS commitments suggest. This indicates that these countries did not see a need to use the GATS as a means to commit to liberalization. Instead, they appear to have relied on other mechanisms, in particular the EU acquis communautaire, as a focal point and lock-in device.

In contrast, many of the transition countries that were not EU accession candidates score high in terms of GATS commitments. This group includes Armenia, Georgia, the Kyrgyz Republic, Moldova, and the Former Yugoslav Republic of Macedonia. All these countries have little or no chance of joining the EU in the near future, which presumably helps to explain why the depth and coverage of their GATS commitments is much greater than that of other transition economies as well as most WTO members. With the exception of Macedonia, they are geographically or culturally distant from the EU, have small markets, and were not GATT

18 For the reasons posited in Bown and Hoekman (2005), the fact that the exporters are also in developing countries may contribute to the explanation of why developing country WTO violations are going unchallenged, as was reported in table 2.
members in 1994. Yet although these countries made many commitments in the GATS, they score low on the EBRD index of actual services policies. The GATS appears to have been either a failure for these countries – not helping to promote improvements in services policies in the period following accession – or irrelevant in the sense that governments made commitments that they either did not intend to implement or could implement without a significant change in actual policies. Thus, for many of the non-EU accession candidates – especially those in Central Asia – the WTO appears to be a weak commitment device. One explanation is that the small size of the potential markets concerned generates weak external enforcement incentives.

2.2.3 Evidence that commitments matter

While we are not aware of any empirical studies examining whether the failure to enforce commitments is a cause of developing countries failing to take on GATT/WTO commitments in the first place, we can point to research suggesting that taking on commitments itself matters for a country’s economic performance. Subramanian and Wei (2007) show that while the WTO has, on average, promoted trade of member countries, the size of this impact varies substantially across countries. From the perspective of this paper, their most compelling result is that WTO members that did not commit to actual applied tariff reductions in the Uruguay Round saw no greater average increase in trade than countries that are not even WTO members. However, Francois and Martin (2004) develop a theoretical model to explore the value to a country of making tariff-binding commitments even if these are higher than the level of the applied tariff. They show that the value is positive because bindings reduce uncertainty regarding the expected future value of applied tariffs, which becomes bounded as a result of the binding.

19 Subramanian and Wei (2007, p. 173) point out that, “Although developing countries’ bound tariffs may have come down in the Uruguay Round, actual tariffs barely budged…[A]lthough the percentage of tariff lines for which bindings (commitments) were taken on by developing countries increased by 50 percentage points due to the Uruguay Round, the actual tariff reductions brought about by the Round were much smaller: only 28 percent of tariff lines involved reductions in applied tariffs, and on these, the reduction was 8 percent. In other words, if tariff reductions are calculated on all tariff lines, the reduction would be about 2 percent…The irony relating to [SDT] in the Uruguay Round was that it was eliminated in areas—such as TRIPs—where maintaining it may actually have been welfare-enhancing. But [SDT] was preserved in the conventional area of trade liberalization in goods where its dilution would have been welfare-enhancing.”
3 Alternatives for Enforcing WTO Commitments in Poor Countries

As with most systems of justice, one sign that the system is working well is that it isn’t being used at all, i.e., the threat of enforcement alone is sufficient to induce compliance. In the case of enforcement of trade liberalization, the best approach would be for developing economies to adopt domestic institutions and create domestic alignment of incentives to minimize the amount of external enforcement needed. For example, domestic legislators could write trade remedy statutes that allow domestic consuming industries to have an equal say to the domestic producers in the process. This structure would permit many of the battles to be hashed out internally.  

It is unrealistic to expect policymakers and negotiators to write “complete” contracts that cover all future contingencies without need for some form of enforcement. Thus, there will be instances in which it is efficient for governments to breach the provisions of a trade agreement contract, in which case a litigation system is needed for mediation. The question is how to do this efficiently in the context of a self-enforcing trading system where sovereign states are voluntary participants.

3.1 A “tough love” or outsourcing model of WTO enforcement?

Absent the alignment of interests generated by the optimal construction of domestic institutions to minimize the need for external enforcement, it is instructive to consider a thought experiment: what would it take under the current WTO system of dispute settlement and political-economic incentives to enforce the commitments of poor countries?

---

20 Developing countries would need to do better at creating such a balance via their domestic institutions than has been the case for many developed countries. For example, in developed economies such as the US and EU there is no explicit consumer interest provision that serves as a counter-weight when domestic producer interests demand protection from imports under antidumping or safeguard laws. One approach would be to adopt the principle of “direct effect” through which domestic actors could challenge their government’s compliance with international obligations in domestic courts. A related approach, adopted by many bilateral investment treaties, allows domestic economic actors (e.g., firms) to sue a foreign government directly for failure to comply with investment treaty obligations, thus bypassing the need for the domestic actor to convince the domestic government to act on its behalf, as is currently the situation at the WTO. Levy and Srinivasan (1996) argue that if a domestic industry would have automatic ability to file such disputes (without its government acting as a buffer) this might adversely affect the obligations the domestic government is willing to take on in prior stage negotiations. As both approaches require systemic changes to either WTO dispute settlement rules or domestic legal interface with WTO law, we do not pursue a discussion of the issues raised by them.

21 Indeed, Horn, Maggi, and Staiger (2006) present an economic theory examining elements of the GATT/WTO agreements from the perspective of an incomplete contract. Including safeguards in the GATT/WTO as an “escape valve” is one place where scholars have noted the importance of allowing for an ex ante exception that there are then economic efficiency reasons against using ex post. See the discussions in Hoekman and Kostecki (2001) and also Bagwell and Staiger (2005).
Since the WTO requires government-to-government adjudication of issues, there must be a WTO member willing to challenge a poor country through the DSU in order to generate the implementation of negotiated commitments. As DSU litigation is resource costly, this WTO member needs to be relatively wealthy. Moreover, since such litigation against a poor country is likely to have some political costs, the WTO member would need a flawless reputation as a development-friendly country so it can credibly deflect allegations that it is acting in a self-serving manner. It also cannot have a substantial market access interest in the developing country respondent, again to make clear that its complainant role in the dispute is for non-selfish reasons.\textsuperscript{22} For the purposes of compensation/retaliation, this hypothetical country will also need to import from the developing country respondent so it has some capacity to make credible retaliatory threats, as this is needed to mobilize export interests in the developing country to convince the domestic government to live up to its import market commitments.\textsuperscript{23}

Not surprisingly, few countries would satisfy all of these criteria. Switzerland could be one of the closer candidates, so for simplicity we refer to this as the “Swiss Model” of enforcing developing country WTO commitments. While this clearly will never happen, it is important to recognize that the current WTO system requires something like this to assure enforcement of the commitments of poor countries.\textsuperscript{24}

3.2 Bolstering the current approach by changing incentives?

Even without any radical systemic changes to the DSU or a WTO member willing and able to play the required role in the “Swiss Model,” there will be some cases involving poor country respondents that do make it to the WTO. For example, to the extent that the adversely affected

\textsuperscript{22} This ignores any DSU requirements/conditions/expectations that complainants need to have a market access interest at stake.

\textsuperscript{23} This relates to some extent to the issues raised in Maggi (1999), though Maggi’s point was to illustrate that under the WTO as a multilateral institution, multilateral retaliation could be used to enforce lower cooperative tariffs in the presence of bilateral imbalances of power – something that economists have been proposing for decades. In our context, the bilateral “imbalance” is the inability of one WTO member to challenge another, perhaps because of political or resource cost relative to market access gains. Another country could work on its “behalf” to lead to an improved outcome. This is also related to the idea of tradable retaliation rights discussed in Bagwell, Mavroidis and Staiger (2006).

\textsuperscript{24} Furthermore, in the more general equilibrium sense, when a “Swiss model” country is considering where to allocate its development assistance resources, it is not clear that the returns to DSU litigation are larger than the returns the country would achieve by choosing to invest in development somewhere else.
foreign exporting country is another developing country, thus reducing the political costs relative to a potential dispute involving a developed country as complainant, there are some resources available to help that poor country complainant pursue a WTO case. There is the Advisory Centre on WTO Law (ACWL) and also the possibility for private sector engagement by pro bono attorneys and/or non-governmental organizations (NGOs) that may be willing to assist a developing country government in pursuing its case at the WTO. However, as we describe elsewhere in substantial detail (Bown and Hoekman, 2005), at best this is only a partial solution to the problem. Furthermore, depending on the form of the legal assistance and the funding source or needs of the provider, the resulting bias in the distribution of cases brought forward for litigation might not necessarily be in alignment with the welfare interests of the developing countries involved.

An alternative could be to pursue the idea of a “small claims” procedure in the WTO for cases involving relatively small amounts of trade and thus not giving rise to a great enough incentive to use WTO dispute settlement. The premise is to put in place simplified procedures so as to reduce the costs associated with going to the WTO. As discussed in depth by Nordström and Shaffer (2007), there are a number of challenges that will need to be addressed in operationalizing this idea, including obtaining agreement on who has access, for what types of cases, and ensuring that a two-tier system does not give rise to inconsistent case law.

Another option could be for organizations and institutions outside the WTO to play a role in enforcing WTO commitments. Perhaps the most obvious candidates are the IMF and World Bank, which could in theory make the provision of financial assistance conditional upon the enforcement of WTO obligations. In practice this is not possible, as the IMF and World Bank are precluded from imposing such “cross-conditionality” by a provision inserted into the Final Act of the Uruguay Round agreement at the insistence of developing countries seeking to preclude exactly such issue linkage. Furthermore, this prohibition was supported by the agencies concerned, to avoid being required to “enforce” WTO rules and disciplines when these might not

---

25 Indeed, in one of the few disputes in which a low income economy was challenged as a respondent (India - Anti-Dumping Measure on Batteries from Bangladesh, DS306), the complainant Bangladesh was another low income economy that received legal assistance from the ACWL (ACWL, 2006).
be considered priority areas for action by the governments concerned. However, such a constraint is not binding upon bilateral donors.\textsuperscript{26}

Most far-reaching in terms of changing the status quo would be to enhance the role of the WTO Secretariat in enforcement of commitments by giving it a mandate to prosecute cases (e.g., Hoekman and Mavroidis, 2000). This would deal with the incentive problems associated with both the costs and expected benefits of bringing cases that afflict the concerned firms and governments. This option is politically infeasible to implement, as most WTO members do not desire to give the Secretariat such a mandate or the tools to execute it. However, some steps in this direction, taking the form of enhancing the capacity of the WTO to identify instances of non-compliance, may be feasible. We discuss these below.

4 \hspace{1em} \textbf{Transparency as a Substitute for “Tough Love”}

The problems and failures with reliance on formal dispute settlement procedures to enforce poor country commitments imply a need to consider alternative mechanisms that induce compliance with WTO obligations. In order to be effective, any such mechanism must target domestic constituencies and the membership of the WTO as a whole. Greater transparency is critical to prevent capture of policies by interest groups, to make policies contestable, and to give both winners and losers a greater voice in policy formation. There is thus a role for international institutions and development assistance to intermediate through the creation of procedures that allow affected groups with a trading interest and their domestic governments to learn about the effect of policies and the trade-offs of various policy options. With some adaptation, there is significant potential for stronger transparency and communication mechanisms to help address the economic problems associated with the weak incentives for enforcement associated with current dispute settlement procedures.

4.1 \hspace{1em} \textbf{The WTO Trade Policy Review Mechanism}

The Trade Policy Review Mechanism (TPRM) is the primary vehicle used by WTO members for periodic review of trade-related policies, the frequency of reviews depending on the relative

\textsuperscript{26} External conditionality can be effective. Wei and Zhang (2006) present evidence that external interventions (IMF trade reform conditionality) are associated with increased trade in developing countries. They find a positive average effect of trade reforms on trade openness of developing countries, though the effect appears driven by countries willing to reform.
importance of a member in world trade. While large traders such as the EU and the US are reviewed on a bi-annual basis, some developing countries and transition economies have yet to be reviewed more than 10 years after the entry into force of the WTO. Given that it is poor countries that presumably would benefit the most from a review, the current system’s periodicity and sequencing may be inappropriate. Clearly this is also true from the perspective of the enforcement problem that is the subject of this paper.

By the end 2005, the TPRM had conducted 212 reviews since its formation, covering 123 out of 148 Members at that time (WTO, 2005). A total of 23 such reviews were completed for least developed countries between 1998 and 2005. Such reviews have increasingly performed a technical assistance function, thus also aiming to increase the governments’ understanding of prevailing trade policies and their relationship with the WTO Agreements. Since 2000, the review process for a least developed country (LDC) includes a three-to-four-day seminar for local officials on the WTO and the trade-policy review exercise. This could be expanded to include greater engagement with the private sector and local think tanks, and more involvement of such groups in the preparation and dissemination of the analysis.27

While there are therefore welfare-motivated arguments for a more frequent and in-depth analysis of trade policies in all WTO members, we argue that this is especially the case for LDCs, as they do not face the same level of extra-WTO scrutiny from academics, think tanks and research institutes that economies such as the US and EU face with respect to their trade policies. Nevertheless, we recognize the political limitations of any proposal that the WTO take on the role of initiating member country-specific scrutiny. In the next section we consider ways of reforming the TPRM to induce international cooperation that may make additional monitoring more politically palatable. Then, in the following section, we propose a role for additional monitoring and cooperation that would take place outside of the WTO framework.

An expanded role for the TPRM may be politically palatable to the membership if it actually moves beyond simple monitoring to create a focal point for a constructive, as opposed to an adversarial, interaction between governments. A TPRM that acts as an intermediary by not only collecting information, but also assessing the effects of policies within and across countries,

---

27 One might ask: why the WTO, and not other international organizations? One answer is that trade policy is not a consistent focus of the activities of international financial and development organizations. A major advantage of the WTO is that trade and trade-related policies are its core business.
would then be more likely to provide to trade constituencies useful information that will help identify national priorities for domestic reform. Such a constructive approach could do much to raise the domestic profile of the trade agenda in developing countries as well as better focus resources (development assistance) across countries by helping to identify where public investments and international assistance are most needed.28

Furthermore, if the process also included monitoring the delivery and effectiveness of the development assistance targeted to address the trade-related priorities of the country under review, the TPRM process could help make WTO deliberations and “enforcement” more politically balanced. Rather than an adversarial approach that solely challenged the policies and market access granted by a specific Member, the debate and discussion would also focus on what richer Members could and did do to assist the country in question, both through market access-related policies and official development assistance.

A 2006 WTO taskforce on “aid for trade” proposed more regular monitoring of the development assistance that Members provide to developing countries in the trade area, and indeed it also suggested the TPRM as a mechanism that could do deliver this function (WTO, 2006c). It is therefore not just an academic notion that formal dispute settlement as an enforcement tool is too narrow an approach and needs to be complemented by “carrots” such as development assistance.

4.2 The WTO committee structures and “soft law” forms of cooperation

As stressed in a number of analyses of the WTO as an institution (e.g., Hoekman and Kostecki, 2001), a major role of the WTO is to provide a forum for communication and interchange on trade-related policies. Many potential disputes and problems relating to implementation of agreements are raised and addressed in the many committees and groups that deal with the substantive policy areas covered by WTO agreements. The TPRM is just one input into such regular exchange of information, albeit the most wide-ranging in terms of policies covered. The various bodies put in place by and supported by the WTO that deal with the various agreements are mechanisms through which governments can put problems on the table, raise concerns and seek assistance. They also provide fora in which regulators and policymakers can learn from each others’ experience (Hoekman, 2005; Scott, 2006).

28 See Hoekman and Mattoo (2007) for a more extensive discussion of this idea with respect to services.
4.3 A commitment to transparency outside of the WTO

Political realities may limit how much monitoring and cooperation/communication can actually take place within the WTO itself. Therefore, greater efforts to ensure transparency should go beyond the WTO. In this section of the paper we consider who else could be involved in this monitoring function before then turning to a discussion of what information is most useful for such organizations to provide.

Research institutes, think tanks, and public interest bodies should engage in monitoring and evaluation of policies at the country level. Such entities could also explore the economic and social aspects of particularly contentious issues or proposed areas for action at the WTO or in a preferential trade agreement context (Hoekman and Mavroidis, 2000), helping to generate information and build consensus on policy priorities. A regional entity that can coordinate with national think tanks and institutes may be the best model for this role. A combination of an independent regional “hub” institution that provides research support to a network of national think tanks and governments and works with them would help reduce the overhead costs of national entities by providing access to inputs such as databases and specialized information.

One of the lessons that can drawn from the World Bank report *Doing Business* is that transparency can have a powerful effect in focusing the attention of policymakers on specific issues, especially if pursued in a way that generates data that allow cross-country comparability and monitoring of changes over time. *Doing Business* has become an influential focal point for national policymakers, in part because it generates data on specific measures that resonate with firms and industries in the private sector, as well as with government officials. Examples are the number of days it takes a package to clear customs, or the time it takes for a standardized container to move from the factory floor to the nearest port.

When it comes to the issue of trade policy enforcement and surveillance of WTO-type commitments, it is important to recognize that such monitoring needs a substantive focus that goes beyond a technical analysis of legal compliance. Making trade agreements relevant for poor countries requires a convincing argument as to how WTO commitments can raise economic welfare. While it may be too difficult to accurately and expeditiously relate a particular policy change to changes in economic welfare, a first step would be calculation and regular reporting of simple measures of industrial structure and trade performance used to characterize the
“conditions of competition” that prevail in an economy. Although such structure and performance data are not policy-specific, they can be employed to bolster monitoring and surveillance (Djankov and Hoekman, 1998) provided by the WTO. This type of outcome monitoring is distinct from an evaluation of the impact of specific policies as it makes no attempt at matching outcomes to policies. However, it is a useful complement to policy monitoring and assessment by providing information on the state of trade and competition.

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 or Herfindahl indices, and data on trends in price-cost margins all suffer from the same drawback: it is difficult to relate any of these measures unambiguously to a specific policy or change in that policy. Nonetheless, such measures provide information on the effect of the set of prevailing policies and have the virtue of being easy to calculate. They also do not require the use of models or calculation of indices that require (political) acceptance of a set of underlying assumptions. If used in regular multi-country exercises on the basis of identical industry classifications, the resulting panel datasets can be used for analytical purposes as well as cross-country comparisons.

5. Conclusion

Developing countries are rarely challenged in formal WTO litigation for failing to live up to WTO commitments and obligations. While this lack of enforcement activity can be explained in part by the fact that developing countries have made fewer commitments than developed ones, there are numerous WTO disciplines independent of tariff bindings that apply to developing countries. These include disciplines ranging from rules on products standards to customs valuation. The weak incentives for trading partners to enforce commitments reduce the relevance of the WTO for trade constituencies in all countries, but especially those in developing economies.

While the first-order cost of failing to enforce WTO commitments in poor countries falls on consumers within these countries who do not realize the economic welfare gains associated with importing, there are dynamic and externality costs as well. The enforcement failure likely has a dynamic cost of creating disincentives to negotiate additional, welfare-enhancing WTO commitments. First, there is little incentive for constituencies in the developing country that might gain from trade to organize politically in order to mobilize support for commitments.
Second, there is little incentive for foreign governments to negotiate reciprocal concessions with even large developing countries in the first place, even if this will help them escape from a terms-of-trade driven prisoner’s dilemma, if the resulting political environment does not accommodate the need for enforcement. Finally, failure to enforce poor country WTO commitments also ignores the identity of the potential foreign beneficiaries associated with increased enforcement. For example, there is evidence to suggest that other poor countries may be among the major exporting producers that stand to benefit from the increased market access associated with the liberalization commitments that need to be enforced. In such instances, the failure to enforce a poor country’s WTO commitments on the import side may have a disproportionately adverse effect on poor country exporters as well.

The failure to challenge poor countries for not abiding by WTO rules and commitments may also indicate that these countries do not realize the positive externality benefits associated with full participation in the institution. First, involvement as a respondent in WTO dispute settlement may induce learning and lead the country to more active engagement in other disputes as a complainant or interested third party in defending export market access interests. Second, a successful challenge of a developing country may result in the government undertaking a public effort to comply with WTO commitments, which may positively affect the probability that other countries also conform to WTO rulings, thus benefiting the developing country’s own export market access interests. Managing a balanced portfolio of WTO litigation – undertaking some cases from which the country will benefit (by legally winning) as complainants as well as being confronted in other cases from which the country will benefit (by legally losing) as respondents – can help governments to maintain public support for WTO engagement.

The basic motivation for this paper is that in the absence of credible enforcement, trade interests in the countries signing agreements do not have incentives to push for liberalization which attenuates the positive dynamics of reciprocity. The WTO’s reciprocity principle is not just limited to negotiating rounds of liberalization – it also plays an important role after the negotiations are done. Small, poor countries do not have much negotiating leverage, as reciprocal exchange of market access concessions is not a game they can play effectively.\textsuperscript{29} The

\textsuperscript{29} This was one of the rationales for SDT for developing countries. Given that small countries cannot negotiate access to export markets, the MFN principle is particularly important for them in generating export benefits from multilateral trade rounds. As this may not generate better access in products that matter to developing countries, the GSP can be seen as a mechanism to enhance such access.
weakness of reciprocity dynamics is sometimes argued to imply that the major source of potential gain for many small developing countries is the use of trade agreements as credibility-enhancing or lock-in mechanisms. But this rationale may be weaker in practice than often claimed in the literature for the same market access-related reason: because they are small and poor, credibility cannot derive from the threat of external enforcement of trade agreements by trading partners. Making the WTO DSU mechanism work for these countries requires that foreign governments deliberately pursue enforcement actions even if they have no market access incentive to do so. The likelihood that countries can pursue such “tough love” in a credible manner is low, and the political feasibility of this possibility appears to be very limited.

Credibility must therefore be sought in other instruments, such as greater and more effective transparency mechanisms. A major advantage of additional monitoring and analysis of developing country policies that affect trade is that this can be a valuable input into improved domestic policies. What is needed is that the constituencies in these countries see implementation of commitments as being in their interest. Often that will require a period of gradual learning about the benefits and the costs of different regulatory approaches, interactions with other countries and learning from their experience, and building up the required institutions needed to enforce the regulations that are developed. Rather than rely on binding commitments and the threat of the DSU, an approach that focuses on transparency and analysis of the effects of policies in such regulatory areas may do more to bolster ownership and identify where multilateral commitments can be beneficial. An additional argument in favor of this approach is the one stressed in this paper: the threat of formal DSU proceedings often may not be perceived as credible.

References


Bown, Chad P. (2006a) “Antidumping, Reciprocity, and WTO Enforcement,” Brandeis University manuscript, December.

Bown, Chad P. (2006b) “Global Antidumping Database,” World Bank and Brandeis University, available online at http://people.brandeis.edu/~cbown/global_ad/.


Table 1. WTO Trade Disputes 1995-2006, by Income Group

<table>
<thead>
<tr>
<th>WTO Member</th>
<th>Disputes as Respondents</th>
<th>Disputes as Complainants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total low-income economies</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>India</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>Pakistan</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Total lower-middle-income economies</td>
<td>46</td>
<td>65</td>
</tr>
<tr>
<td>Brazil</td>
<td>13</td>
<td>22</td>
</tr>
<tr>
<td>China</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Colombia</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Ecuador</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Egypt</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Guatemala</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Honduras</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Indonesia</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Peru</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Philippines</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Thailand</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Total upper-middle-income economies</td>
<td>69</td>
<td>59</td>
</tr>
<tr>
<td>Total high-income economies</td>
<td>217</td>
<td>235</td>
</tr>
<tr>
<td>Total</td>
<td>352</td>
<td>380</td>
</tr>
</tbody>
</table>

Notes: WTO trade dispute from [www.wto.org](http://www.wto.org). The income group categories are taken from the World Bank’s classification based on 2005 GNI per capita calculated using the World Bank Atlas method. The groups are: low income, $875 or less; lower middle income, $876 - $3,465; upper middle income, $3,466 - $10,725; and high income, $10,726 or more.
Table 2. Developed and Developing Country Use of Antidumping and DSU Challenges, 1995-2005

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total developed economy antidumping users</strong></td>
<td>1169</td>
<td>687</td>
<td>66</td>
</tr>
<tr>
<td>Australia</td>
<td>179</td>
<td>67</td>
<td>1</td>
</tr>
<tr>
<td>Canada</td>
<td>134</td>
<td>84</td>
<td>1</td>
</tr>
<tr>
<td>European Union</td>
<td>327</td>
<td>219</td>
<td>5</td>
</tr>
<tr>
<td>United States</td>
<td>366</td>
<td>234</td>
<td>58*</td>
</tr>
<tr>
<td>Other developed economies</td>
<td>163</td>
<td>83</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total developing economy antidumping users</strong></td>
<td>1671</td>
<td>1117</td>
<td>69</td>
</tr>
<tr>
<td>Argentina</td>
<td>204</td>
<td>147</td>
<td>4</td>
</tr>
<tr>
<td>Brazil</td>
<td>122</td>
<td>66</td>
<td>1</td>
</tr>
<tr>
<td>China</td>
<td>123</td>
<td>68</td>
<td>0</td>
</tr>
<tr>
<td>Colombia</td>
<td>27</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Egypt</td>
<td>50</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>India</td>
<td>425</td>
<td>316</td>
<td>39**</td>
</tr>
<tr>
<td>Indonesia</td>
<td>60</td>
<td>27</td>
<td>0</td>
</tr>
<tr>
<td>Malaysia</td>
<td>35</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Mexico</td>
<td>85</td>
<td>76</td>
<td>7</td>
</tr>
<tr>
<td>Pakistan</td>
<td>12</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Peru</td>
<td>60</td>
<td>40</td>
<td>2</td>
</tr>
<tr>
<td>Philippines</td>
<td>17</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>South Africa</td>
<td>197</td>
<td>113</td>
<td>5</td>
</tr>
<tr>
<td>Thailand</td>
<td>34</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td>Turkey</td>
<td>101</td>
<td>86</td>
<td>1</td>
</tr>
<tr>
<td>Venezuela</td>
<td>31</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>Other developing economies</td>
<td>88</td>
<td>42</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2840</td>
<td>1804</td>
<td>135</td>
</tr>
</tbody>
</table>

Note: Data for the initiations and measures used in this table compiled by the author from WTO (2006a,b). The data on WTO disputes is compiled by the author and is available as http://people.brandeis.edu/~cbown/global_ad/data_files/DSU-WTO-v2.1.xls in Bown (2006b). *The 58 US antidumping investigations were challenged under 26 different case groupings by 10 different countries. **The 39 Indian antidumping investigations were challenged under three different DSU case groupings by 3 different countries– the EU (DS304) challenging 31 investigations, Bangladesh (DS306) challenging 1 investigation and Taiwan (DS318) challenging 7 investigations.
<table>
<thead>
<tr>
<th>Respondent Trade Policy under Dispute</th>
<th>Disputes Initiated Between 1995 and 1998</th>
<th>Disputes Initiated Between 1999 and 2006*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antidumping law, practice or measure*</td>
<td>13</td>
<td>53</td>
</tr>
<tr>
<td>Countervailing duty law, practice or measure</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Other trade remedy law, practice or measure (e.g., safeguards)</td>
<td>4</td>
<td>30</td>
</tr>
<tr>
<td>Total trade remedy disputes</td>
<td>21</td>
<td>96</td>
</tr>
<tr>
<td>Other non-trade remedy disputes</td>
<td>133</td>
<td>102</td>
</tr>
<tr>
<td>Total disputes (352)</td>
<td>154</td>
<td>198</td>
</tr>
</tbody>
</table>

Note: *For a dispute challenging more than one type of trade remedy (e.g., both an imposed antidumping measure and a countervailing duty), we avoid double-counting by entering it as challenging one type of trade remedy only (typically, an antidumping measure).
Table 4. Characteristics of Five Developing Country Users of Antidumping, 1995-2004

<table>
<thead>
<tr>
<th>AD-imposing country</th>
<th>Exporting country target</th>
<th>Share of import market in 2000 (rank)</th>
<th>Antidumping investigations (share of total)</th>
<th>Investigations resulting in measures (share of target country’s investigations)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Argentina</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. China</td>
<td></td>
<td>4.4% (4)</td>
<td>38 (22%)</td>
<td>33 (87%)</td>
</tr>
<tr>
<td>2. Brazil</td>
<td></td>
<td>25.9% (1)</td>
<td>33 (19%)</td>
<td>22 (67%)</td>
</tr>
<tr>
<td>3. EU</td>
<td></td>
<td>22.9% (2)</td>
<td>21 (12%)</td>
<td>10 (48%)</td>
</tr>
<tr>
<td>4. South Africa</td>
<td></td>
<td>0.3% (23)</td>
<td>10 (6%)</td>
<td>6 (60%)</td>
</tr>
<tr>
<td>5. Korea</td>
<td></td>
<td>2.1% (8)</td>
<td>10 (6%)</td>
<td>8 (80%)</td>
</tr>
<tr>
<td>All other</td>
<td></td>
<td>44.3%</td>
<td>85 (48%)</td>
<td>58 (68%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>100.0%</td>
<td>176</td>
<td>124 (70%)</td>
</tr>
<tr>
<td><strong>Brazil</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. China</td>
<td></td>
<td>2.3% (8)</td>
<td>24 (19%)</td>
<td>18 (75%)</td>
</tr>
<tr>
<td>2. EU</td>
<td></td>
<td>25.0% (1)</td>
<td>18 (14%)</td>
<td>13 (72%)</td>
</tr>
<tr>
<td>3. USA</td>
<td></td>
<td>23.2% (2)</td>
<td>18 (14%)</td>
<td>7 (39%)</td>
</tr>
<tr>
<td>4. India</td>
<td></td>
<td>0.5% (25)</td>
<td>8 (6%)</td>
<td>5 (63%)</td>
</tr>
<tr>
<td>5. South Africa</td>
<td></td>
<td>0.4% (27)</td>
<td>5 (4%)</td>
<td>3 (60%)</td>
</tr>
<tr>
<td>All other</td>
<td></td>
<td>48.7%</td>
<td>56 (43%)</td>
<td>16 (29%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>100.0%</td>
<td>129</td>
<td>62 (48%)</td>
</tr>
<tr>
<td><strong>India</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. China</td>
<td></td>
<td>3.0% (5)</td>
<td>66 (19%)</td>
<td>59 (89%)</td>
</tr>
<tr>
<td>2. EU</td>
<td></td>
<td>20.8% (1)</td>
<td>49 (14%)</td>
<td>40 (82%)</td>
</tr>
<tr>
<td>3. Taiwan</td>
<td></td>
<td>1.0% (16)</td>
<td>28 (8%)</td>
<td>22 (79%)</td>
</tr>
<tr>
<td>4. Korea</td>
<td></td>
<td>1.8% (11)</td>
<td>25 (7%)</td>
<td>21 (84%)</td>
</tr>
<tr>
<td>5. USA</td>
<td></td>
<td>6.0% (3)</td>
<td>19 (5%)</td>
<td>15 (79%)</td>
</tr>
<tr>
<td>All other</td>
<td></td>
<td>67.5%</td>
<td>164 (47%)</td>
<td>135 (82%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>100.0%</td>
<td>351</td>
<td>292 (83%)</td>
</tr>
<tr>
<td><strong>Mexico</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. USA</td>
<td></td>
<td>73.3% (1)</td>
<td>21 (28%)</td>
<td>16 (76%)</td>
</tr>
<tr>
<td>2. China</td>
<td></td>
<td>1.7% (6)</td>
<td>13 (17%)</td>
<td>12 (92%)</td>
</tr>
<tr>
<td>3. EU</td>
<td></td>
<td>8.5% (2)</td>
<td>7 (9%)</td>
<td>2 (29%)</td>
</tr>
<tr>
<td>4. Russia</td>
<td></td>
<td>0.0% (41)</td>
<td>6 (8%)</td>
<td>5 (83%)</td>
</tr>
<tr>
<td>5. Ukraine</td>
<td></td>
<td>0.0% (35)</td>
<td>5 (7%)</td>
<td>5 (100%)</td>
</tr>
<tr>
<td>All other</td>
<td></td>
<td>16.6%</td>
<td>23 (31%)</td>
<td>15 (65%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>100.0%</td>
<td>75</td>
<td>55 (73%)</td>
</tr>
<tr>
<td><strong>Turkey</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. China</td>
<td></td>
<td>2.4% (5)</td>
<td>44 (44%)</td>
<td>40 (91%)</td>
</tr>
<tr>
<td>2. Taiwan</td>
<td></td>
<td>1.0% (14)</td>
<td>11 (11%)</td>
<td>10 (91%)</td>
</tr>
<tr>
<td>3. Thailand</td>
<td></td>
<td>0.4% (25)</td>
<td>8 (8%)</td>
<td>6 (75%)</td>
</tr>
<tr>
<td>4. Korea</td>
<td></td>
<td>2.2% (7)</td>
<td>6 (6%)</td>
<td>5 (83%)</td>
</tr>
<tr>
<td>5. India</td>
<td></td>
<td>0.8% (18)</td>
<td>6 (6%)</td>
<td>5 (83%)</td>
</tr>
<tr>
<td>All other</td>
<td></td>
<td>93.2%</td>
<td>25 (25%)</td>
<td>19 (76%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>100.0%</td>
<td>100</td>
<td>85 (85%)</td>
</tr>
</tbody>
</table>

Note: Antidumping data compiled from Bown (2006b). Import data from COMTRADE. *For consistency, this table only allows for one “EU” entry for each product-specific investigation, hence total number of investigations and imposed measures may differ from table 2 due to aggregation of EU member cases per investigation.